

**Monterey District  
California State Parks**

**Henry W. Coe  
State Park  
Wildfire  
Local Operating  
Agreement**

May, 2007

# Henry W. Coe State Park

## Wildfire Local Operating Agreement

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District Superintendent, Monterey District  
California Department of Parks and Recreation

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California Department of Forestry and Fire Protection



# HENRY W. COE STATE PARK WILDFIRE LOCAL OPERATING AGREEMENT

## INTRODUCTION

Henry W. Coe SP (HWCSP) is approximately 87,000 acres in size, all containing wildland fuels capable of carrying a wildfire (Figure 1). Facilities within the park include parking lots, dirt and asphalt roads, trails, park residences, backpacking camps, a visitor center, offices and shops, garages, metal water tanks with an associated distribution system, 150 dams with accompanying reservoirs, and restrooms. The park is owned by the California Department of Parks and Recreation (DPR), and the California Department of Forestry and Fire Protection (CAL FIRE) has the responsibility for the suppression of wildfires in and threatening the park.

The purpose of this plan is to:

- ◆ inform CAL FIRE of park policy and sensitive park resources,
- ◆ be the local working agreement between DPR and CAL FIRE for all activities related to wildland fires in HWCSP,
- ◆ inform Department staff of functions within the Incident Command System with respect to wildland fire, and
- ◆ identify responsibility for all activities related to wildland fires.

Policies regarding wildfire are found in the Department's Operations Manual. In general:

"Management of unwanted fires on State Park System lands is more than prevention and presuppression preparedness. It is the Department's goal to prevent all unwanted human-caused fires. Given that some unwanted fires will occur, both human-caused and lightning-caused, it becomes the responsibility of the Department to minimize damage to park resources from the fire itself and from all suppression activities.

Prescription burning is one means of minimizing resource damage from unwanted fires.

Another important mitigation is the construction and maintenance of fire control features including firebreaks and fuelbreaks. The type and location of all fire control features must conform to State Park System standards as described in the 'Wildland Fuel Management Guidelines for the California State Park System' and to the objectives of the particular unit.

Each Unit of the State Park System than may experience wildland fires must have a Wildfire Management Plan."

The land management objectives for wildfire at HWCSP are to:

- ◆ take educational and operational measures to prevent, insofar as possible all unwanted fires,

- ◆ protect life first, and property and resources second,
- ◆ plan and organize the personnel and equipment of the park and the Monterey District to perform initial attack to control unplanned fires
- ◆ take initial action on all fires in any area considered threatening to DPR lands, including adjacent private and other public lands,
- ◆ identify appropriate suppression methods at specific areas within the unit that minimize resource damage,
- ◆ establish fuel reduction areas and fuel breaks,
- ◆ identify modified fire suppression activities
- ◆ identify appropriate mitigations after the fire.

At HWCSP, the District Superintendent is responsible for all activities including fire control. The Superintendent may request assistance from the DPR Wildfire Response Team and other Departmental staff. Due to their familiarity with the Unit, the local staff at HWCSP will perform as fire control advisors before, during, and after wildfires.

## I. BEFORE THE FIRE

### A. Wildfire Potential

HWCSP is located in the Mount Hamilton Range of the Central Coast Ranges of California. It includes lands in eastern Santa Clara County and western Stanislaus County. All six vegetation types found in the park (riparian woodland, chaparral, chaparral complex, oak woodland, grassland, and ponderosa pine) will carry a wildfire during the dry season, which occurs from May through October. From November through February, wildfires of lesser intensity can occur until the percentage of green herbaceous plants and the live fuel moisture percentage in chaparral increases to the point where fire cannot carry.

The terrain in the park is generally typical of the rugged ridges with intervening valleys found in the Mount Hamilton Range. The western half of the park is deeply incised by several ridges, which parallel the longitudinal axis of the range. From west to east, these are Pine Ridge (3009 feet in elevation), Middle Ridge (2889 feet in elevation), Blue Ridge (3216 in elevation), and Mahoney Ridge (2604 feet in elevation). The middle portion of the park is a high plateau, a broad, less-pronounced ridge that runs roughly north to south. Bear Mountain, 2604 feet in elevation, is the highest point on this central highland, approximately 6 miles south of the park's northern boundary and 9 miles from the southern boundary. The east-central portion of the park contains a broad open valley formed by the South Fork of Orestimba Creek. This basin is characterized by more gentle slopes. The northernmost portion of the park is on the south-facing slopes of Mount Stakes, and at approximately 3500 feet is the highest area of the park. The southern areas of the park contain Burra Burra Peak at 2263 in elevation and a series of ridges and canyons which drain west into Coyote Creek or southeast into Pacheco Creek. The boundaries of HWCSP are surrounded by similar terrain and wildland fuels, all capable of carrying a wildfire. There are a few scattered homes near the boundary, but no housing communities are located nearby.

The wildfire fuels of HWCSP are largely determined by the vegetation type. Of the 87,000 acres with wildland fuels, the vegetation consist of approximately 35% chaparral (a combination of chaparral and chaparral complex, about 40 tons of fuel per acre), 49% oak woodland, (about 20 tons of fuel per acre), 10% grassland (about 3 tons of fuel per acre), 5 % riparian woodland (about 5 tons of fuel per acre) and 1% ponderosa pine forest (about 20 tons of fuel per acre). These figures are somewhat variable depending on the height of the grasses and forbs, the age-class of a particular stand of brush, and the number of down trees of a particular area.

Fire records show that the majority of the park has burned since 1936 . The western portion of the park was burned with prescribed burns in the 1980's and 1990's. The lightning-caused Bollinger Ridge Fire in 1961 burned much of the center of the park. In 1960 and 1961 two large prescribed burns occurred in the eastern part of the park. Prescribed burns to enhance cattle grazing on the old Coit Ranch occurred in the south central part of the park in the 1950's and 1970's. In general, fuels of the park will burn several years after the last fire, but there are few areas of the park with unusually high (greater than 50 years) fuel build-up. Of 11 wildfires which occurred since 1970, campfires (5), equipment (4), and lightning (3) were the cause.

The climate of the area is typical of Central California with dry summers (moderate to high daytime temperatures) and wet winters (moderate temperatures). Precipitation is concentrated in the winter months with approximately 90 percent of the annual total falling in the six months from November to April. Thunderstorms rarely occur during the summer, and do not account for a substantial part of the seasonal rainfall. During the summer, the prevailing wind direction over the park is from the northwest, as a moderate onshore flow of marine air blows through the Bay Area. Marine air entering through the Pajaro River Valley may, at times, bring winds from the southwest. In winter, winds are predominantly from the northwest, and in the fall, morning and evening winds frequently flow from the east. Wind speeds at the park are generally light to moderate. Unit personnel have noted that the highest winds occur primarily during the winter and spring, when fire hazards are not usually high.

Precipitation data from 1954-1981 from the Coit Ranch Station within the park shows annual rainfall as 24.79 inches, 90% falling from November through April. Temperature data at HWCSP from 1975-1982 shows average maximum high temperatures of 70-84 degrees F from May to October, the typical wildfire season. During this period, the extreme maximum high temperatures can range as high as 104 degrees F.

The potential for wildfire is greatest during California's dry period, approximately May 1 to October 31. During these months, the herbaceous vegetation dies and is the primary fuel for carrying wildfires. However, lower intensity fires can occur year-around in the thatch of herbaceous vegetation, and in oak and pine understory fuels.

Occasionally, east winds occur at the park, bringing the lowest relative humidities.

Although these winds are not as intense as the 'Santa Ana' winds found in Southern California or the funneled east winds of the Oakland/Berkeley hills, east winds bring humidities that cause the most intense burning conditions found in the park.

Wildfire records show that, on the average, a wildfire occurs in or around the park every year. Since the 1960's, fire suppression by CAL FIRE has limited most of these wildfires to less than 50 acres. The greatest constraint to wildfire suppression at HWCSP is access. The travel time for ground equipment can exceed two hours. However the travel time for the Hollister Air Attack Base and the Alma Helitack Crew is less than thirty minutes.

B. Pre-Fire Prevention, defined as those fire protection activities done in advance of fire occurrence to ensure effective fire suppression, is the responsibility of California State Parks. The following techniques will be used:

1. Place signs, posters, and notices on bulletin boards to educate the public. Deliver fire prevention talks at campfires aimed at further informing the general public, and campers in particular, about the fire problem.
2. Give information and warning to the public, especially during period of high fire danger, through both the media and all public contacts made by Unit Personnel.
3. Participate in the National Fire Prevention Program to the fullest extent possible by means of talks, pictures, and any other means available. Carry out periodic inspections and cleanup of debris in and about buildings.
4. In public contacts, on bulletin boards, and at campfire talks, stress California Code of Regulations, Division 3, Chapter 1, Section 4311 that "No person shall build or maintain a fire within a unit except in a camp stove or a fireplace provided, maintained, or designated by the Department for such purpose. Portable camp stoves may be used in portions of units approved by the Department. Upon a finding of extreme fire hazard by the Department no person shall smoke or build fires in portions of units other than those designated by the Department for such purposes."
5. Prescribed burning will be conducted using required permits. Prior to burning, arrangements will be made for adequate personnel and equipment to control the fire.

#### C. Alert Levels

When severe fire weather is predicted or occurs, CAL FIRE uses 'Red Flag' procedures which involve a 'Red Flag Watch' when severe fire is predicted, and a 'Red Flag Warning' when severe fire weather is occurring. CAL FIRE will advise DPR when these events occur, and DPR will take appropriate action, which may include closure to smoking, closure to campfires, closure to portable stoves, or complete closure of a park or portion thereof to visitors.

D. Fuel Management is the responsibility of California State Parks and adjacent landowners.

If an adjacent landowner has made every attempt to provide defensible space on their property for structures and have modified these structures to limit risk from wildfire, fuels may be modified on California State Park property.

The reduction of large accumulations of fuel from areas having high wildfire potential is an important part of fire prevention. The Unit Prescribed Fire Management Plan for HWCSP provides for the concept of a perimeter fuelbreak, and Unit-wide fuel reduction through the use of prescribed burning. The perimeter fuelbreak will not be constructed to standards, but will be a concept to drive fuel reduction when road maintenance and prescribed burns occur in the area. The overall goal of the Prescribed Fire Management Program is to re-introduce fire to its natural role in the ecosystem. Preliminary studies of the mean fire interval in the last 200 years suggest a fire frequency of 15 years in grassland fuel types to 35 years in chaparral fuel types.

Fuel management considerations park developments and Fire Management Compartments mapped in Figure 1 are:

1. Maintain defensible space (minimum of <sup>100</sup>~~20~~ feet) around all structures.
2. Remove tree branches near chimney outlets.
3. Near structures, maintain trees and shrubs free of dead and dying wood.
4. Maintain screens over the outlets of any chimney.
5. When conducting prescribed burns, treat the perimeter fuelbreak of the park (Figure 2), and Fire Management Compartment perimeters (Figure 1) to increased fuel reduction practices.

#### E. Communications

In the event of a wildfire, the 911 Emergency Dispatch System will be activated. In addition, the DPR Cencom Dispatch at Monterey will be notified (831-649-2810). During small wildfires that are contained in one day, a complex organization is not necessary. If the DPR Cencom Dispatch is notified first, they will activate the 911 Emergency Dispatch System. If severe fire weather prevails, or containment could take longer due to access, several days of fire suppression may be required and a more complex Incident Command System will be established. CAL FIRE or a DPR employee will likely be the first to arrive at the fire. If CAL FIRE arrives first, a DPR employee, normally the employee on duty most familiar with the Wildfire Plan, should report to the Incident Command Post to serve as a park representative and advise CAL FIRE (see Section II.A. Organization).

#### E. Fire Compartment Map

Figure 1 is a map of the area. HWCSP is divided into wildfire compartments. It is not the intent of this plan to conduct fuel modification along all compartment boundaries. The intent of compartments is to identify areas where existing roads and trails encircle areas, and fire-weather dependent, the boundaries of these fire compartments would be defensible in a wildfire. On the maps, developments that require protection are



designated by a 'D'. Areas to avoid with heavy equipment are designated as shaded 'sensitive zones' or 'sensitive spots' indicated by circles with letters. ('V' is rare, endangered, or unusual vegetation, 'A' is a rare, endangered or unusual animal population, 'P' is a pond or lake, 'S' is a survey corner, possibly a wooden stake or other perishable historic marker, 'X' is a hazardous such as a propane tank or underground utilities [see list below]). Cultural sites (historic or prehistoric spots) are not shown on the maps, and a DPR cultural resource specialist should be consulted whenever a wildfire occurs in the park.

Hazardous sites, designated with an 'X' on the map are:

Coe Ranch HQ	300-gallon propane tanks at the visitor center, ranch house, modular home, and mobile home
	1000-gallon gasoline tank at the metal barn
	Multiple propane tanks, oxy-acetylene, flammable/combustible liquids, compressed air at the shops
	PGE riser pole in canyon below the Visitor Center near Yerba Buena Camp. Overhead lines in canyon to pole, underground from pole to generator building
	underground utilities
Pacheco Camp	propane tank
Dowdy Ranch	propane tank
	underground utilities
Kickham Ranch	propane tank
	overhead/underground utilities
	flammable/combustible liquids
Rooster Comb Trail	open mine shaft

Water systems found in the park are:

Headquarters	1 ½ " hydrant 20,000 gallons	spring feeds two 10,000 gallon tanks, 1 off-line in reserve
Dowdy	3" hydrant	well with pump operated manually

Pacheco  
Kickham

1 ½" hydrant

spring

#### G. Road Access Specifications and Constraints

The park roads mapped on the Fire Compartment Maps are subject to the following specifications and constraints:

1. Roads are generally 8 feet wide on center, dipped outward to divert water, and are brushed intermittently.
2. Road widths should be no more than the minimum for one-way traffic (usually no wider than a grader blade).
3. Only graders should be used for road maintenance purposes.
4. No berms should be constructed; no castings should be pushed into the roadside vegetation or canyons.
5. Roads should be outsloped, permitting water to sheet off the road.
6. No borrow pits or spoils areas should be developed without DPR approval.
7. No turnarounds or alterations to existing roads should be constructed without DPR approval.
8. With prior DPR approval, water bars and culverts may be used, provided that they do not concentrate runoff or cause erosion.
9. No new roads or alterations to existing roads should be constructed without prior DPR approval.
10. Use of roads within the Park will be limited to official business only. During inclement weather, use is to be limited to emergency needs only, with the understanding that the using agency will be responsible to immediate repairs.
11. Where roads intersect areas identified as archeological sites, cultural sites, or sensitive plant or animal sites, no machine grading or widening of the road bed will be allowed. All road maintenance at these locations will be done by hand.

## II. DURING THE FIRE

### A. Organization

The Incident Commander of a wildfire shall be from CAL FIRE. If CAL FIRE has not arrived at a wildfire, the first DPR employee familiar with the Wildfire Plan will act as Incident Commander, and will be relieved by CAL FIRE upon their arrival. A representative from California State Parks will advise the Incident Commander of resource and safety-related issues. During large fires, a DPR employee may be assigned to each Division of the fire and to each bulldozer. Planning for post-fire resource damage mitigation shall begin during the fire, and is the responsibility of California State Parks (See Section III.B., Post-Fire Resource Damage Mitigation).

### B. Emergency Evacuation

To assure protection of life, the District Superintendent has authority for the evacuation and closure of the fire-involved area. Park personnel, with the assistance of CAL FIRE

or County Sheriff Deputies if necessary, shall close the fire-involved area to the public. This may involve the evacuation of visitors, resident employees, and their dependents.

Evacuation exits for the park are the Gilroy Hot Springs, Coe Headquarters, Bell Station, San Antonio, and Garzos Creek.

#### C. Fire Safety

Fire suppression is dangerous work; therefore, safety must be uppermost in the thinking of all employees engaged in suppression work. Human life and safety must never knowingly or carelessly be subordinated to other values. Consideration should be given to personal safety when approaching any fire suppression activity.

#### D. Modified Fire Protection

DPR shall provide a Fire Control Advisor to advise the Incident Commander of modified suppression options. During the wildfire, the Incident Commander shall consider modified fire protection to protect park resources. Modified suppression includes such techniques as allowing the wildfire to burn to pre-established fire compartment boundaries, containment by the placement of control lines outside of special areas (such as cultural sites and ecologically sensitive areas), burnouts, water drops, wet lines, foam lines, hand lines instead of bulldozer lines, etc.

The DPR Fire Control Advisor will make every effort to assist CAL FIRE in the selection of control line locations which will be effective in the control of wildfire, yet protect Park values to the greatest extent possible under the circumstances. Some areas with sensitive resources are shown on the Fire Compartment Maps. Frequently, the control methods, such as bulldozed lines, are more harmful to the natural values than the fire itself. Therefore, maps have been developed, with the cooperation of CAL FIRE, which establish proposed Fire Management Compartments and fire control lines. A complete description of the compartments and existing fire defense improvements is provided in the plan.

Whenever possible, motorized vehicles will remain on the perimeter of the unit on the road that bounds the unit, and will not enter the unit. Motorized vehicles will also avoid activity around sensitive areas.

The final decision to modify suppression action will be based upon the probability of threat to life and/or property, the availability of fire suppression resources, the magnitude of fire expansion as determined by the Incident Commander, impending fire weather, and fuel loads as determined by recent adjacent wildfires or prescribed fires. The type and intensity of suppression efforts should be tied to these factors.

Modified suppression also applies to mop-up. The following are discouraged and will occur only as deemed necessary by the Incident Commander:

1. Cutting down any tree, dead or alive.
2. Cutting up dead and down logs.
3. Widening firelines



4. Trenching.
5. Cold-lining unburned islands.
6. Secondary firelines.

#### AFTER THE FIRE

##### A. Wildfire Reports

For California State Parks, the written reports of a fire will consist of (1) the DPR 385, Public Safety Report, (2) 385A Public Safety Report Supplemental - Natural Hazards, (3) DPR 386, (4) and the DPR 408 Radio Operators Log.

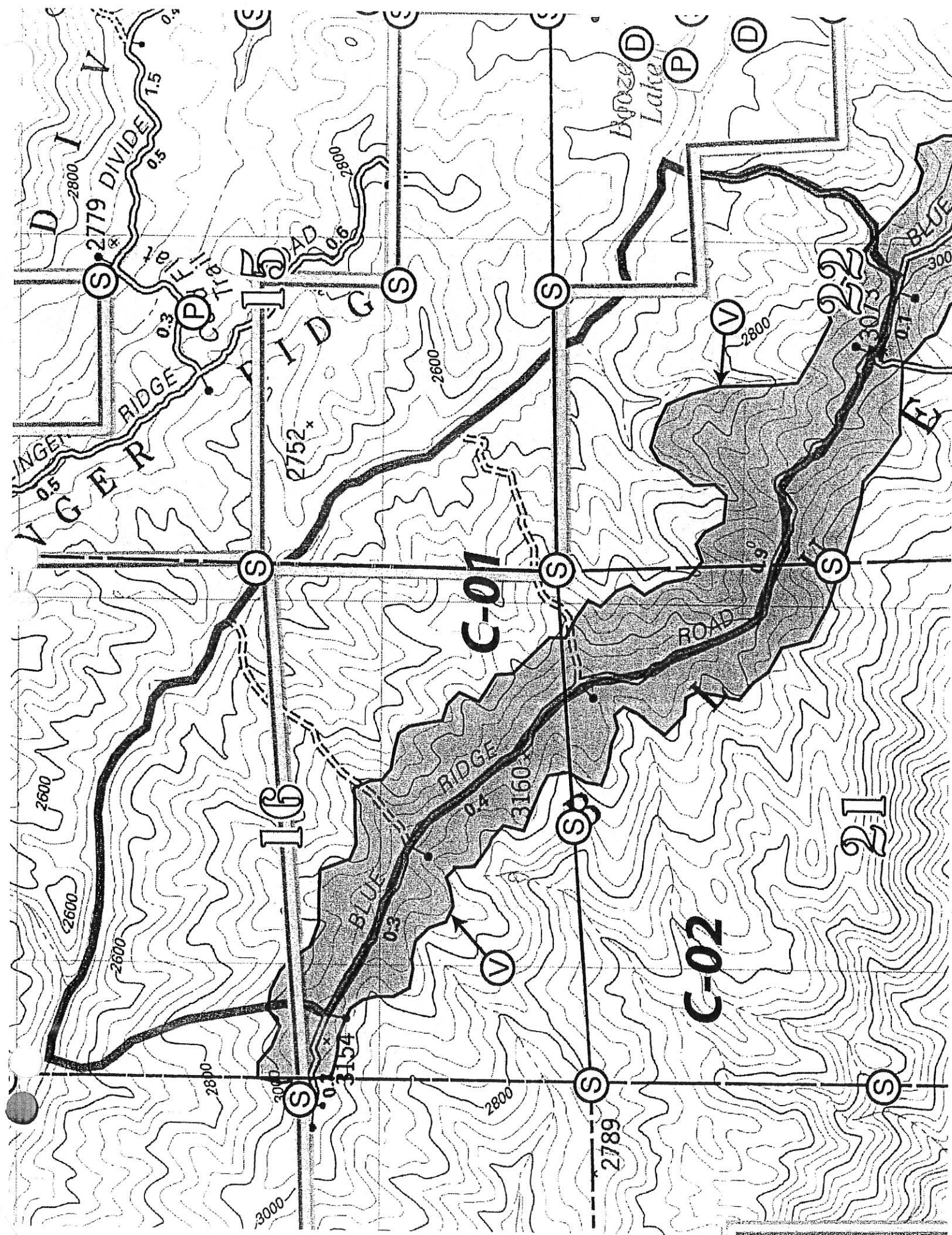
B. Post-Fire Resource Damage Mitigation. CAL FIRE and California State Parks are responsible for the following:

1. Returning land to original shape. Mineral soil which has been moved by suppression activities shall be returned as closely as possible to its original location. This includes returning sidecast material to cuts, pulling berms back across firelines, and removing material from watercourses.
2. Rehabilitation of roads, and trails. All roads and trails that were modified by suppression shall be returned to standard conditions.
3. Protection of exposed soil. Cover all exposed soil with unburned organic matter such as leaves, needles, and woody material.
4. Elimination of new trails. New fire lines are sometimes used by the public, creating problems. New trails shall be blocked by limbs and other available material.
5. Erosion control devices. Temporary erosion control devices shall be installed when other means of landform restoration do not solve erosion problems created by suppression activities.
6. Incident bases, base camps, helispots, and other sites used for fire suppression or control activities shall be removed upon completion of use and the site rehabilitated to as natural a state as possible. Mitigation methods will be discussed and agreed upon by CAL FIRE and DPR.

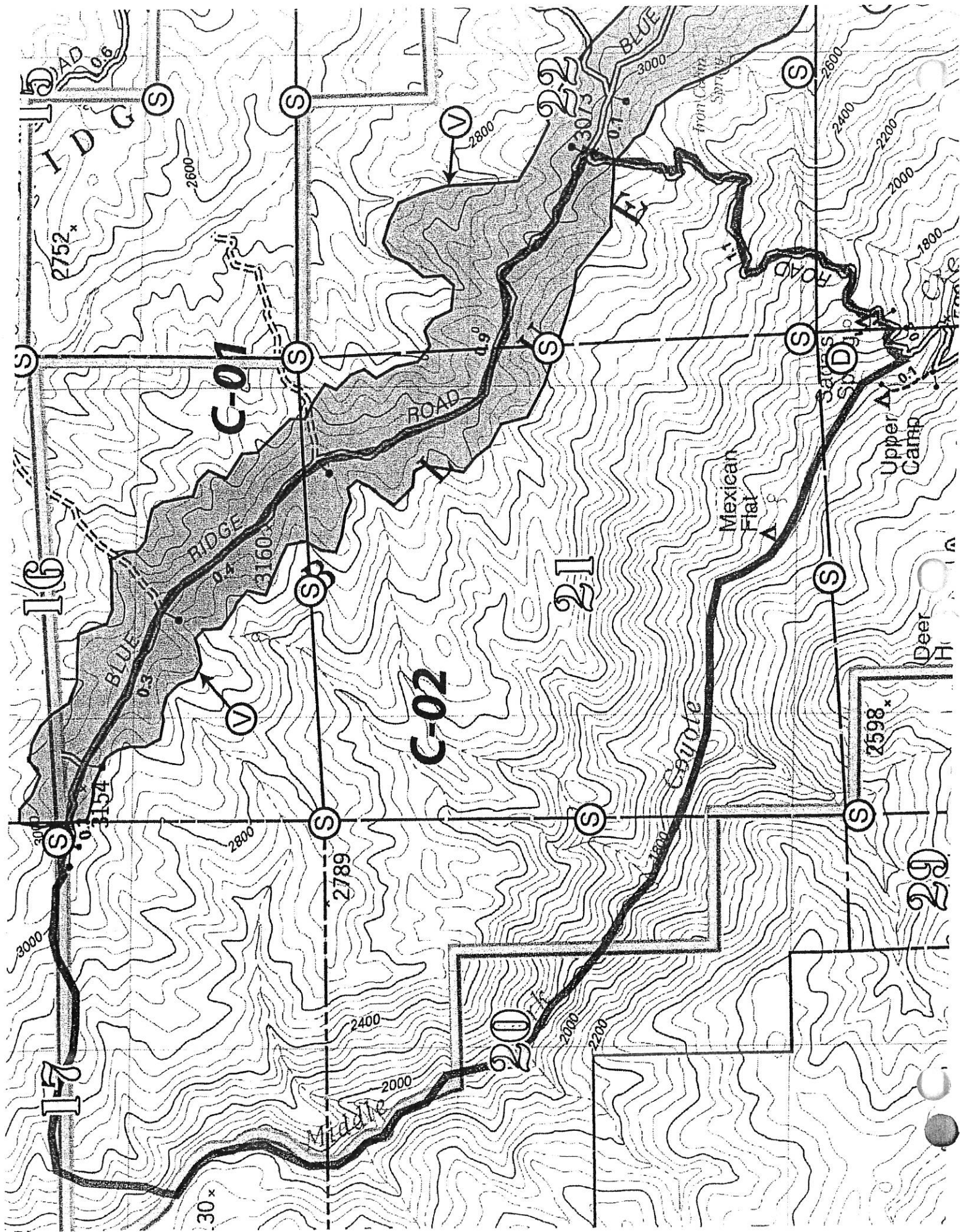
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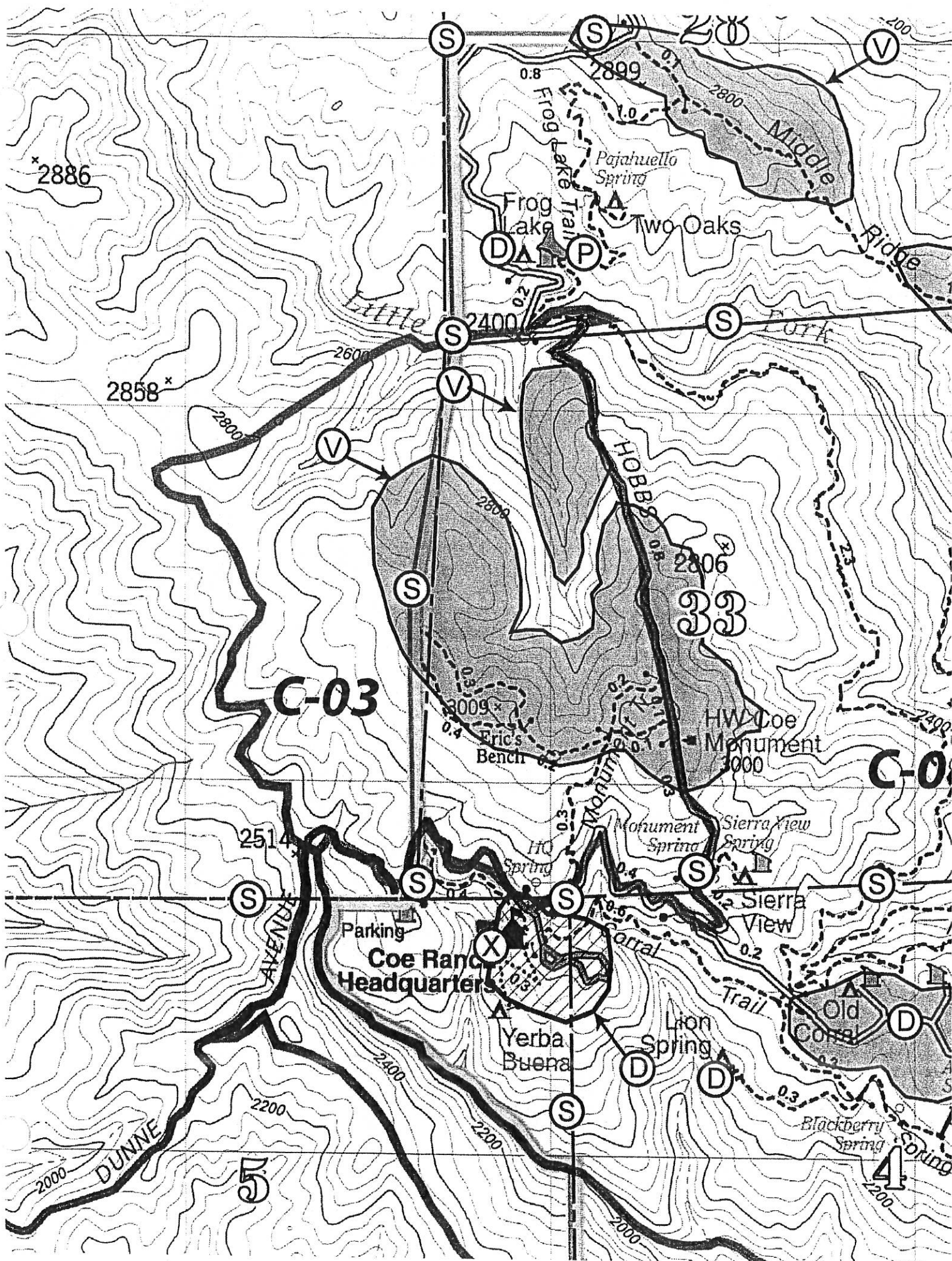
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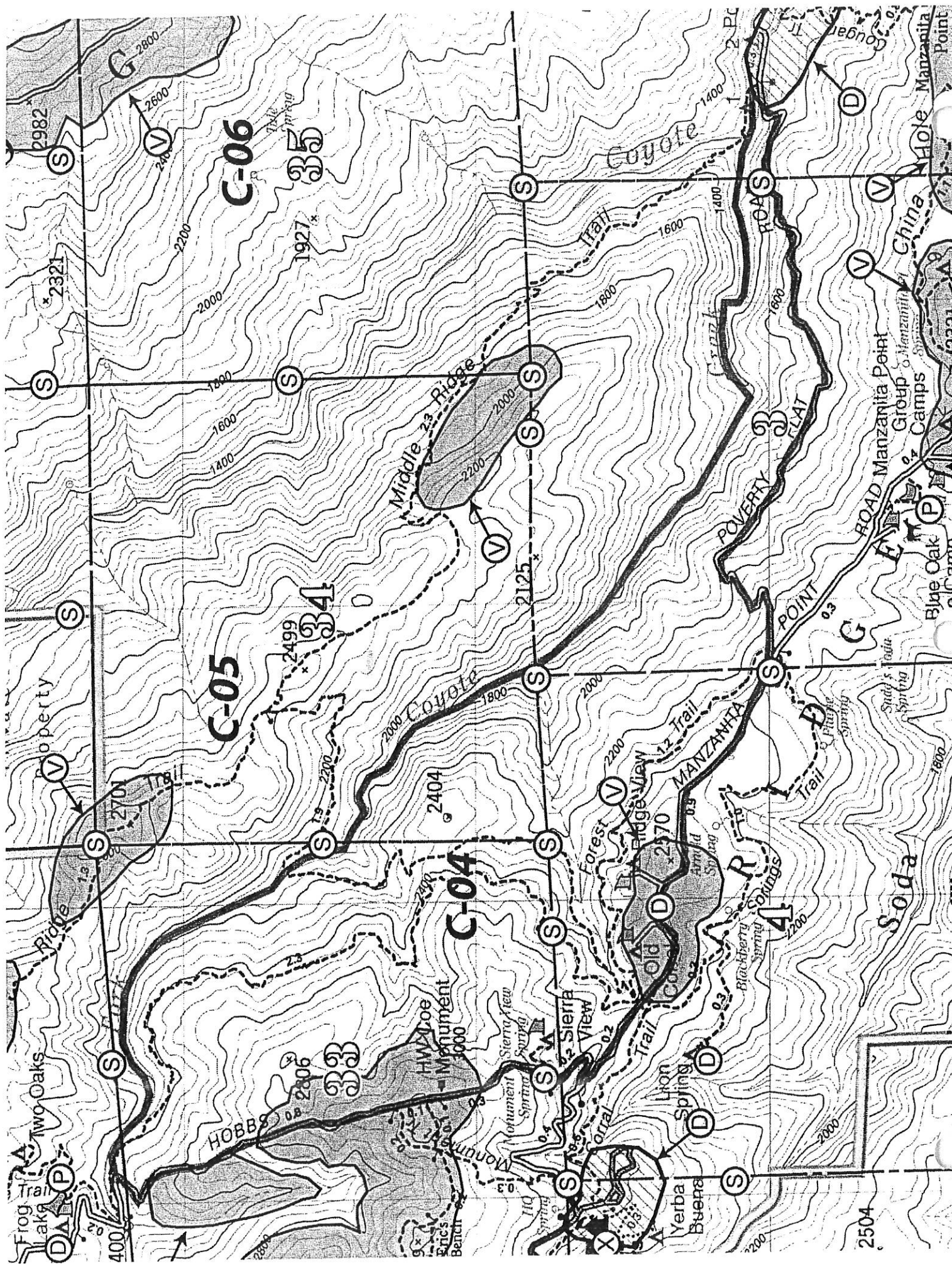




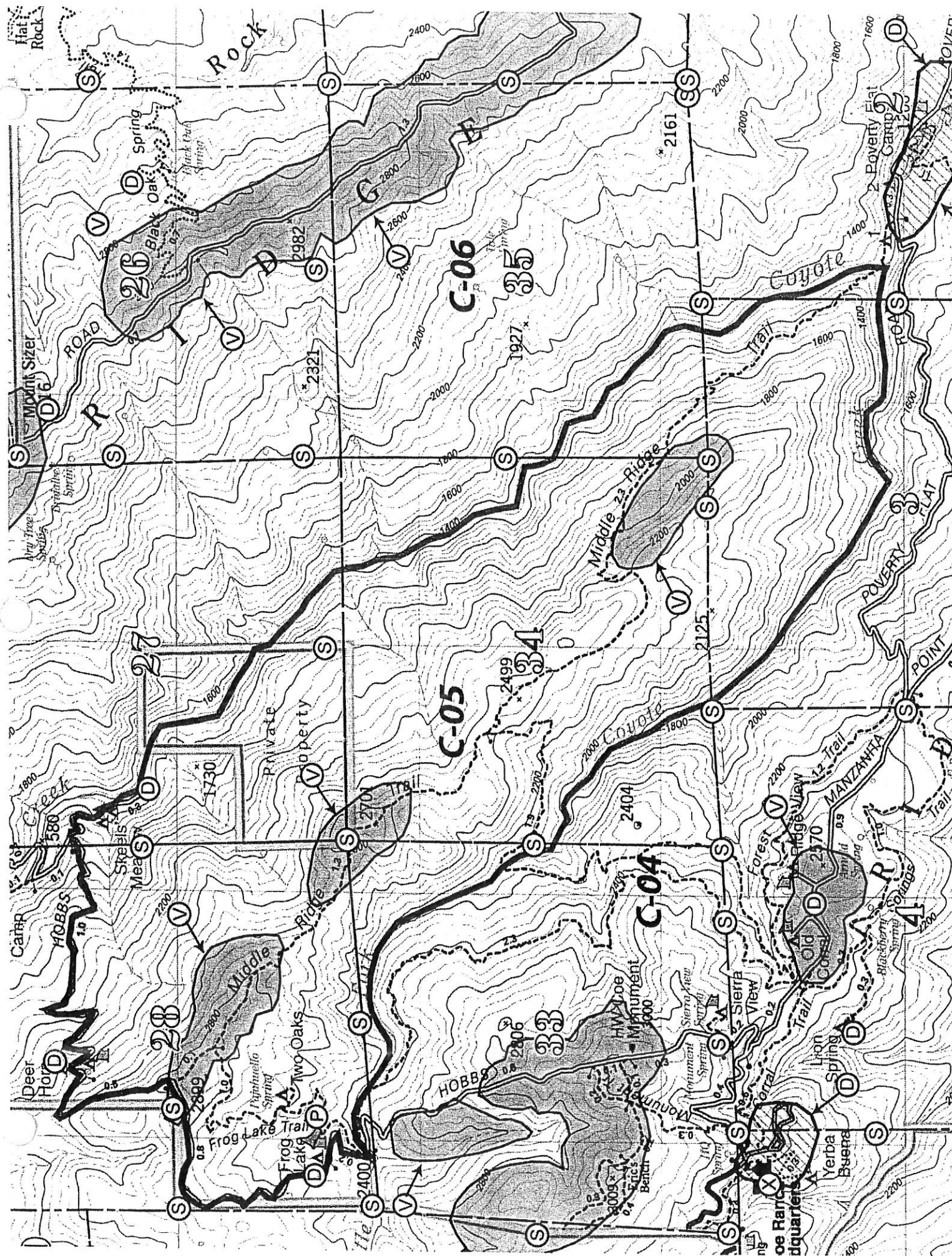




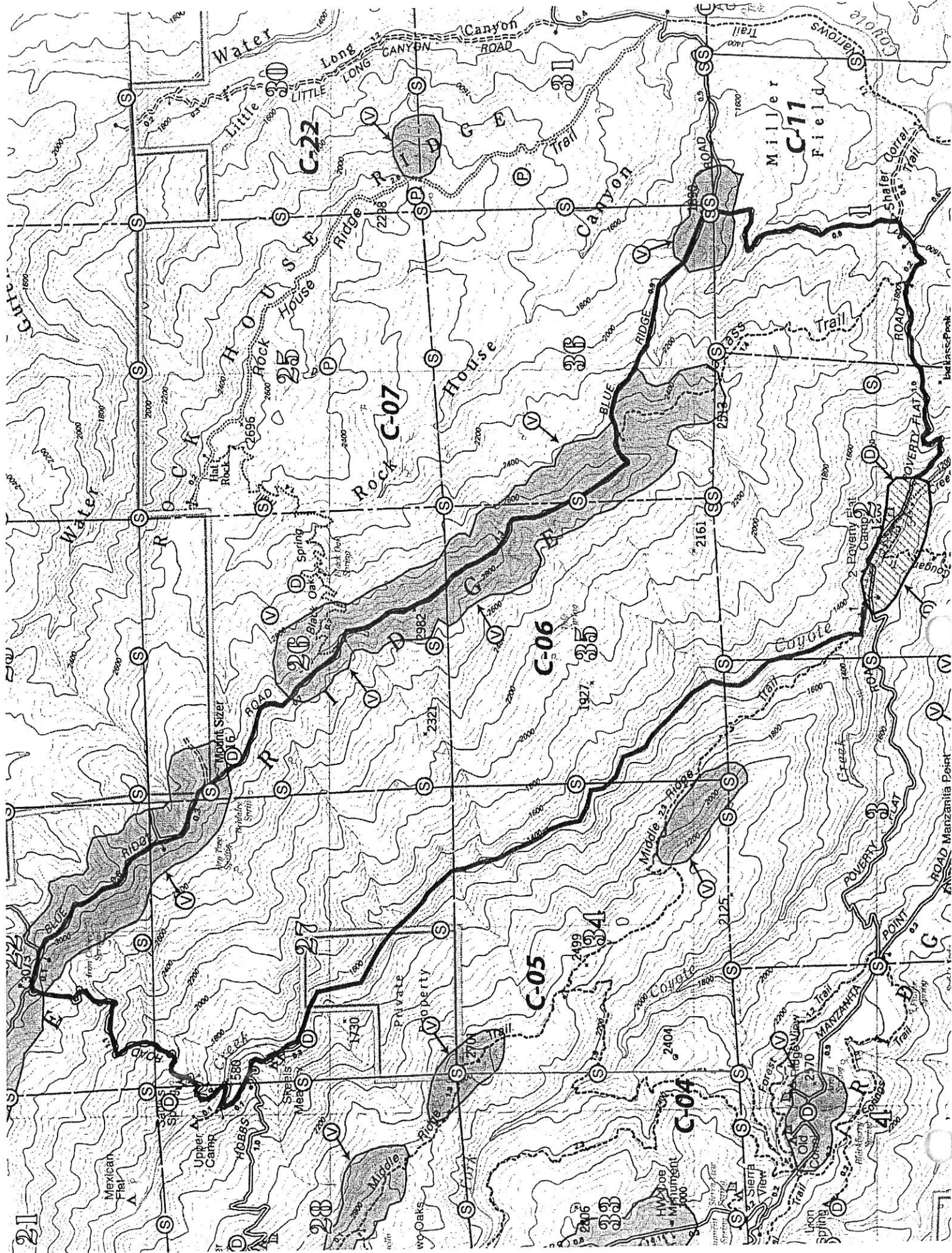




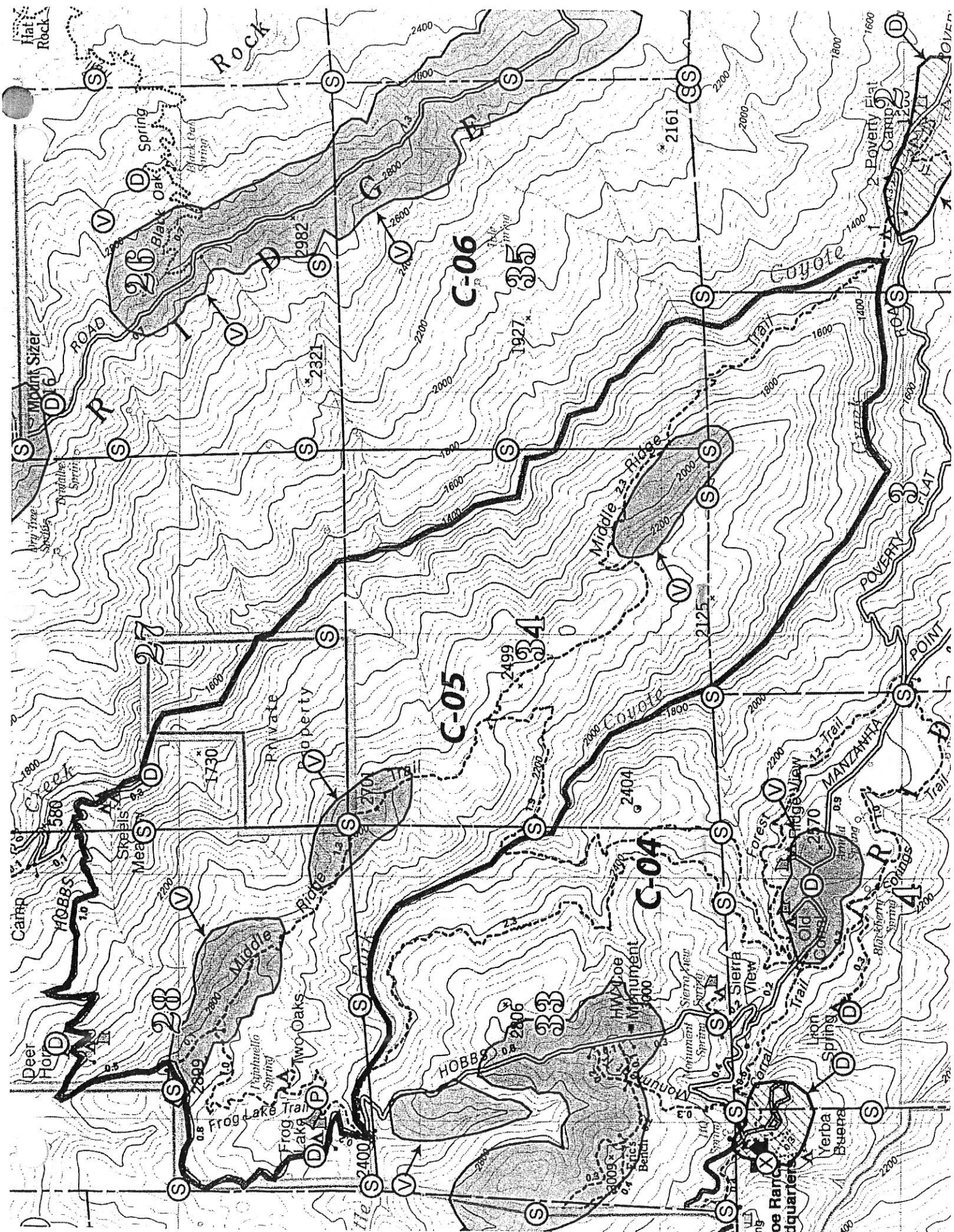




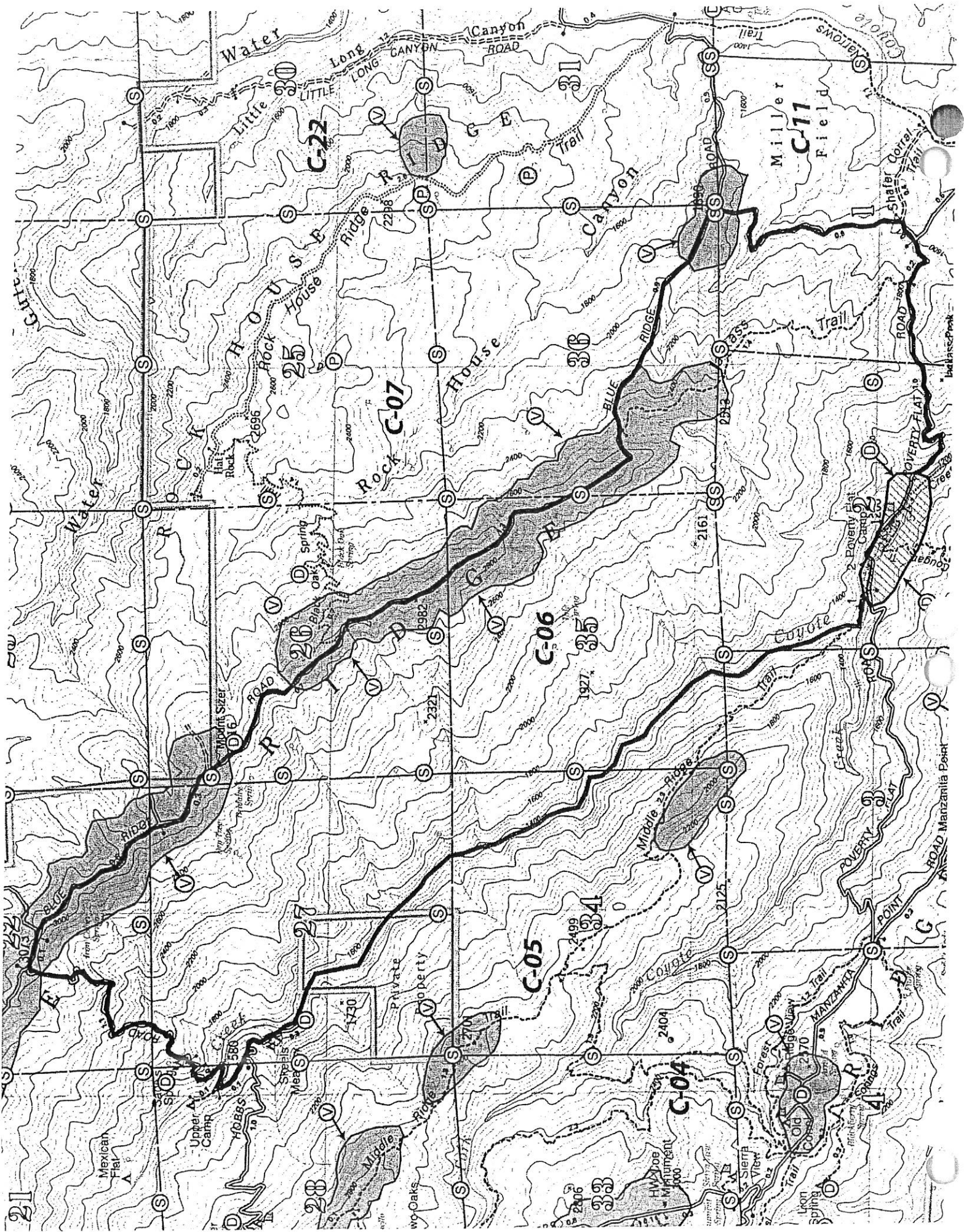




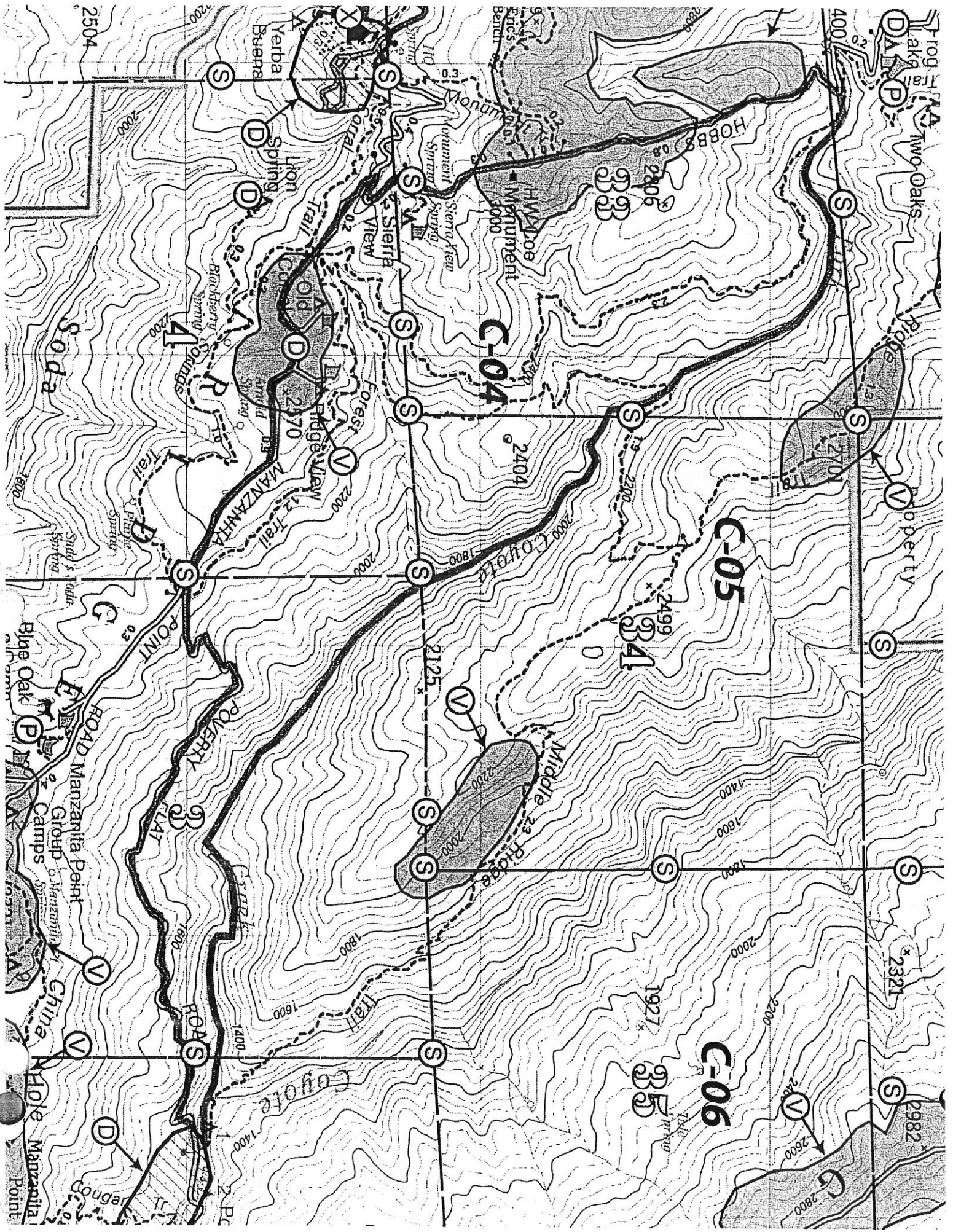


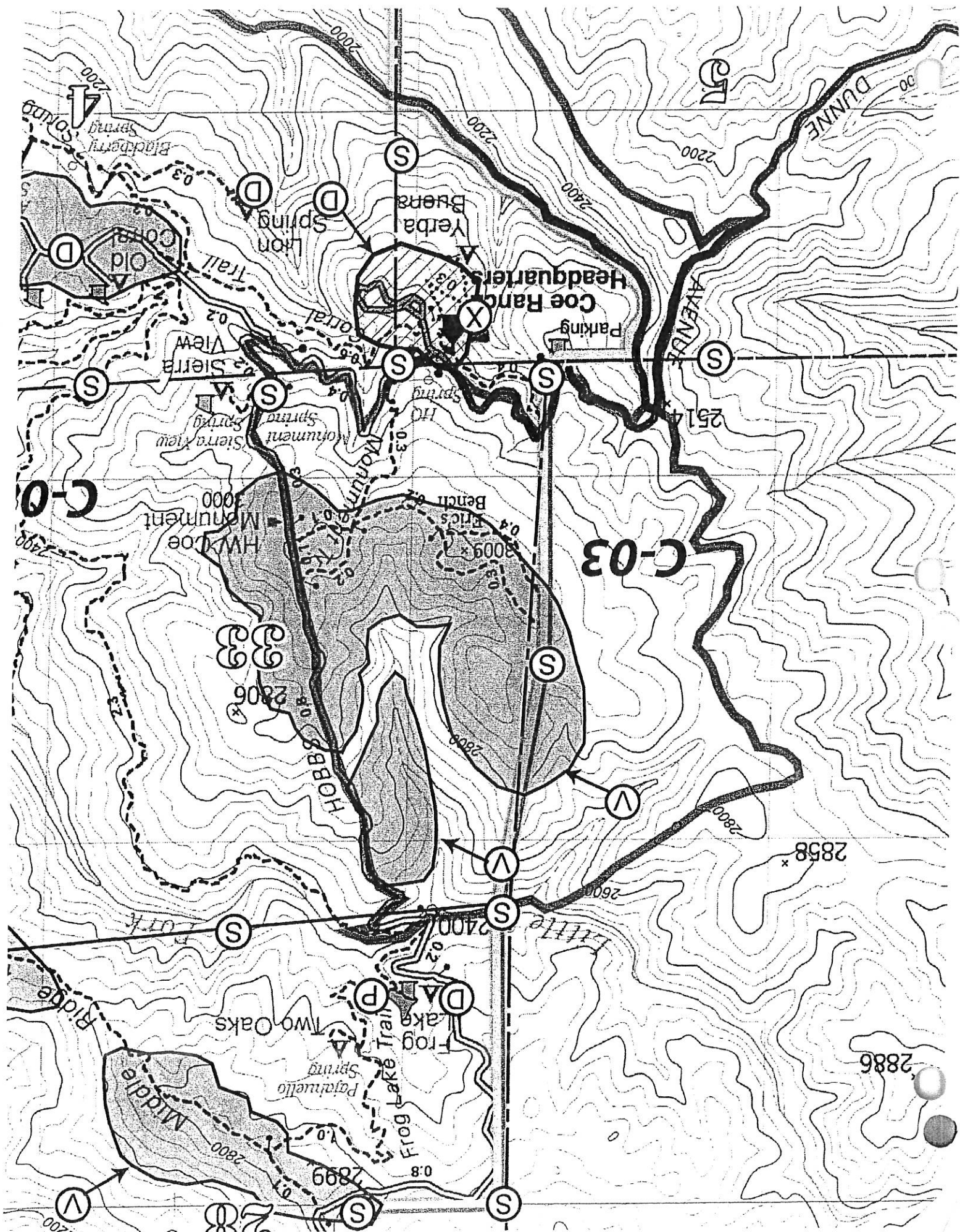




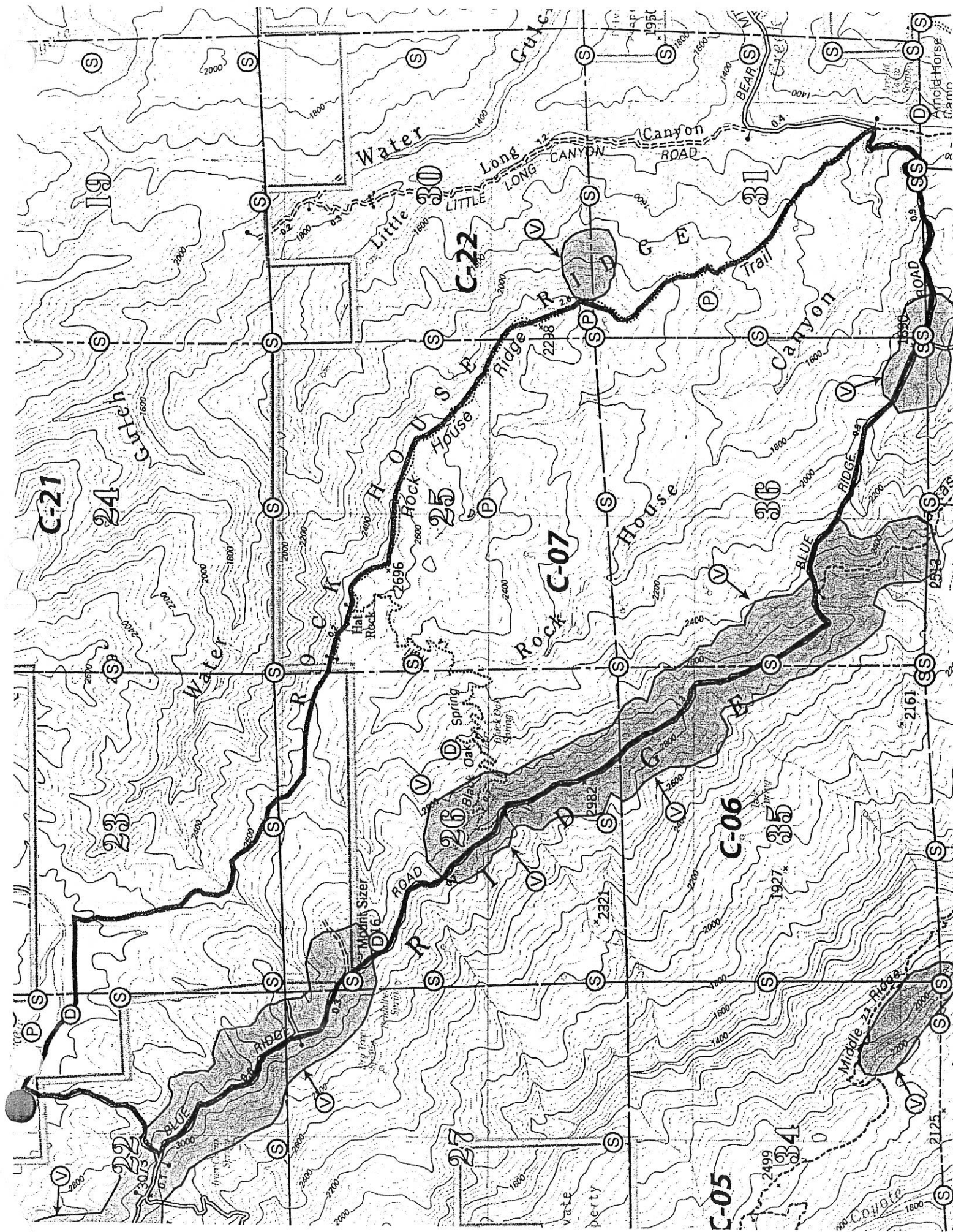




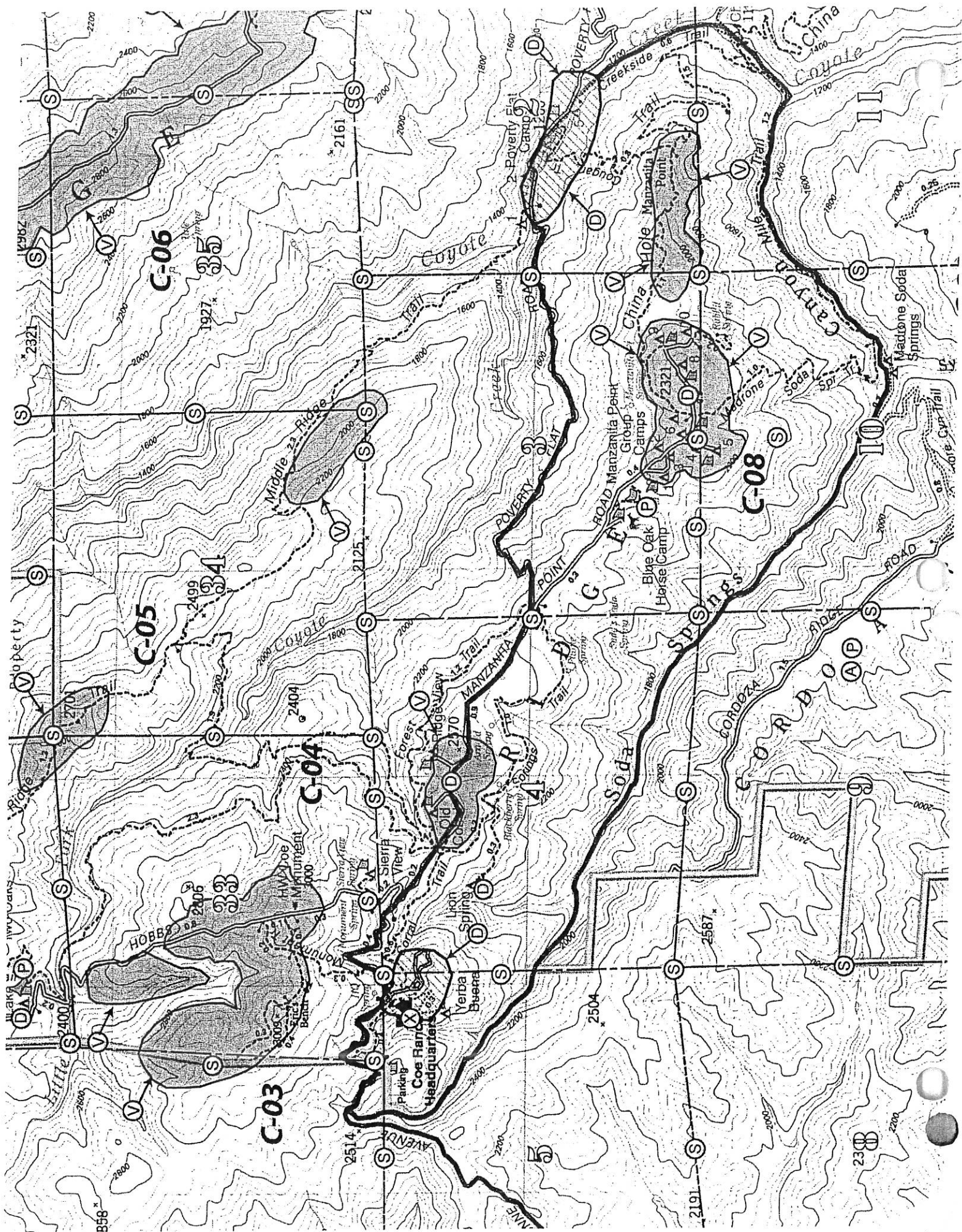


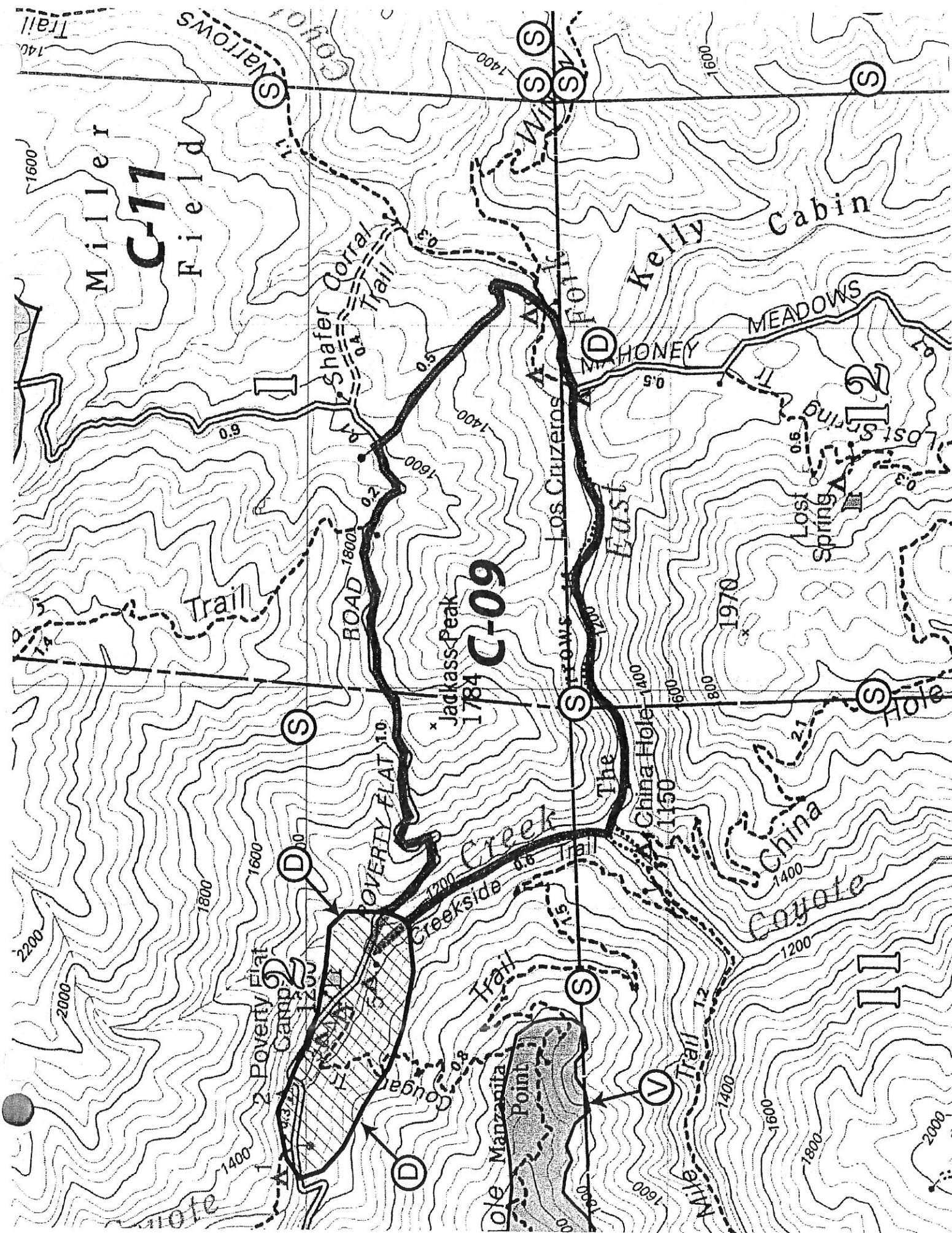




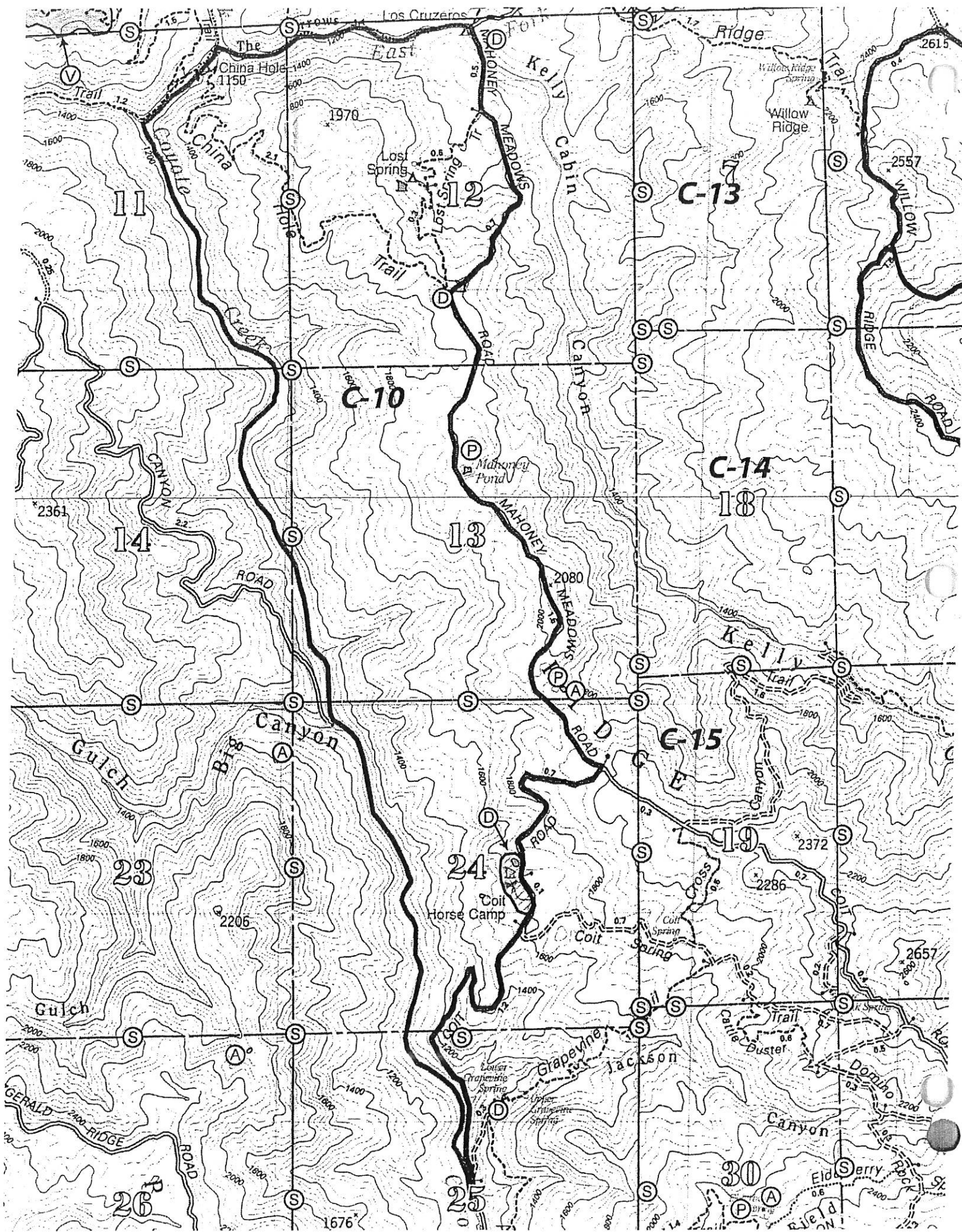




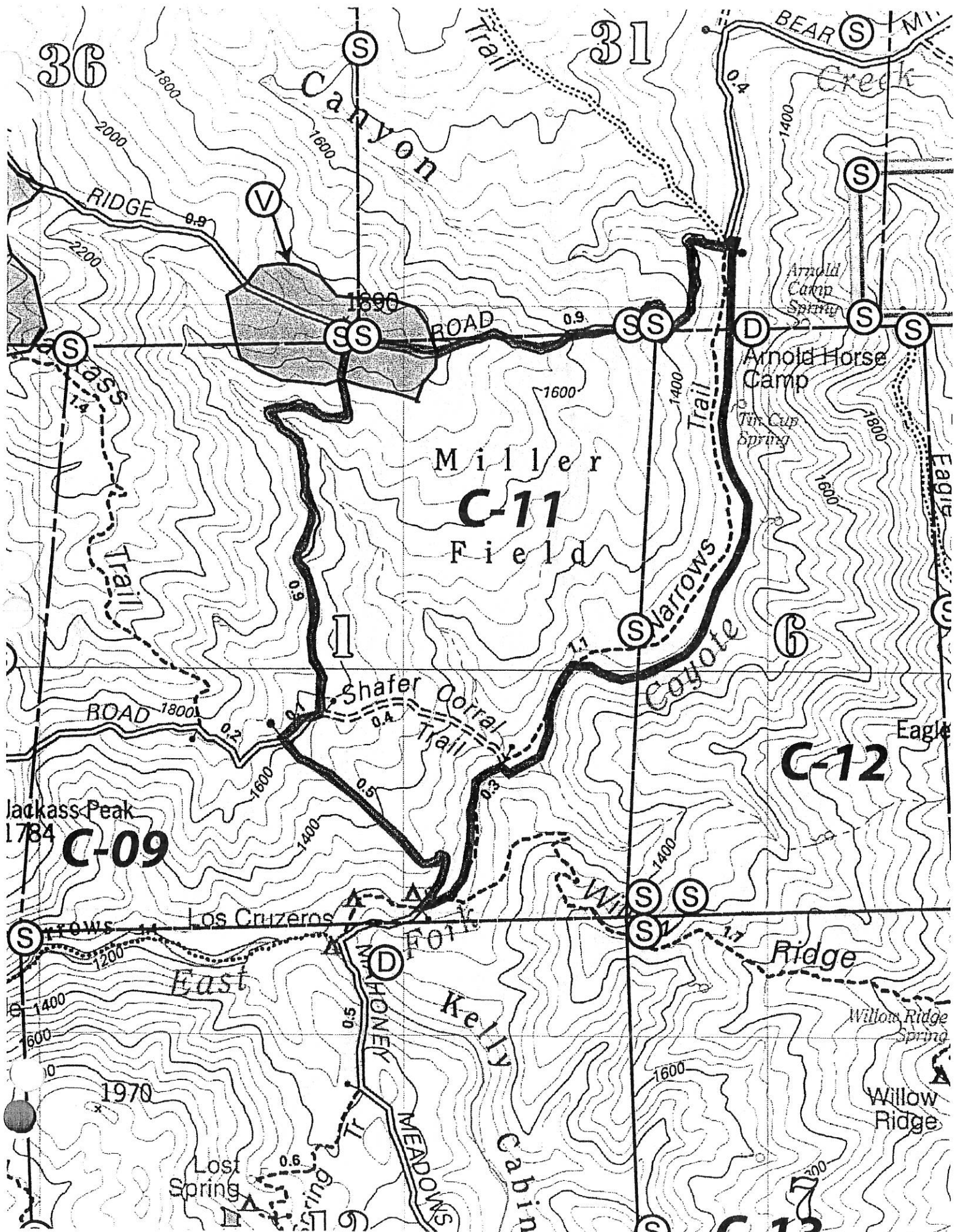


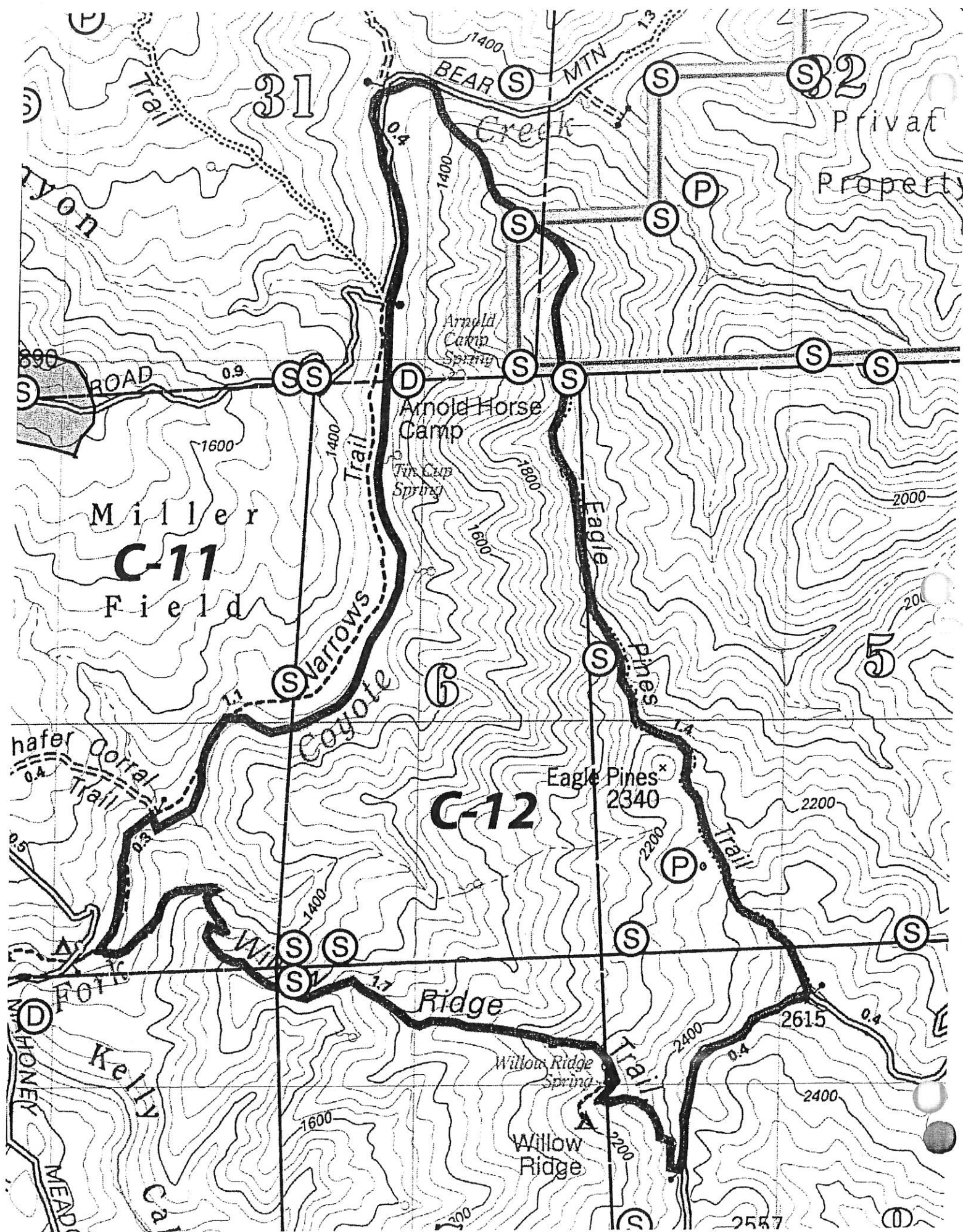




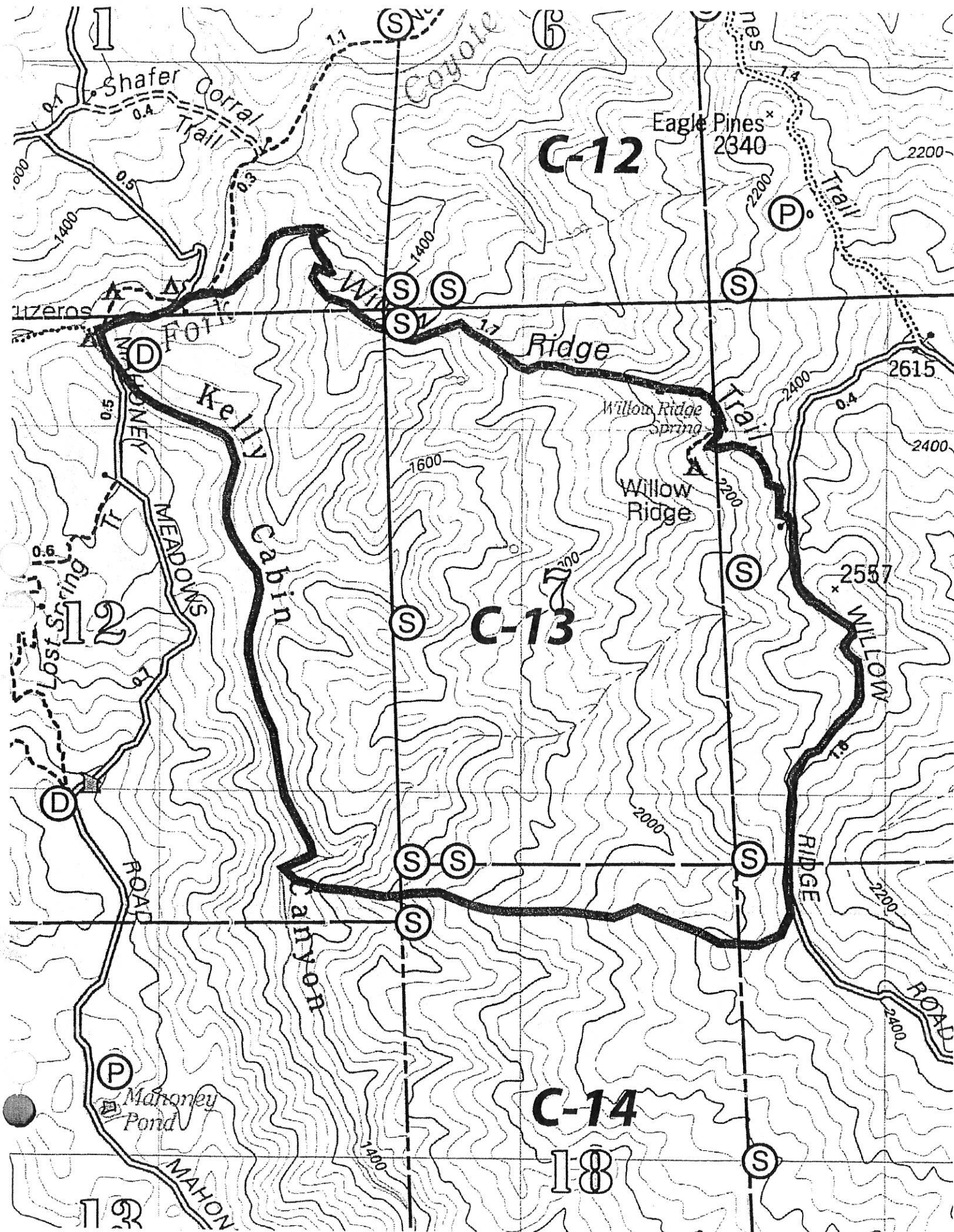


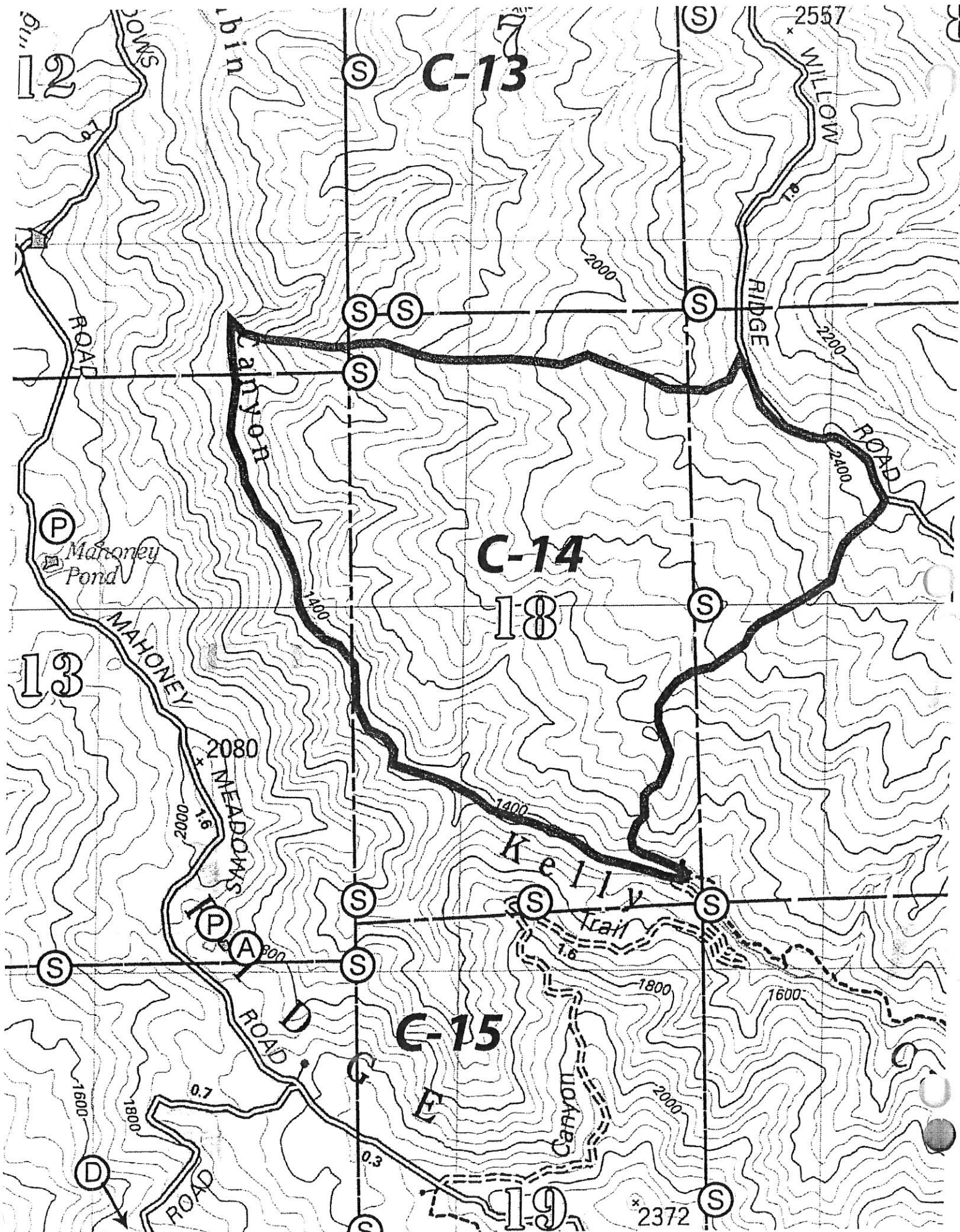




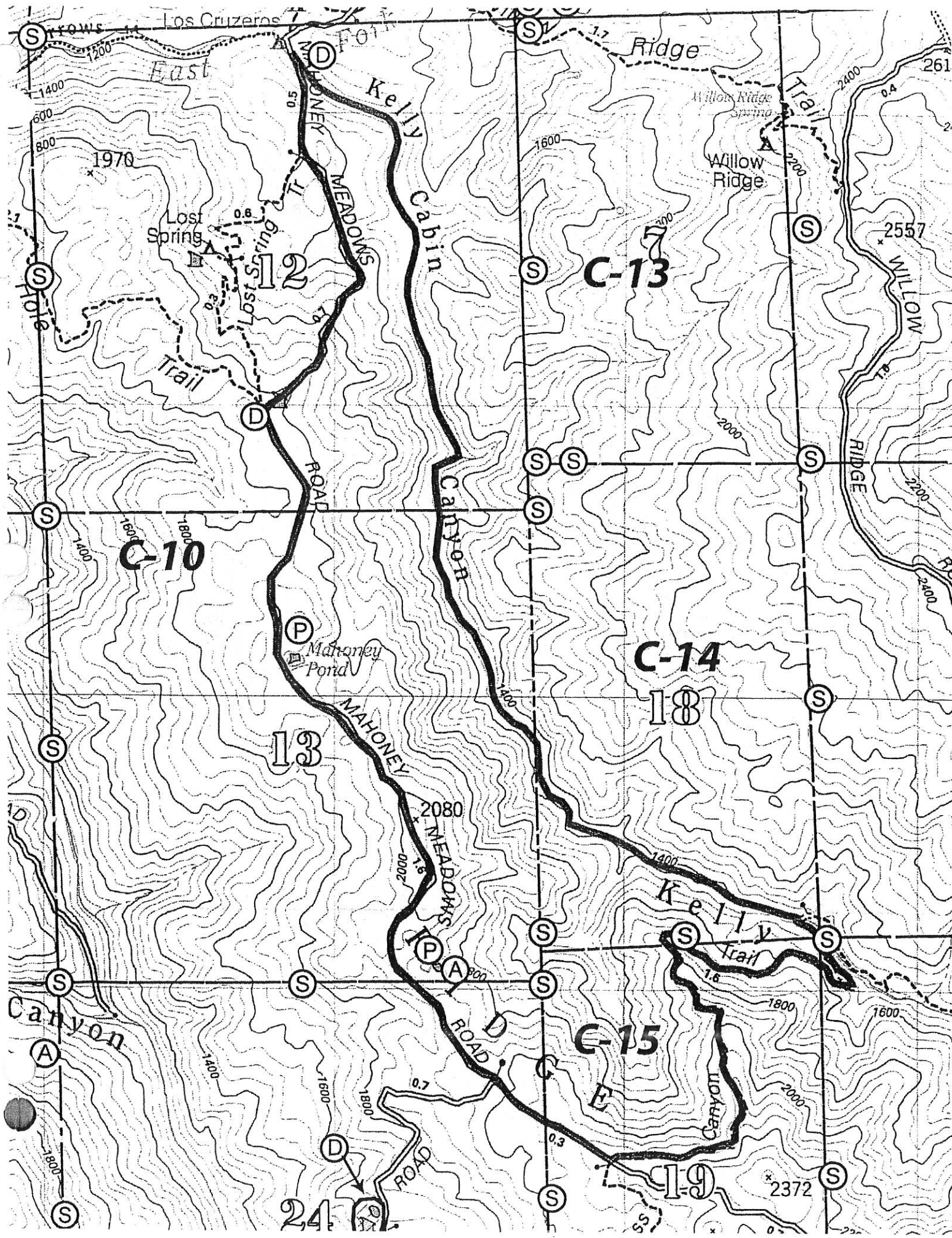


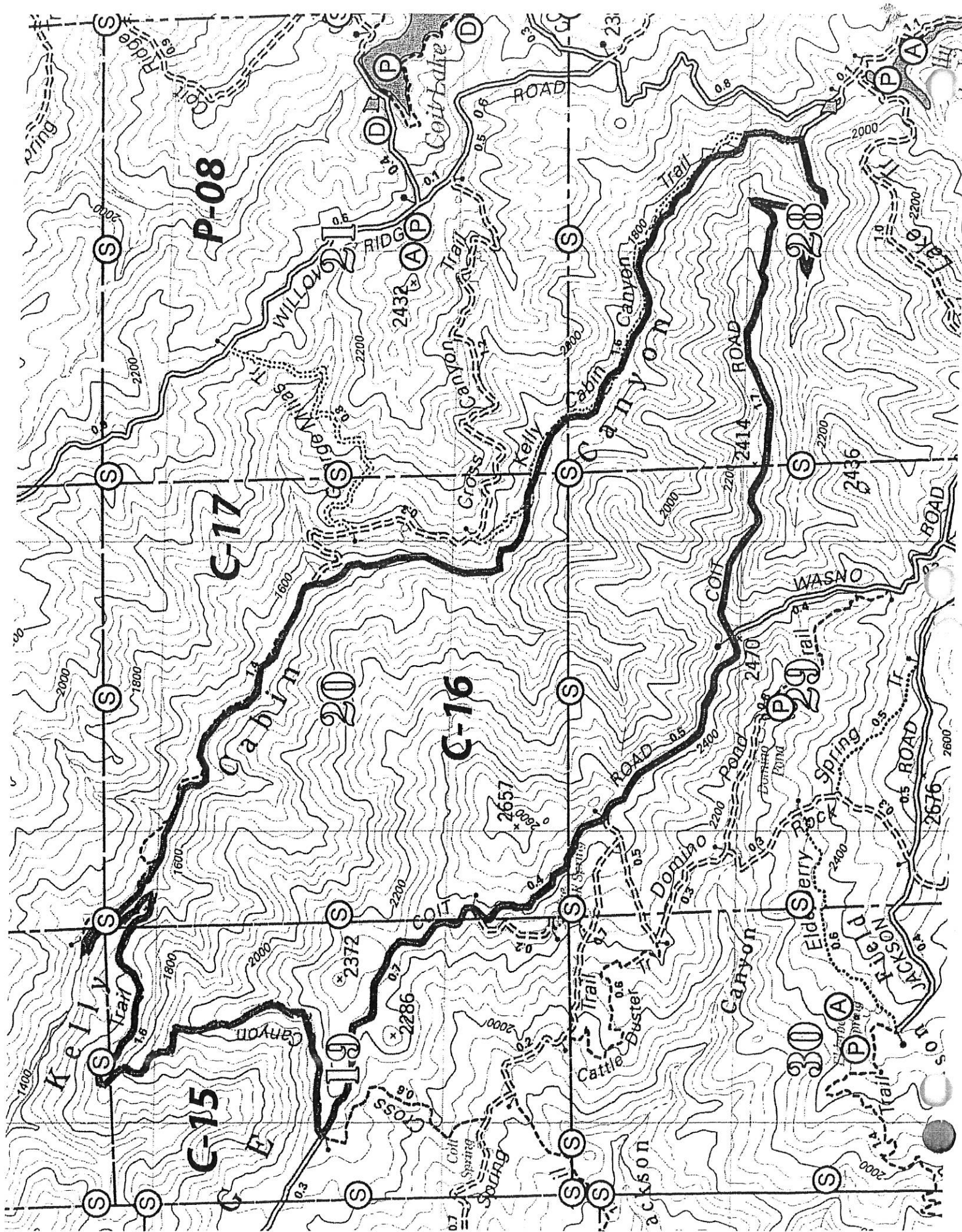




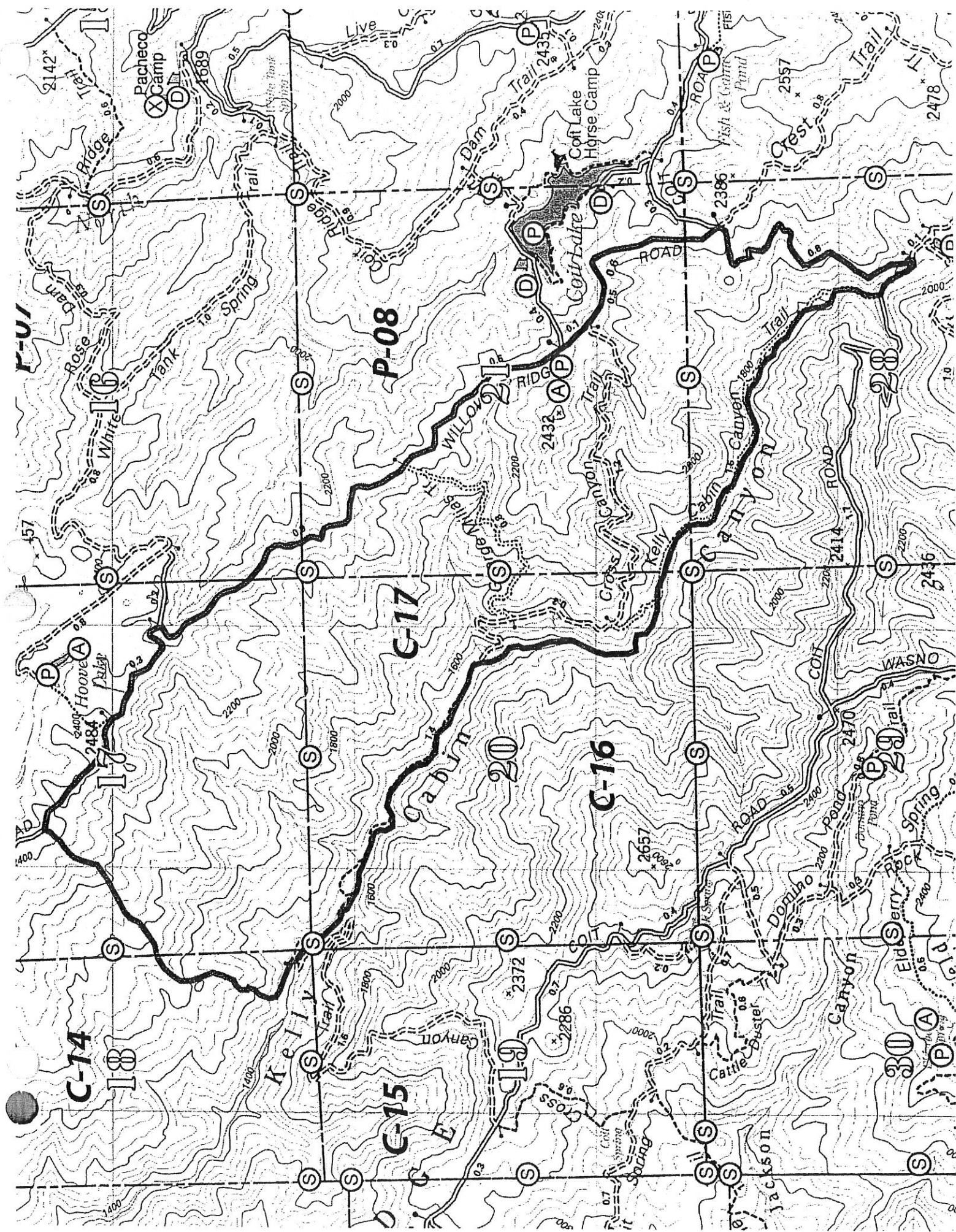


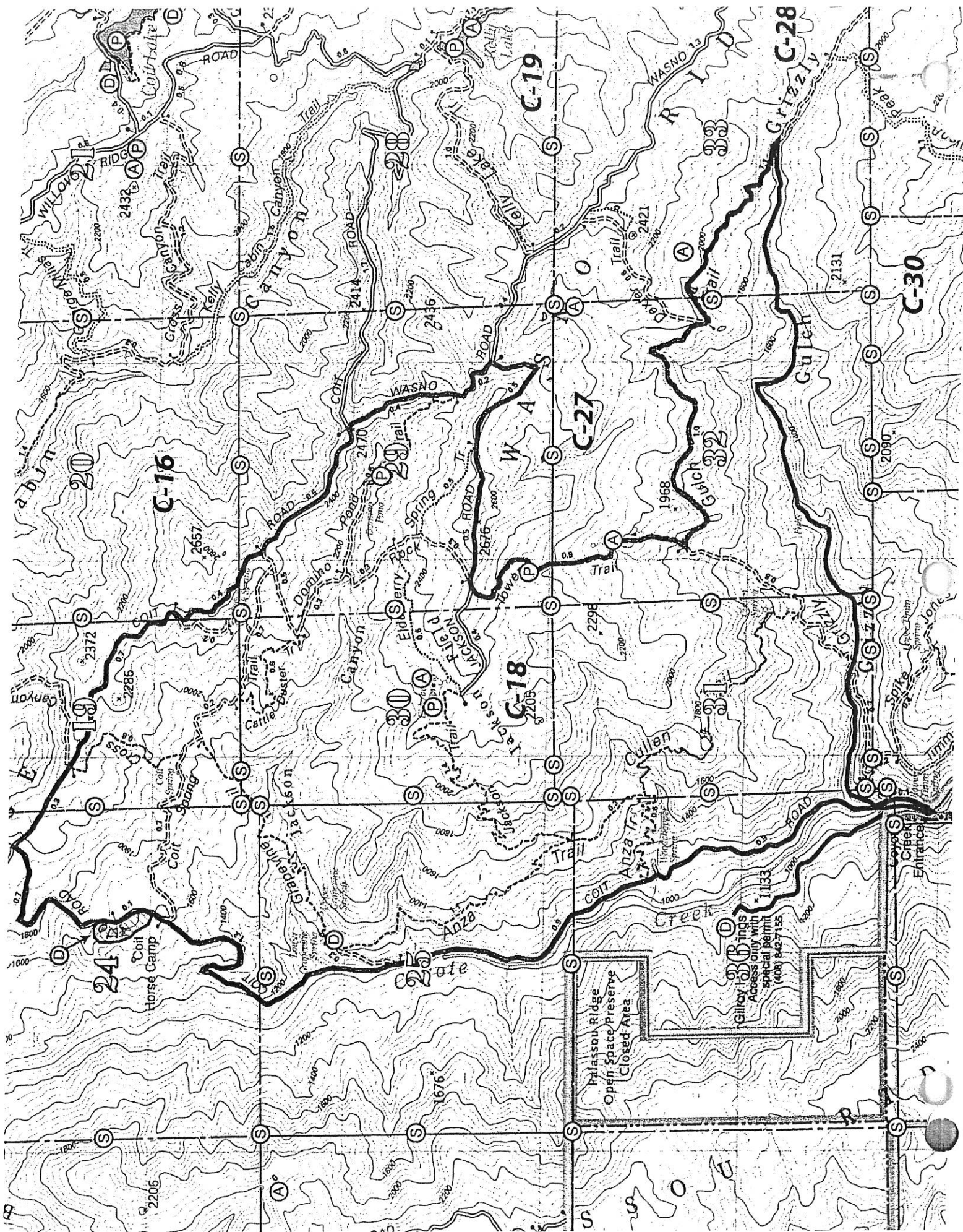




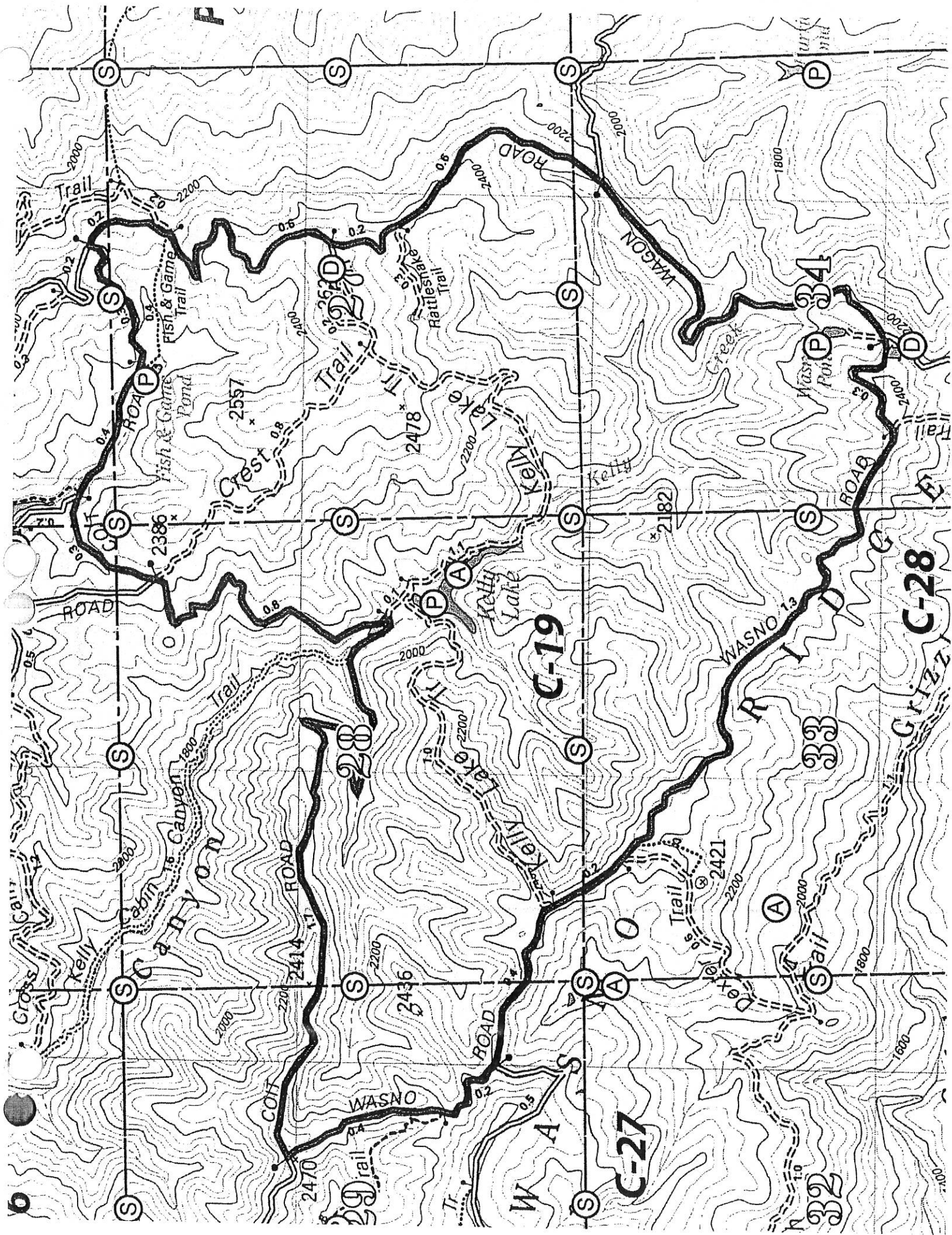


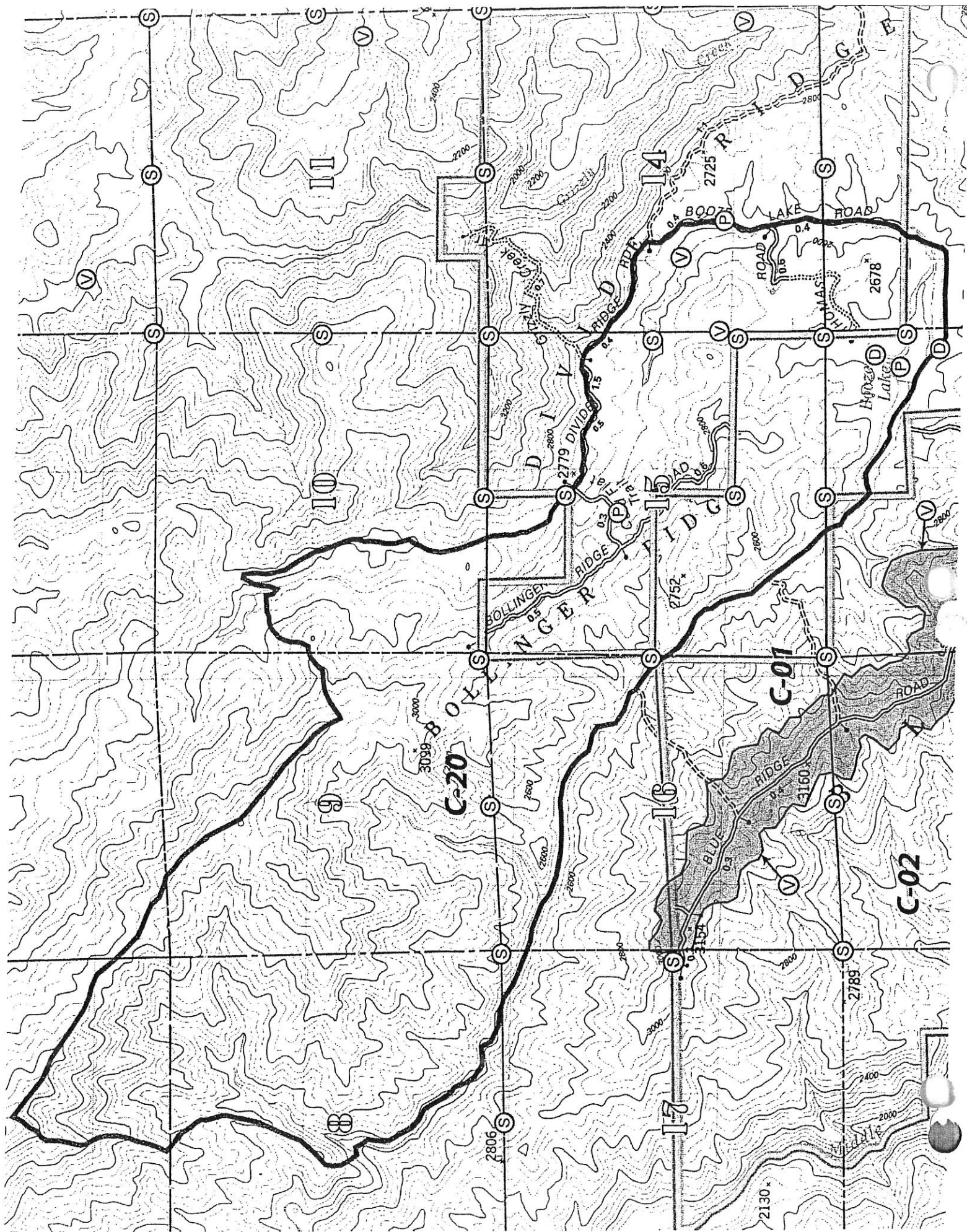




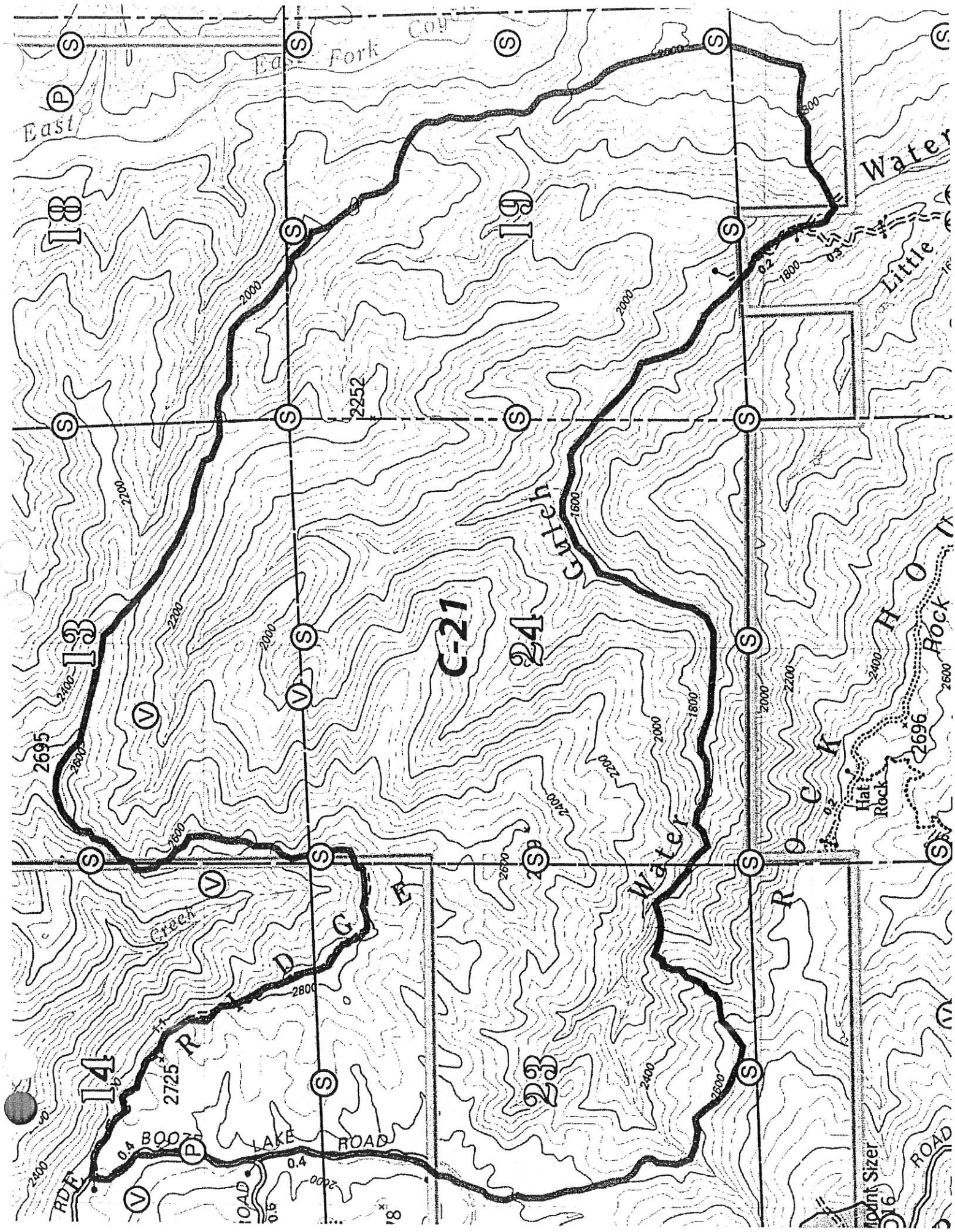


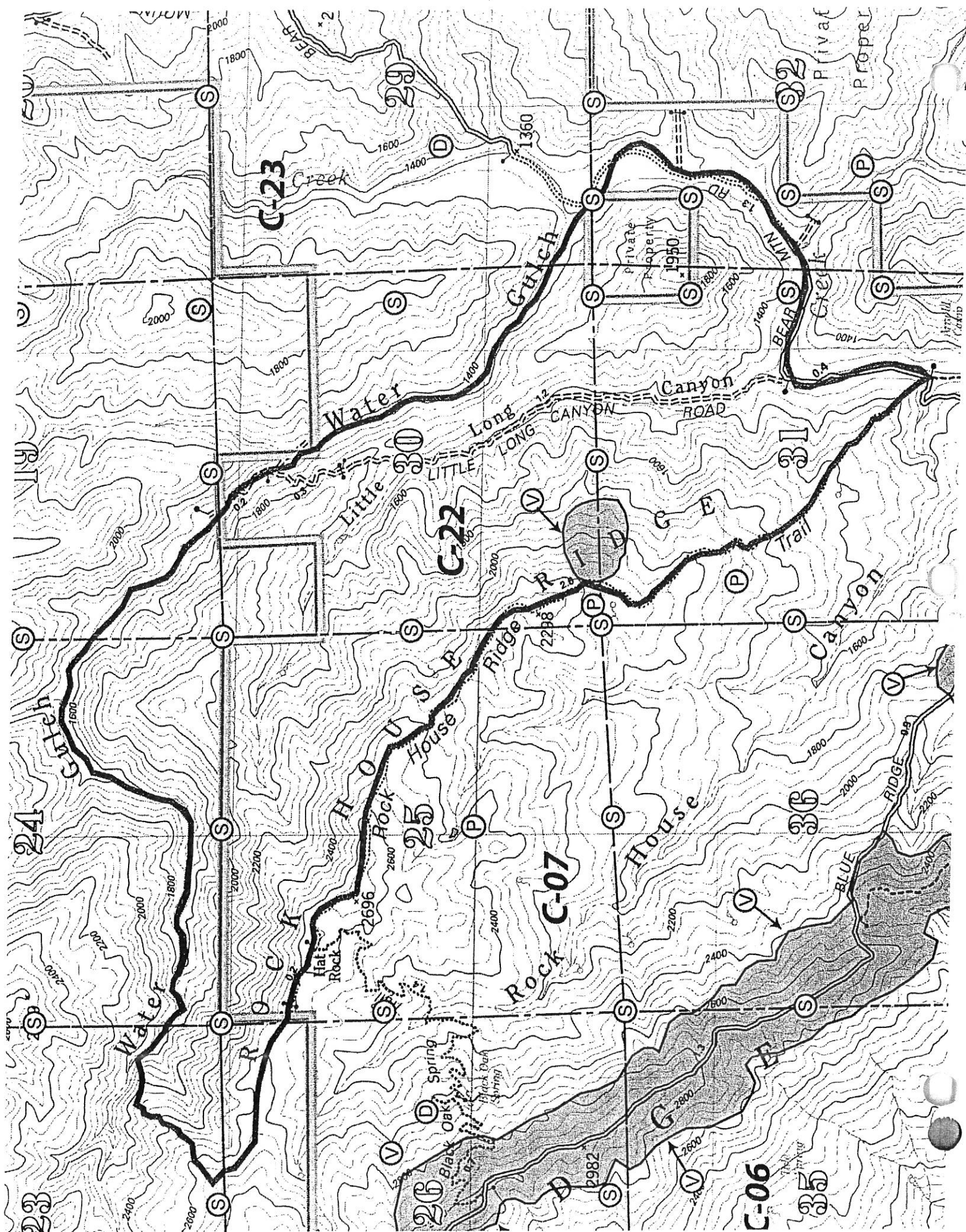




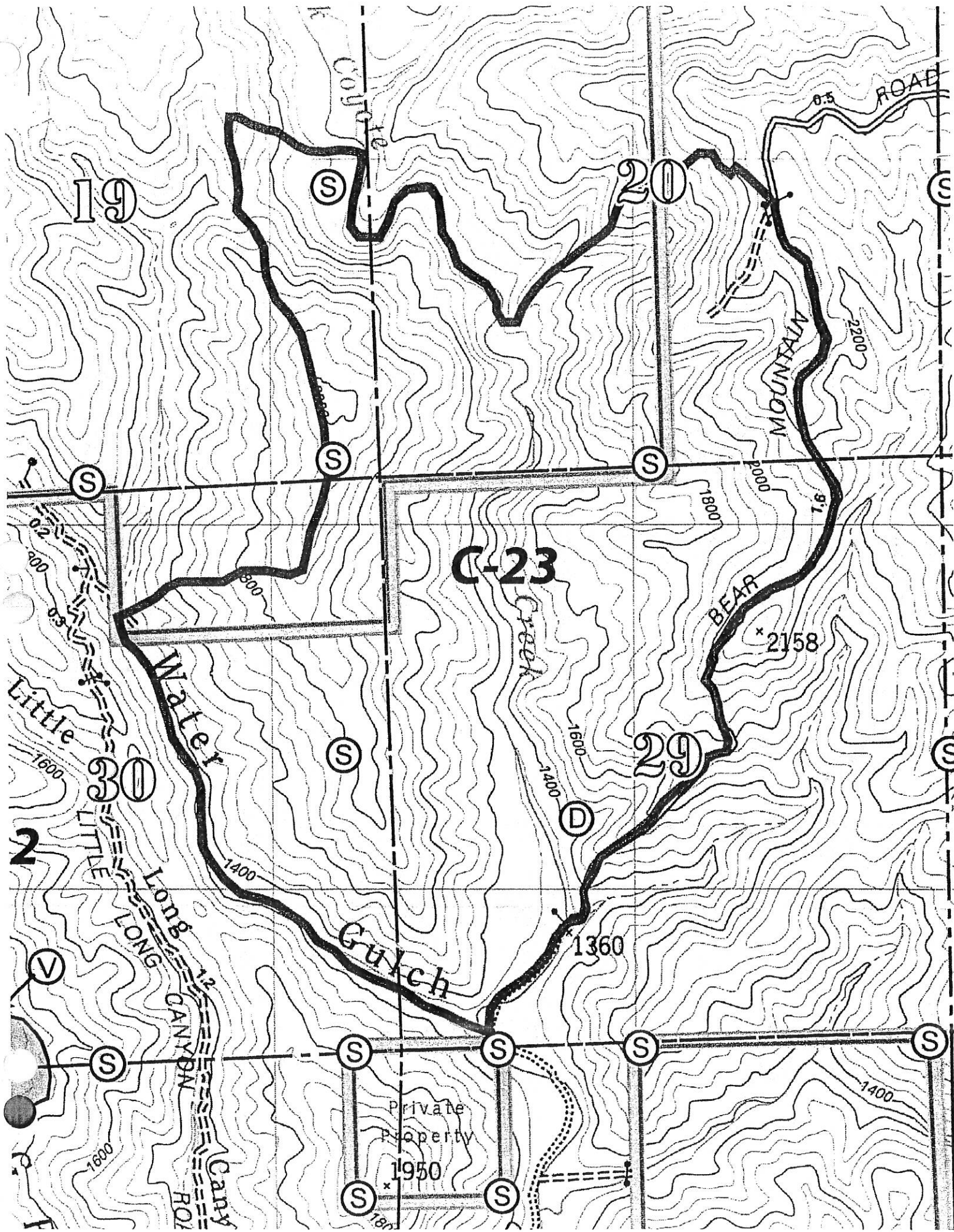


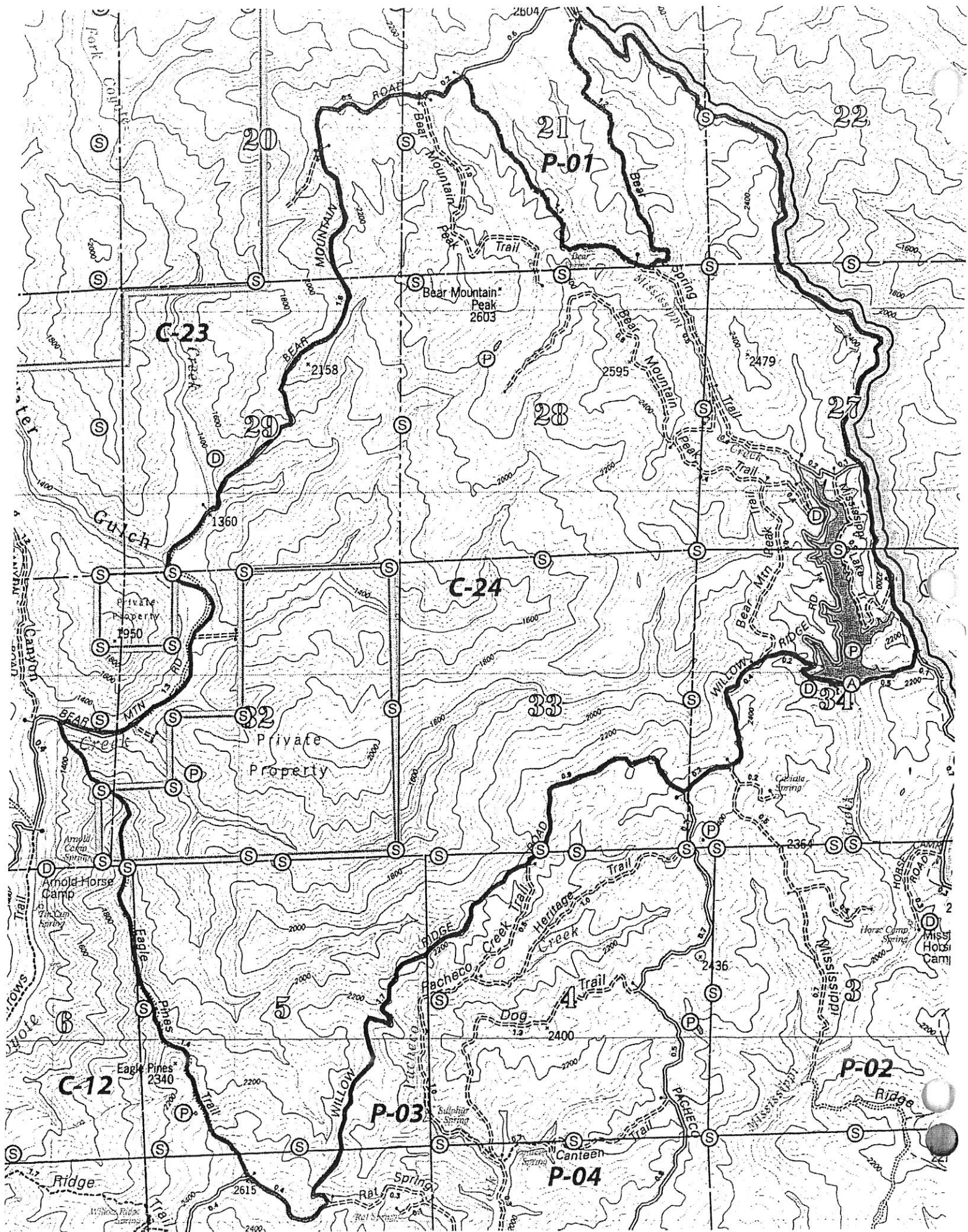




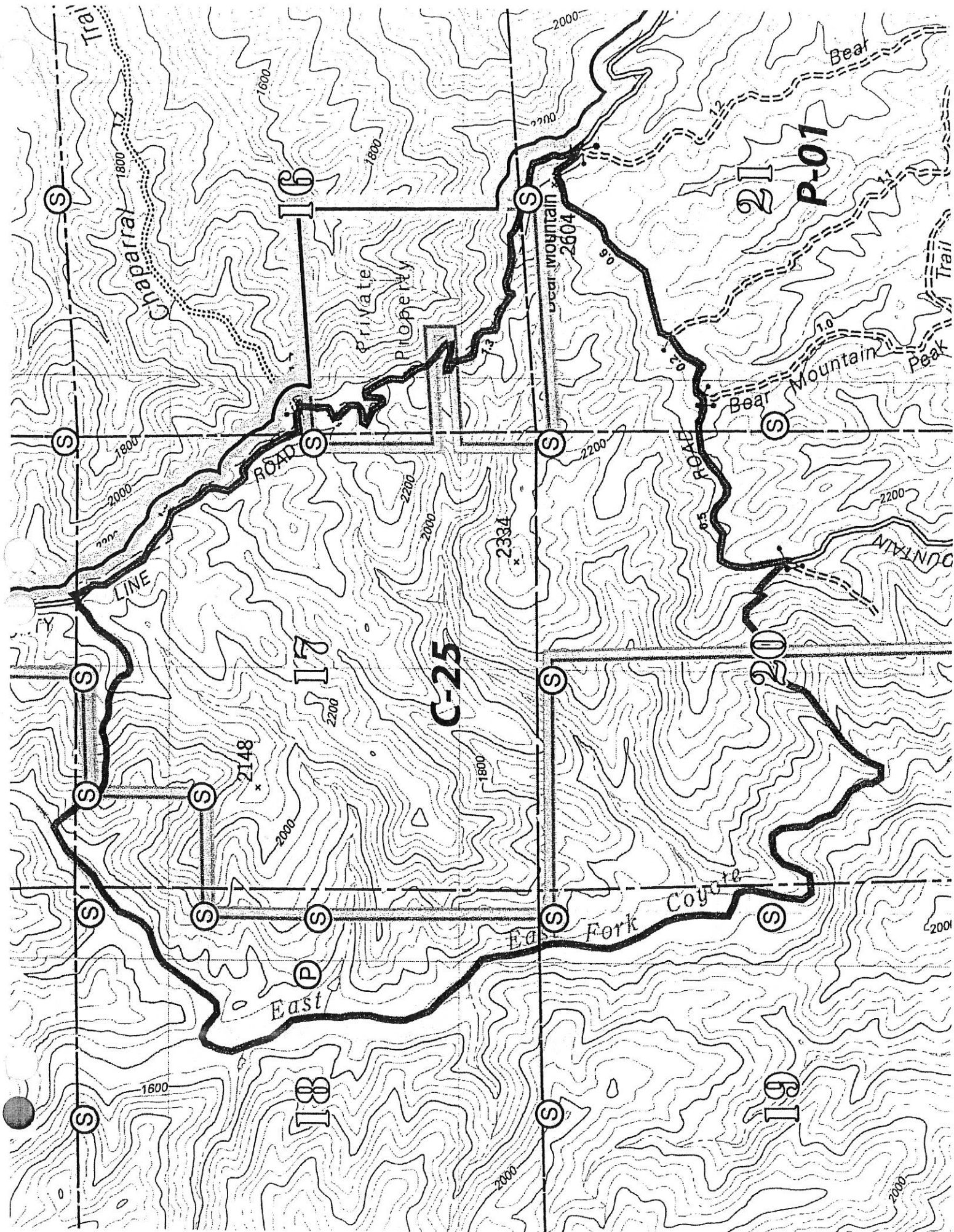


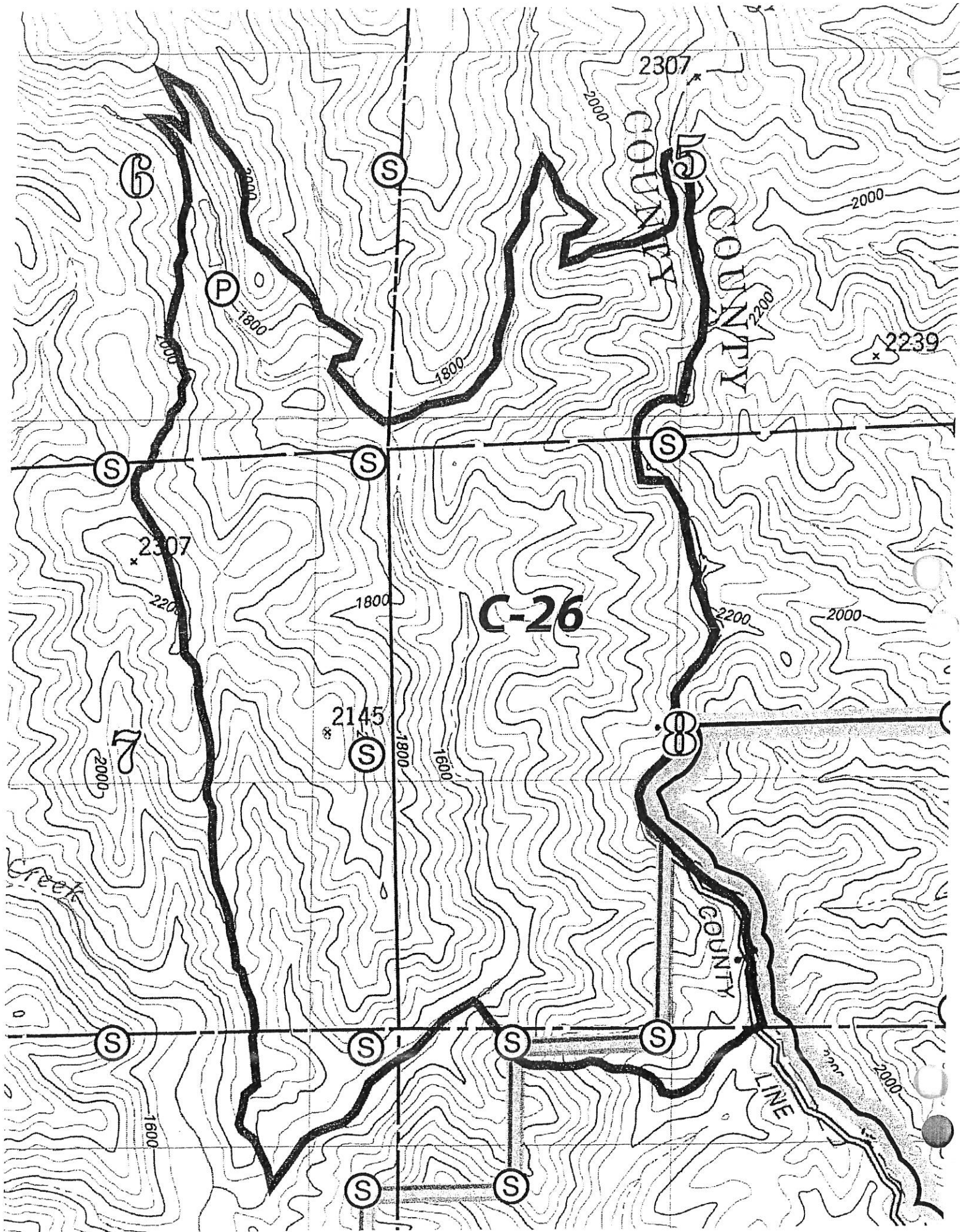




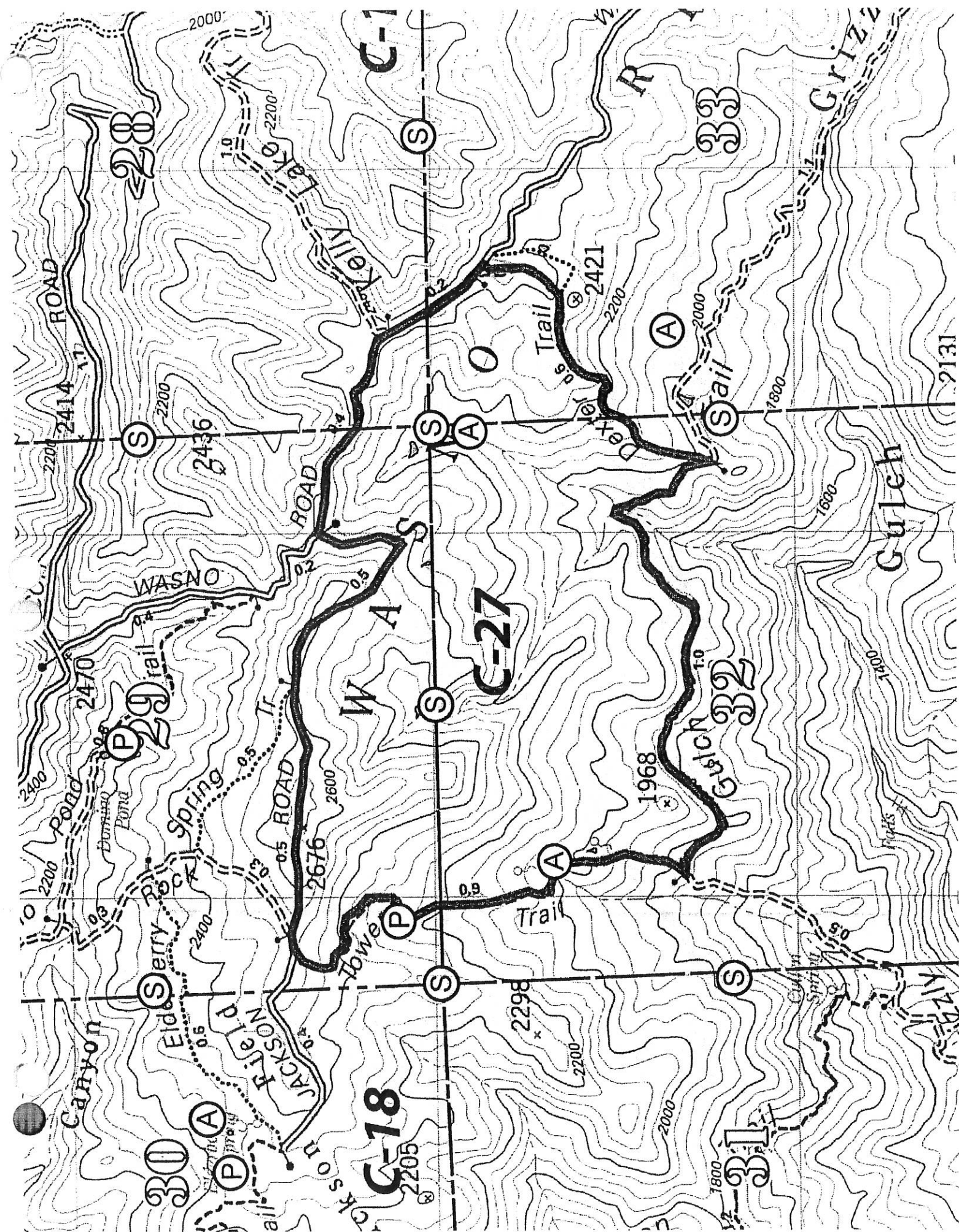


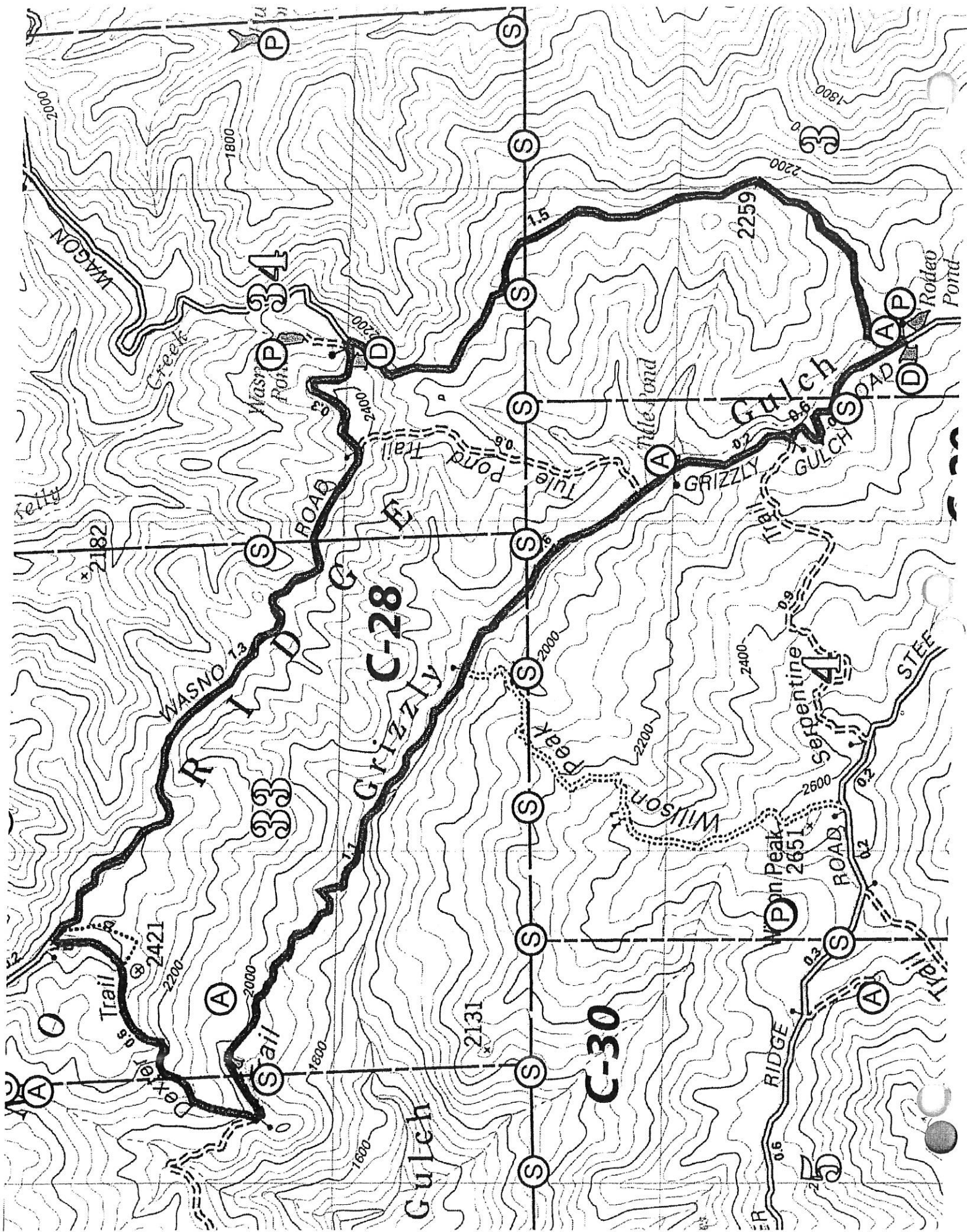




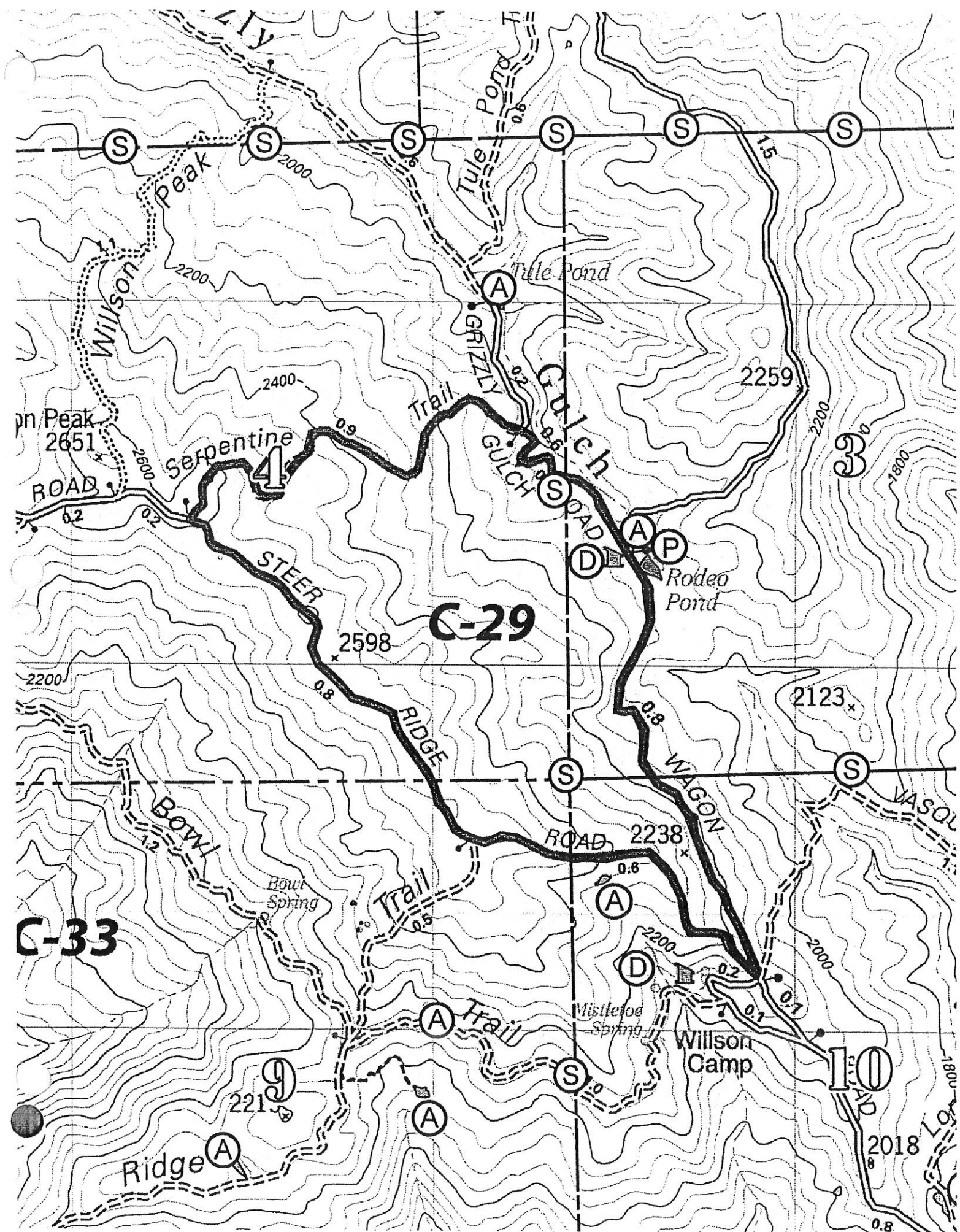


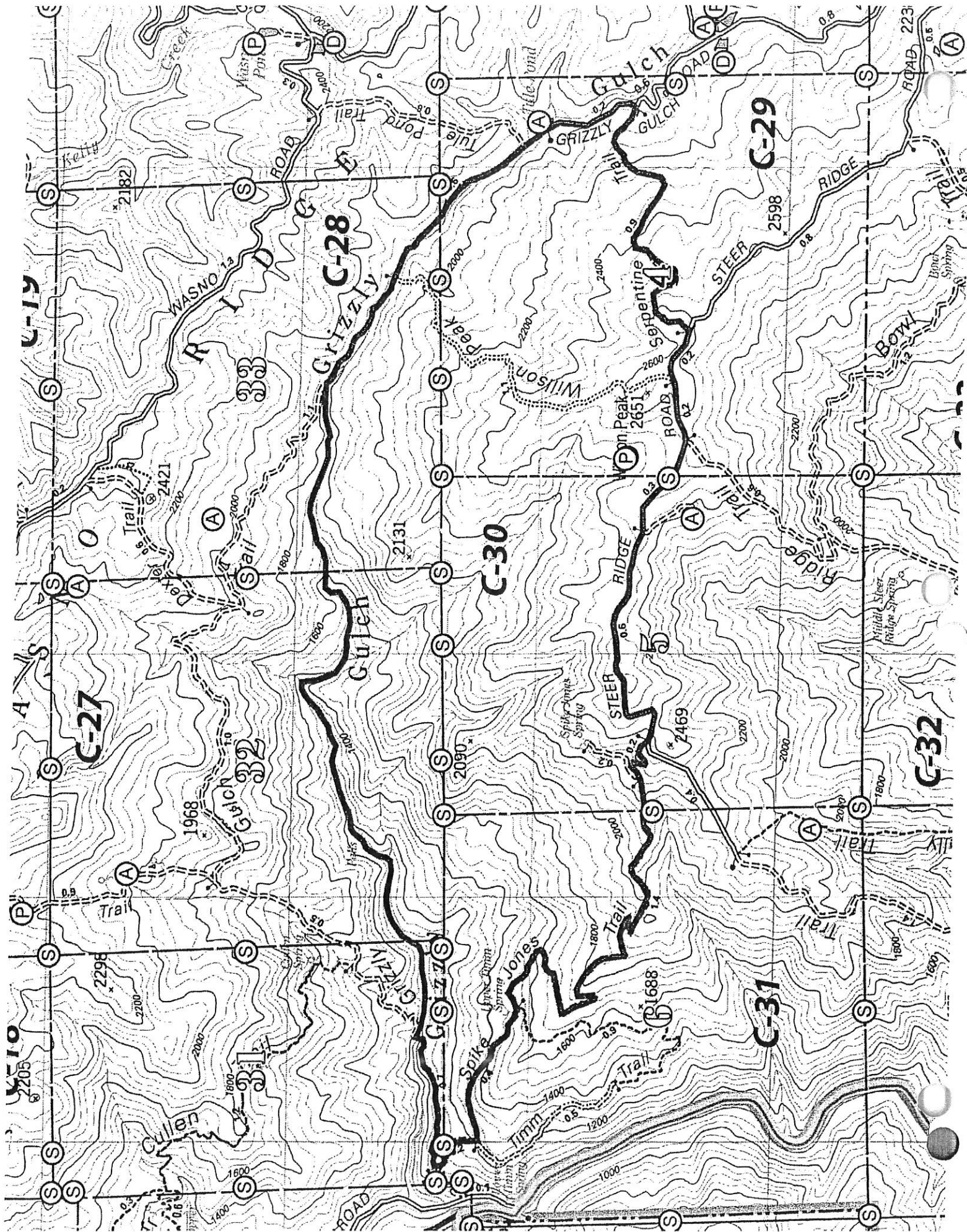




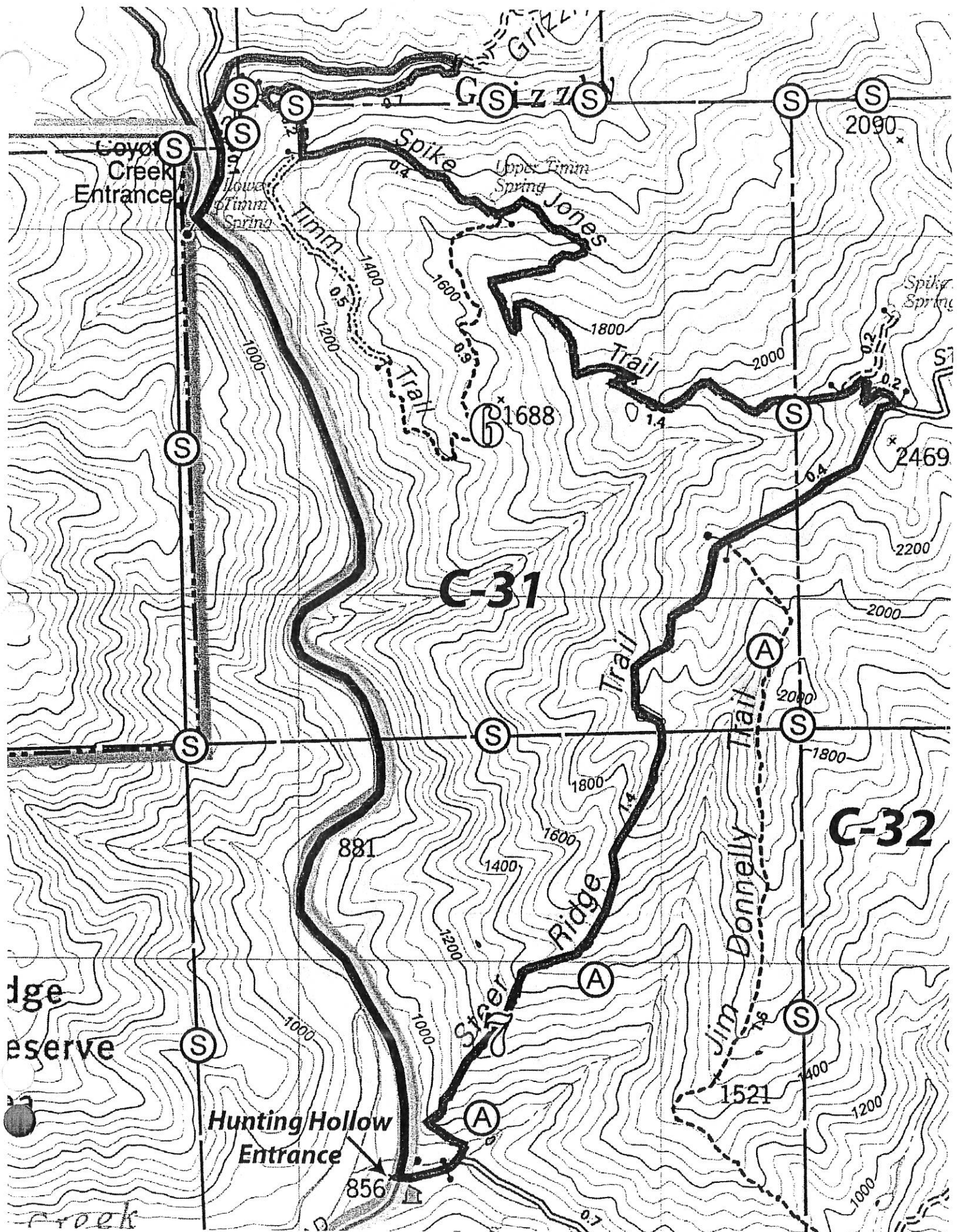


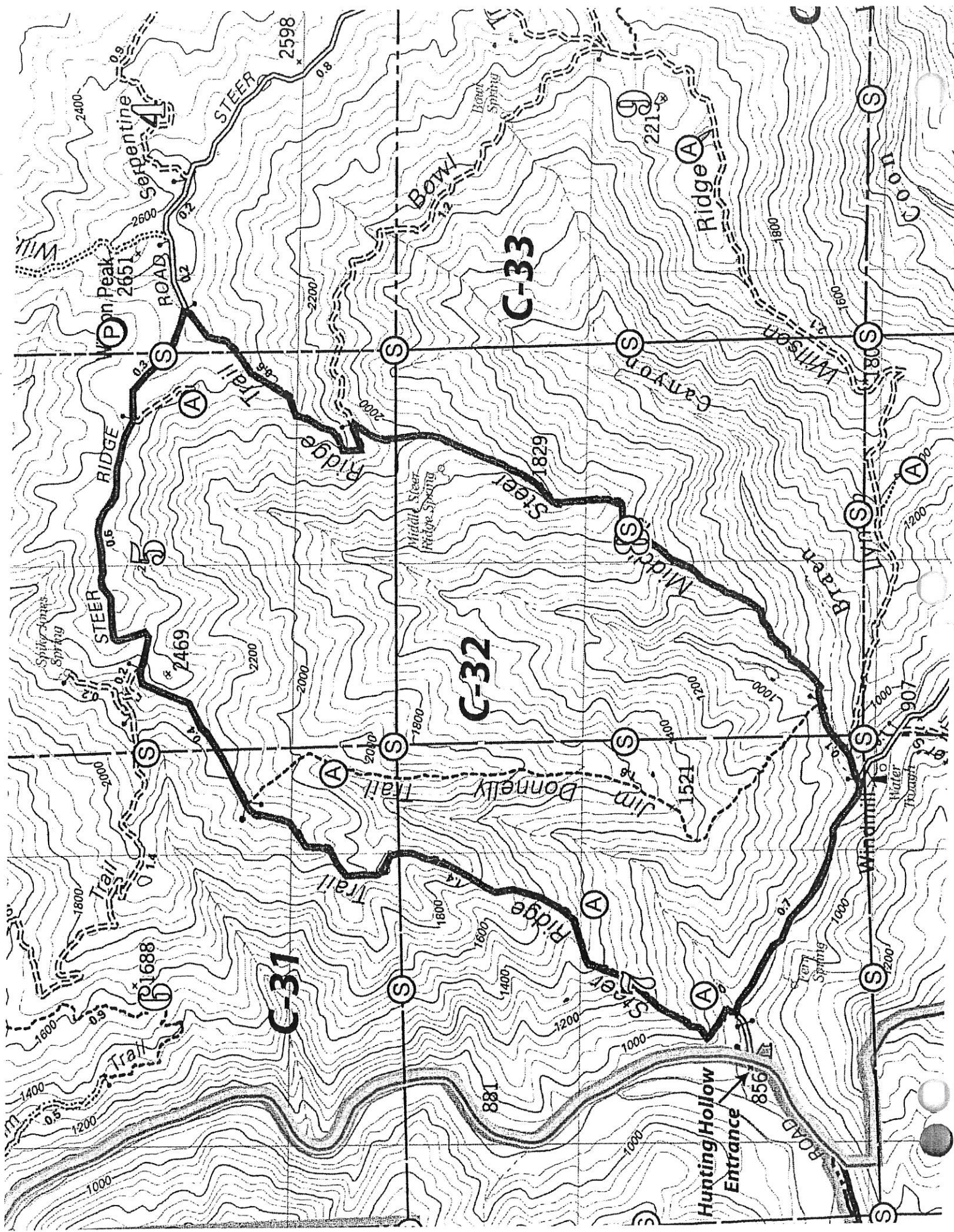




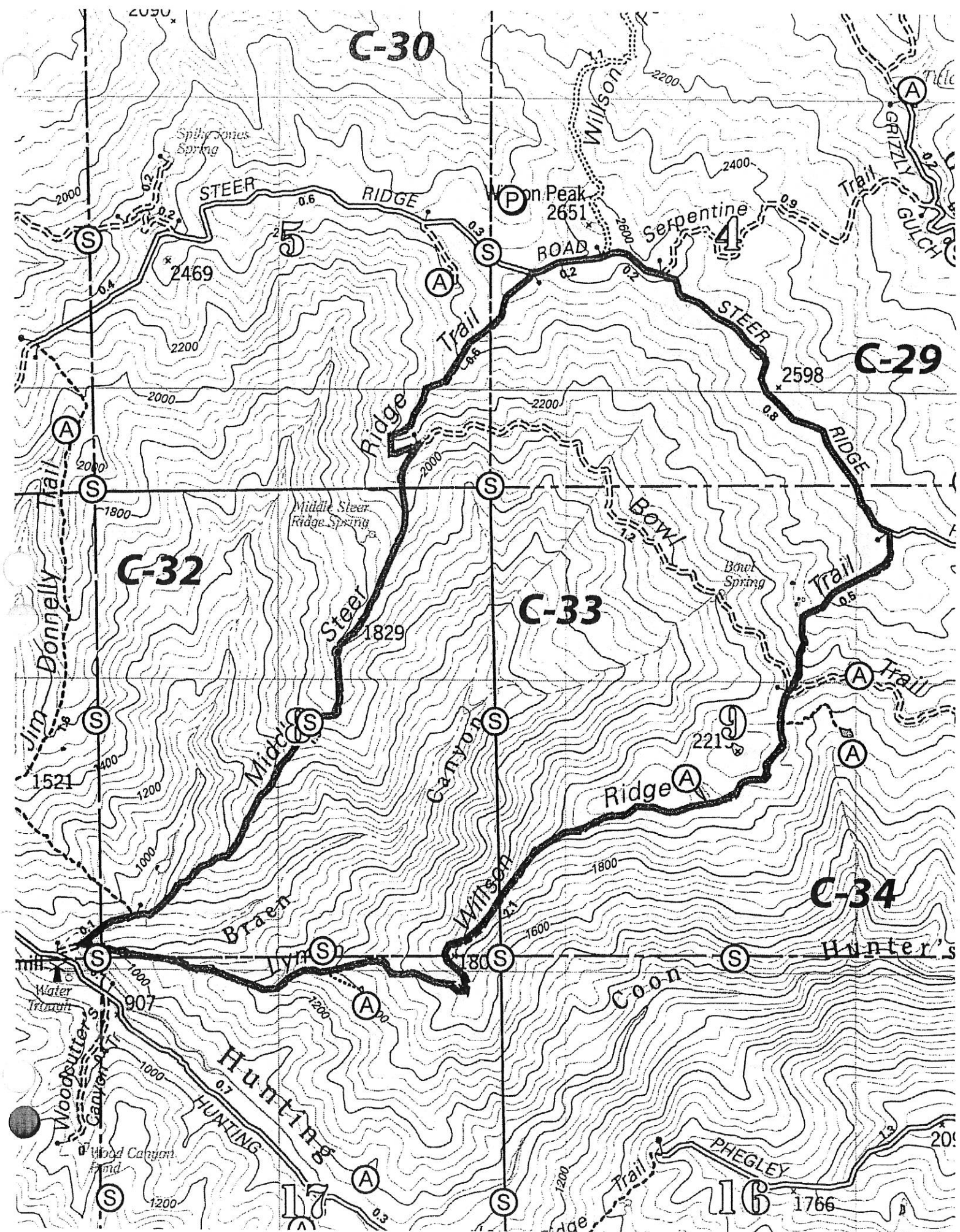


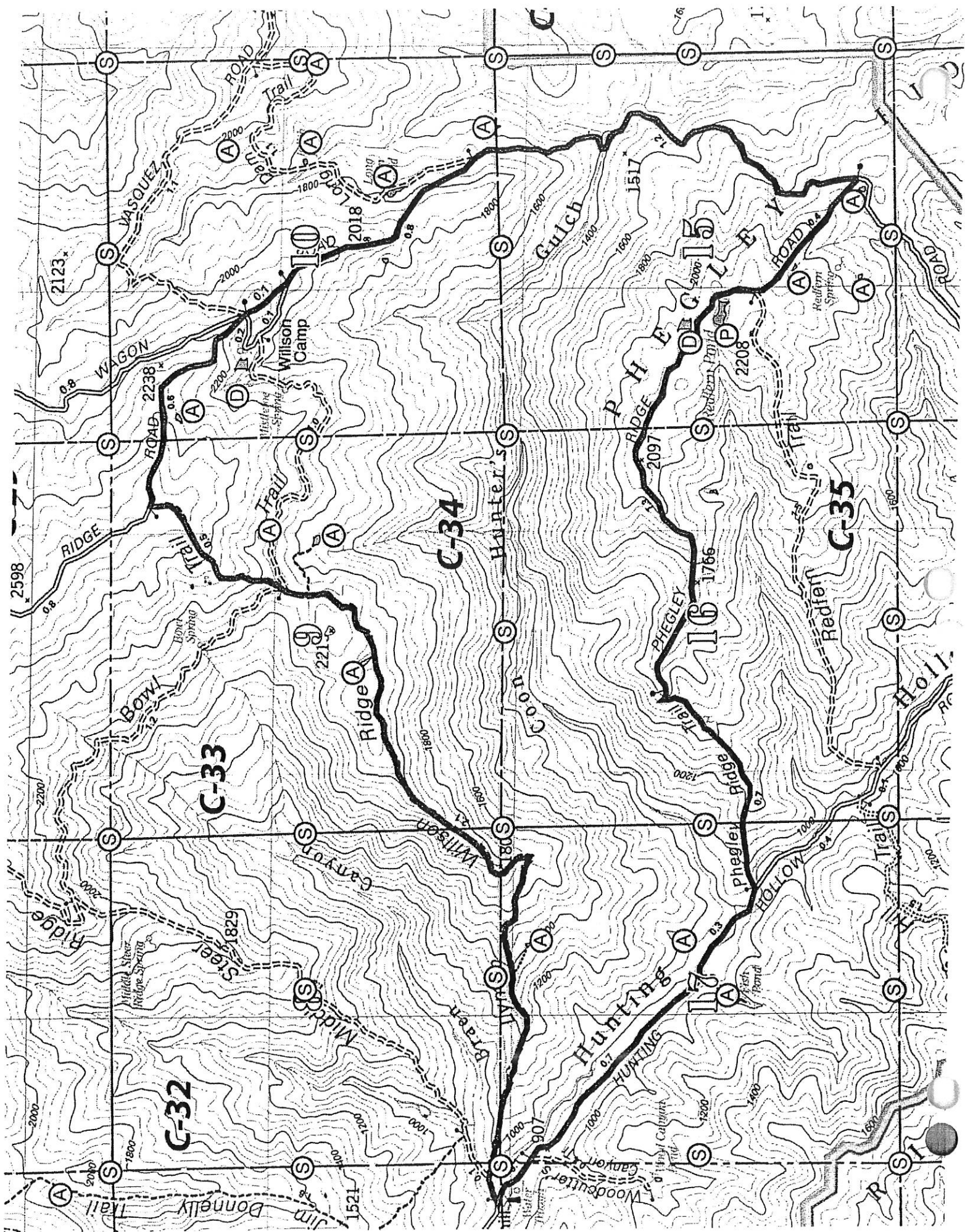




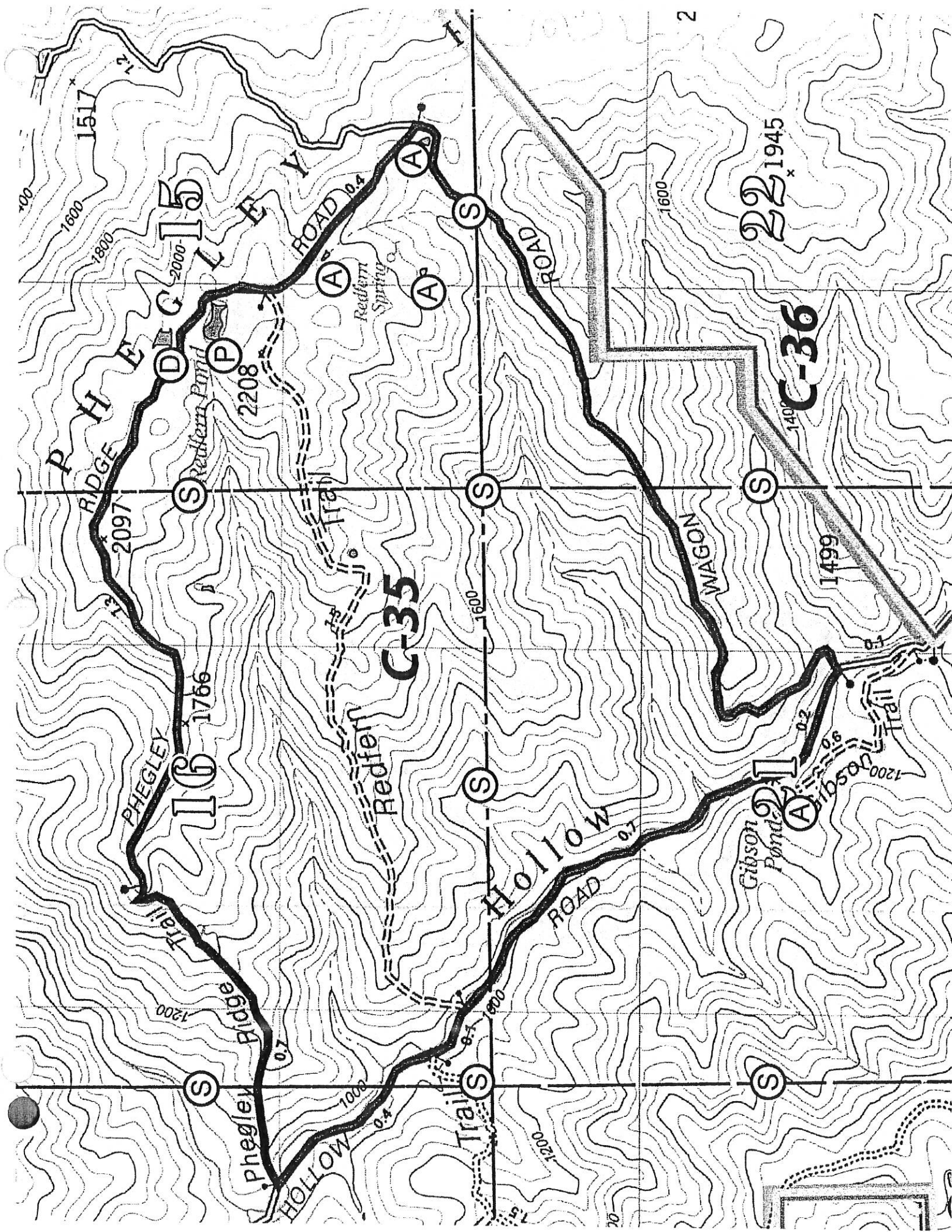


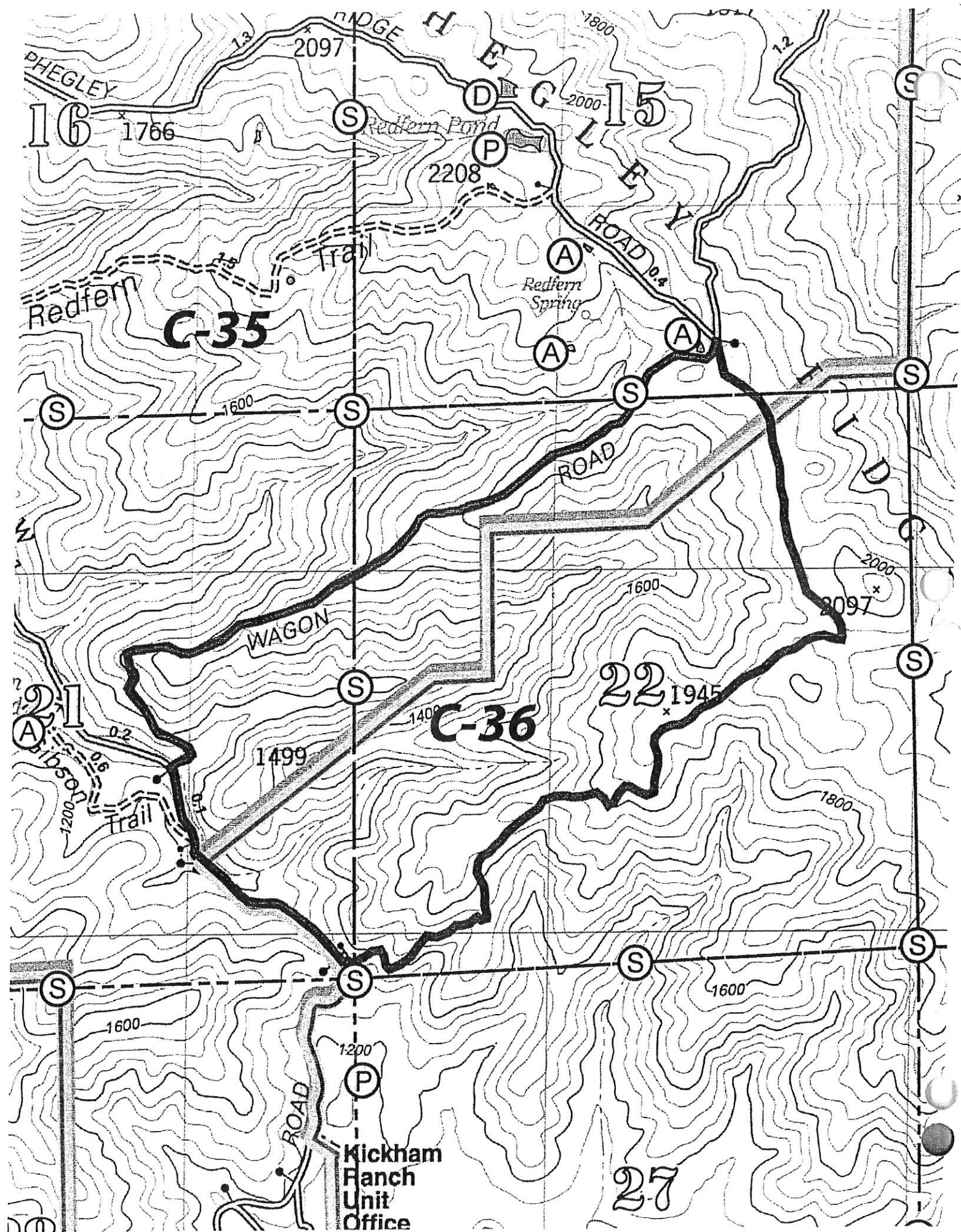




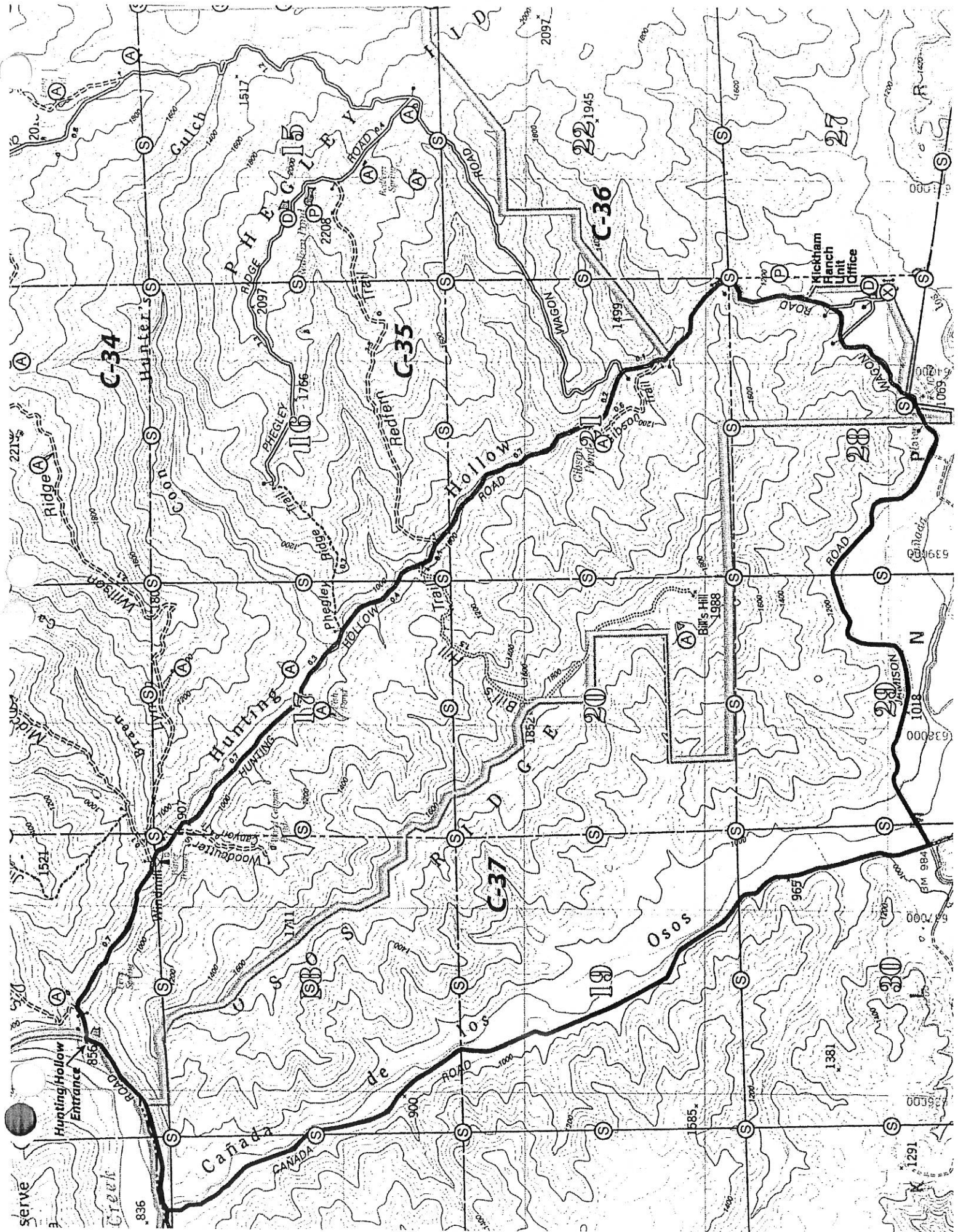


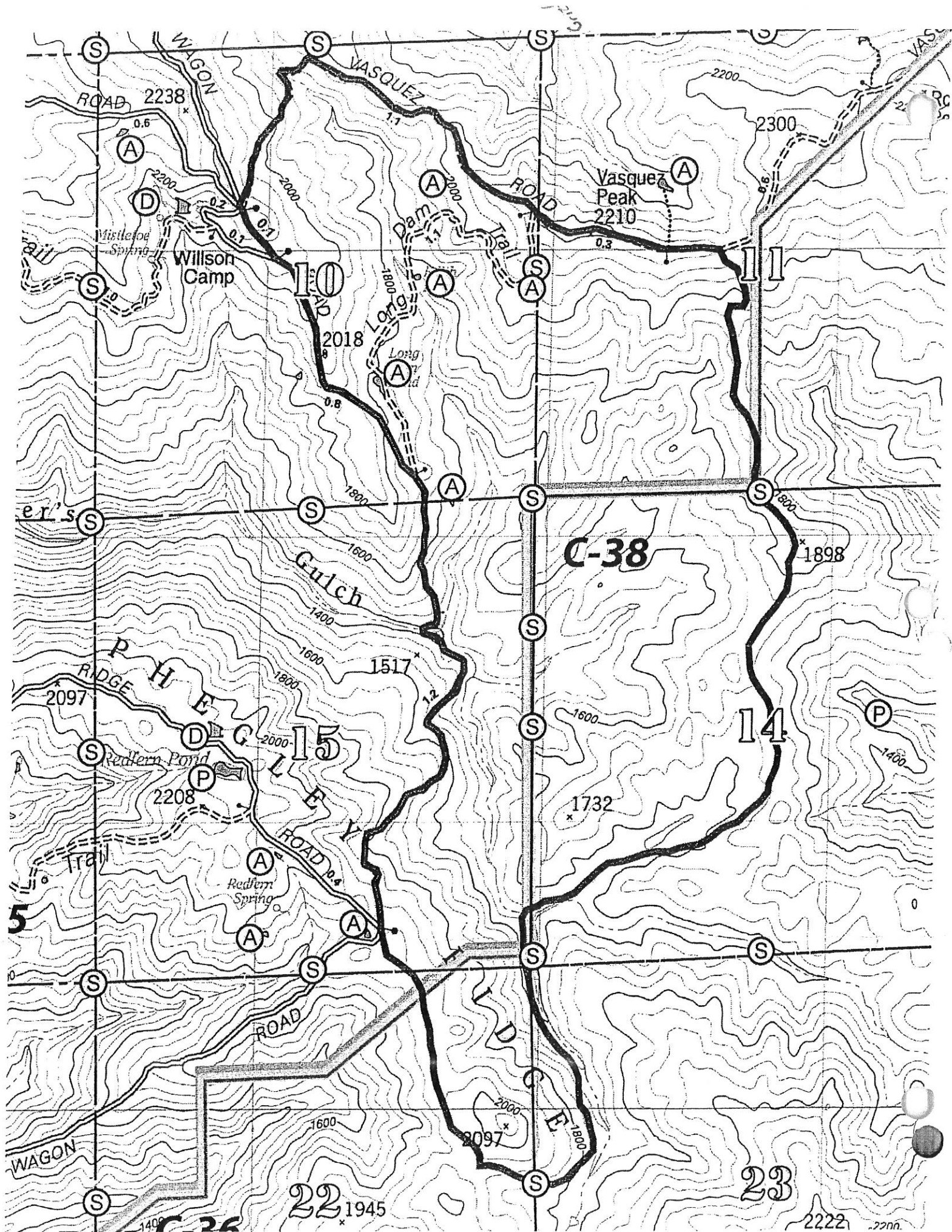




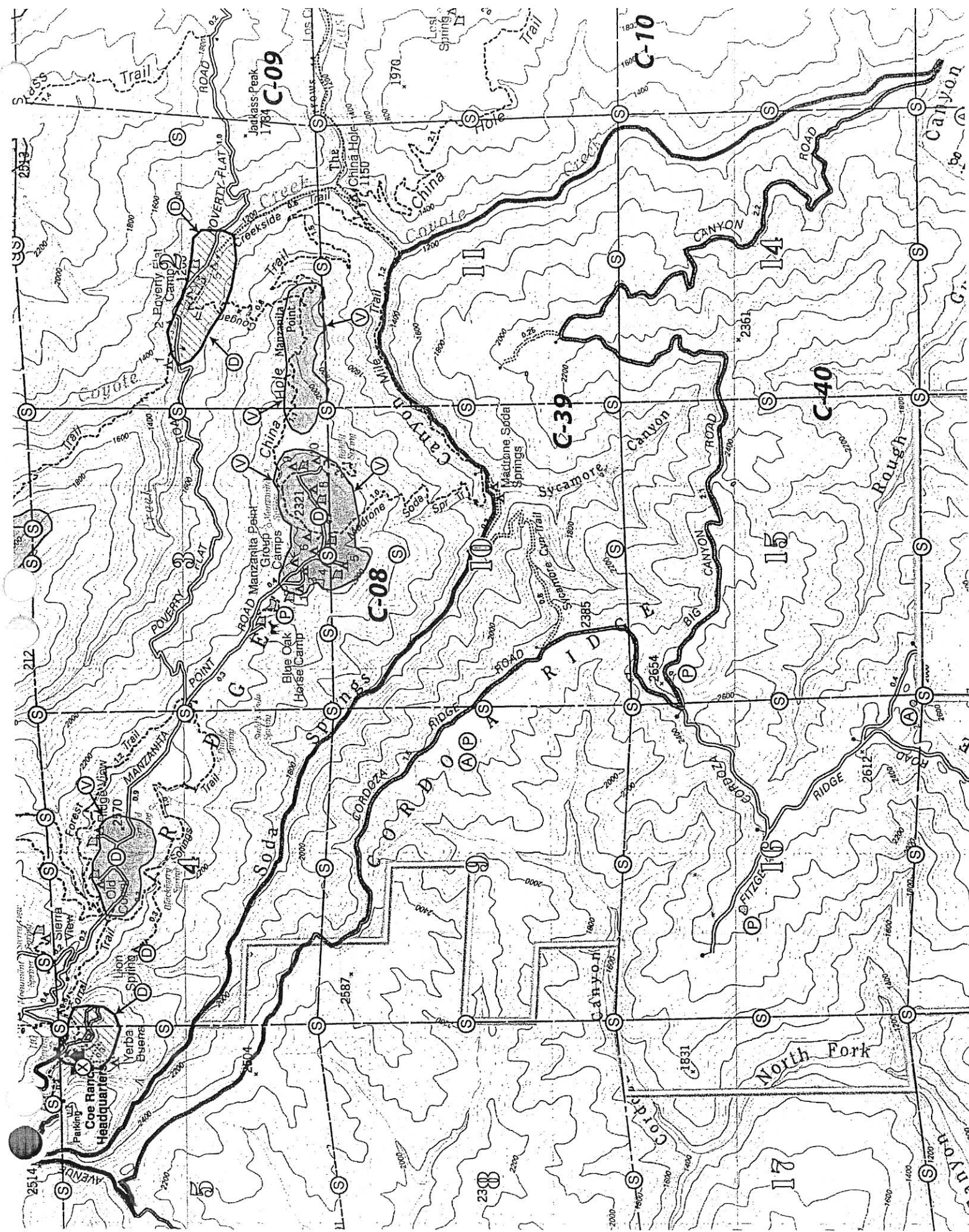


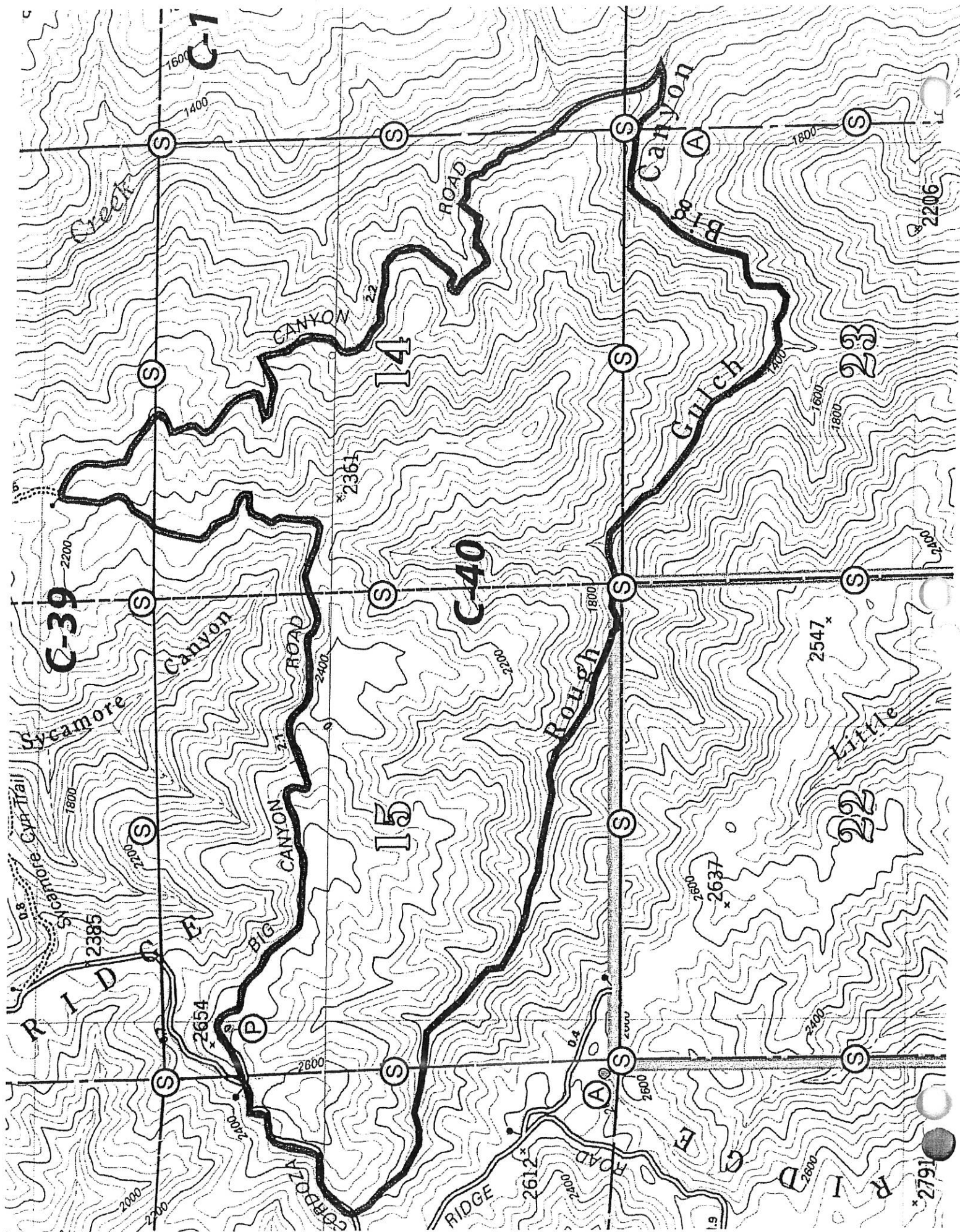




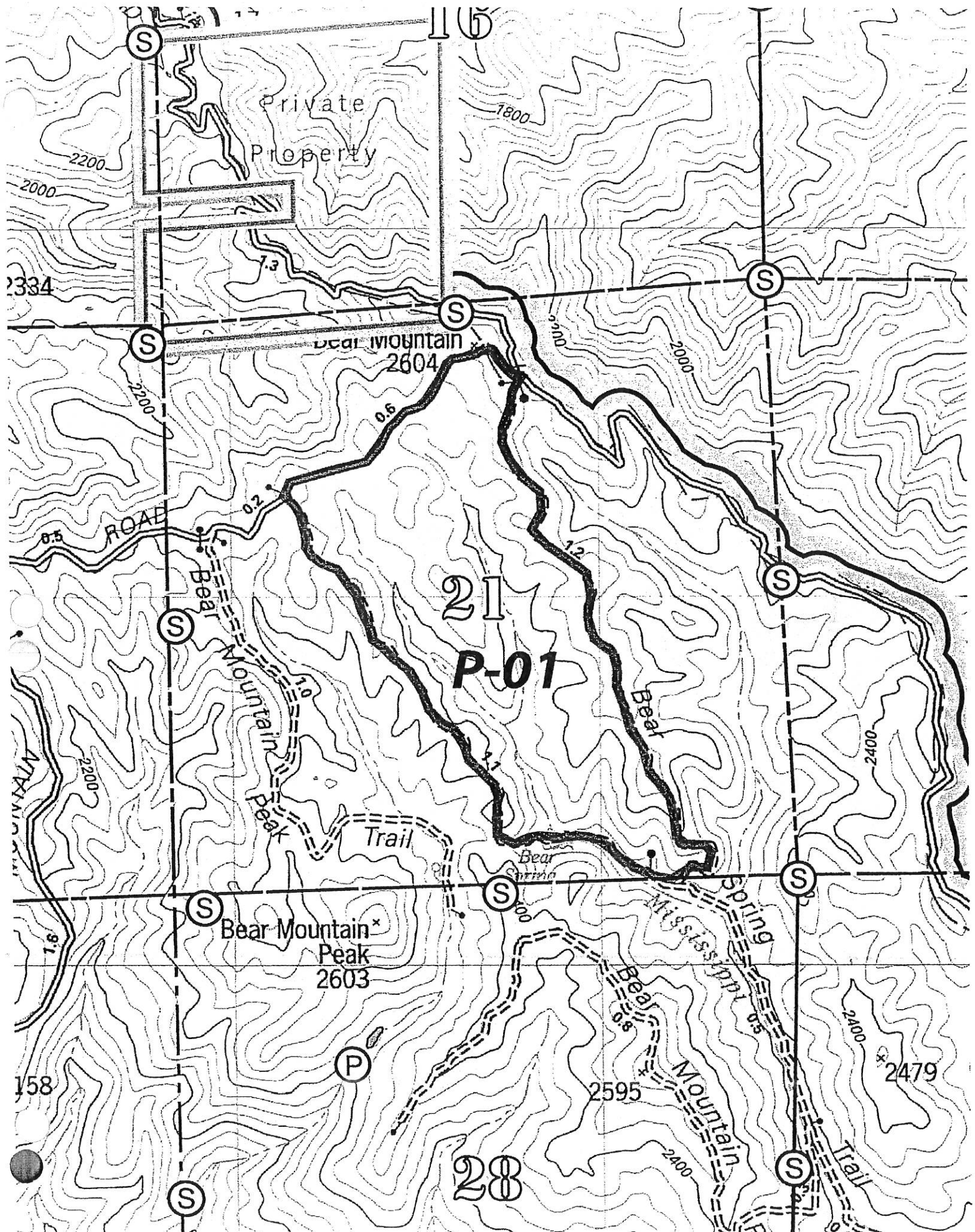


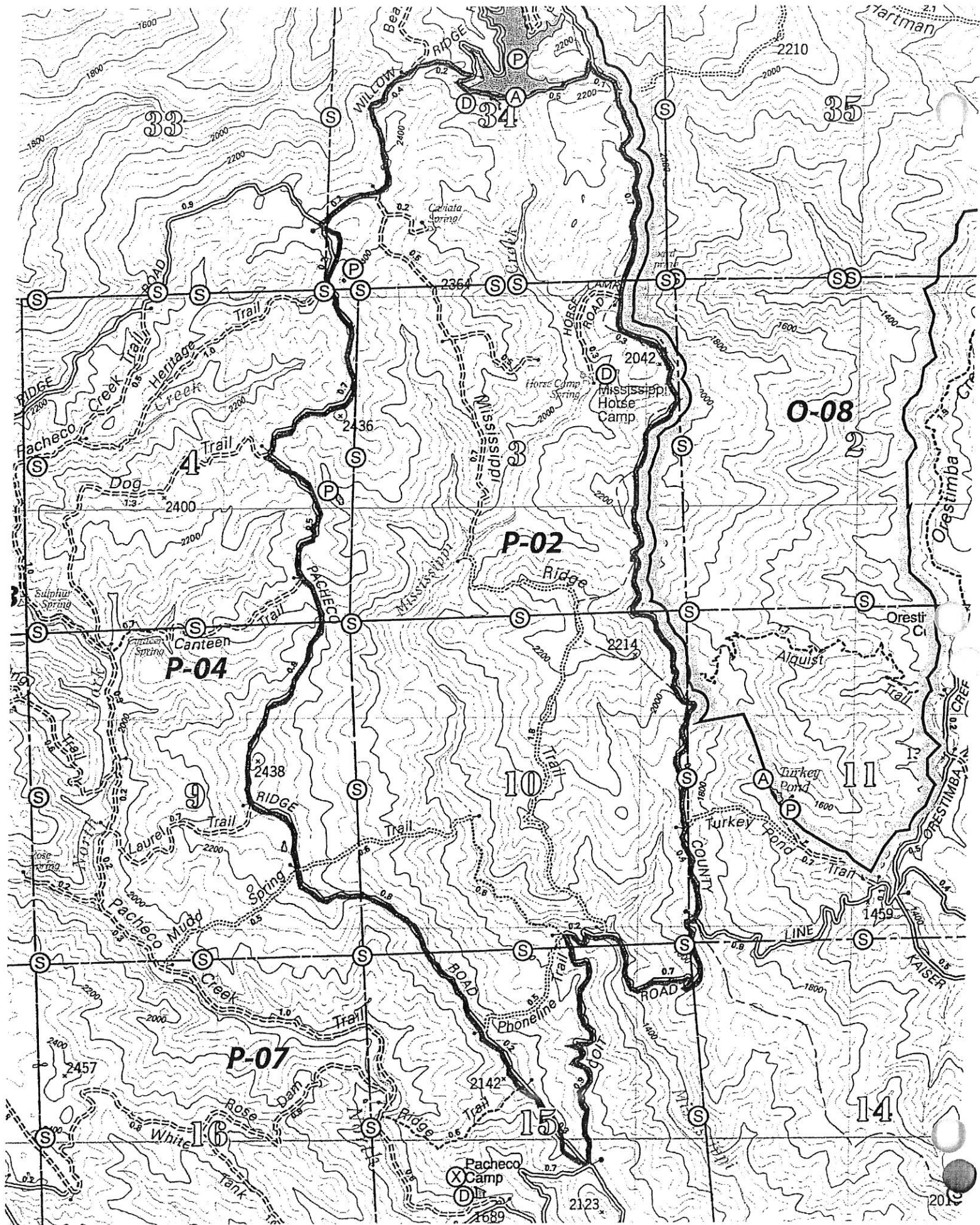




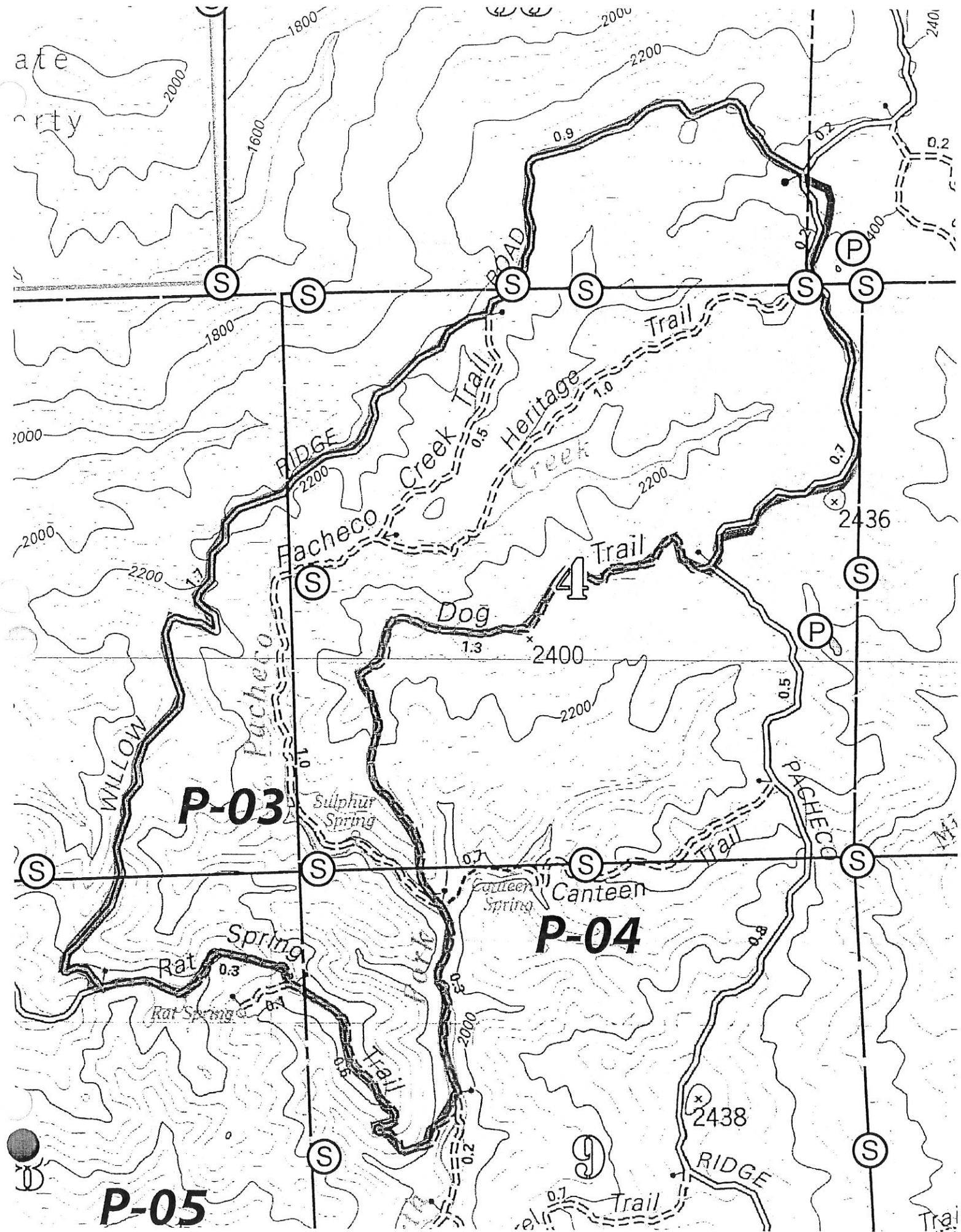


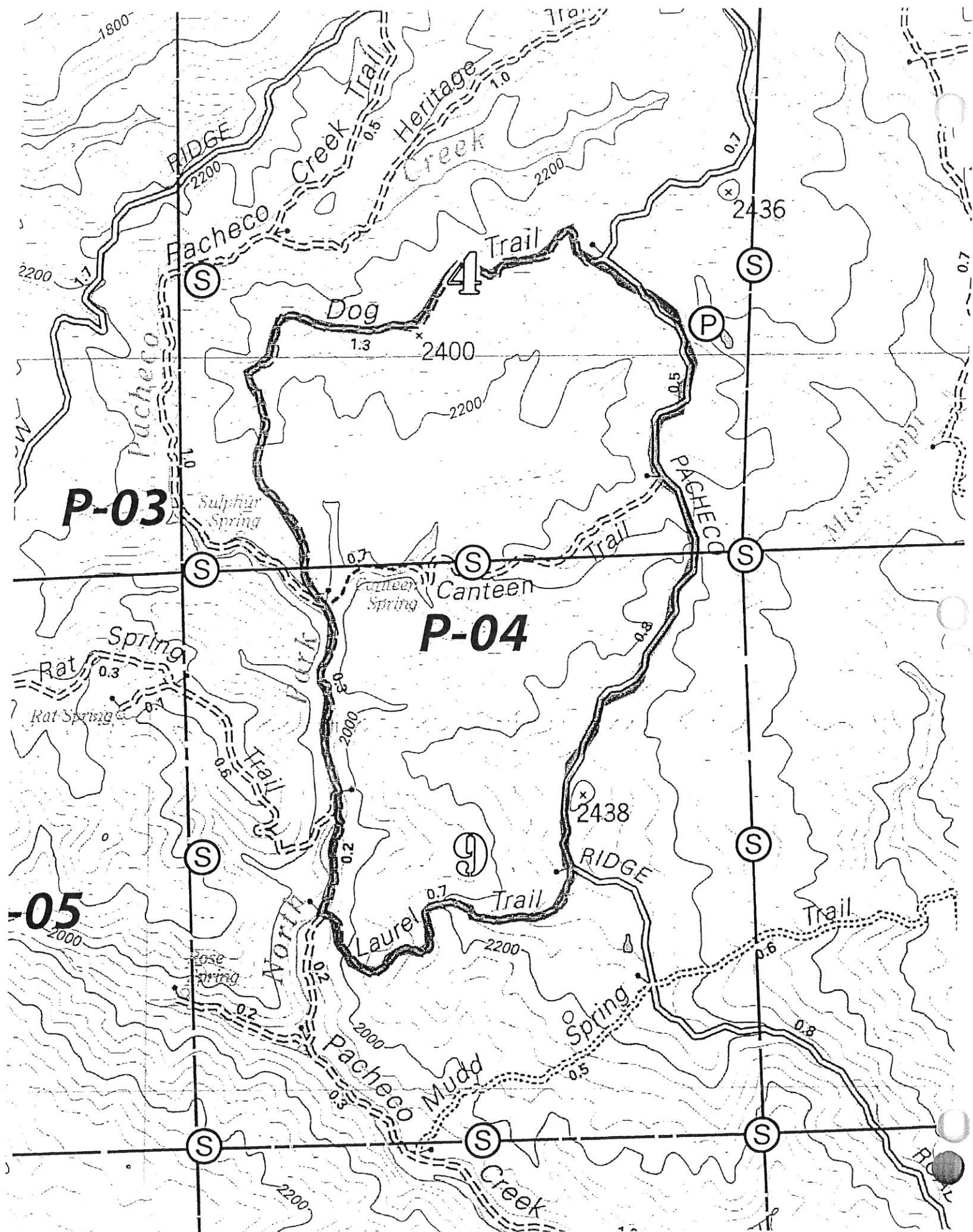




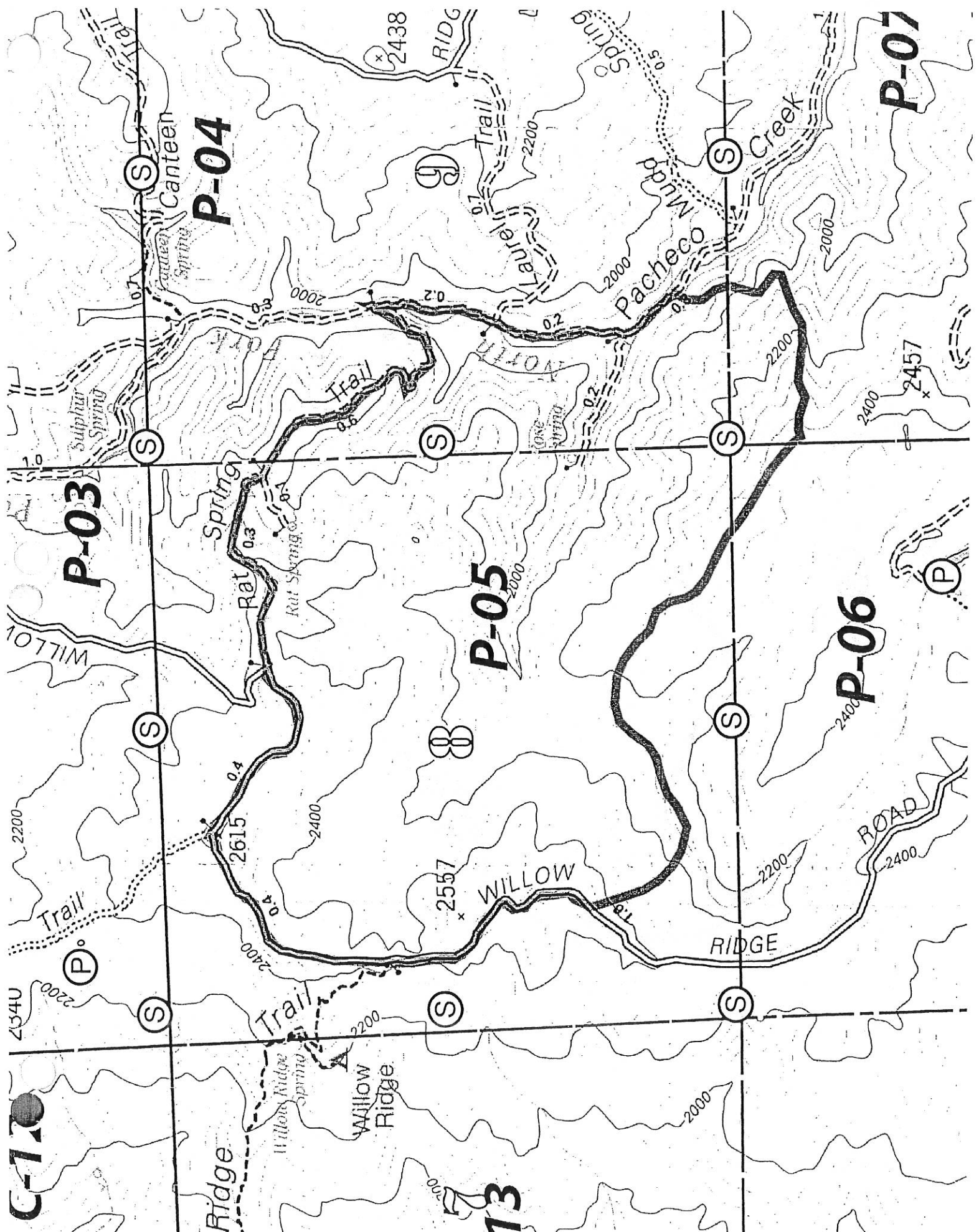


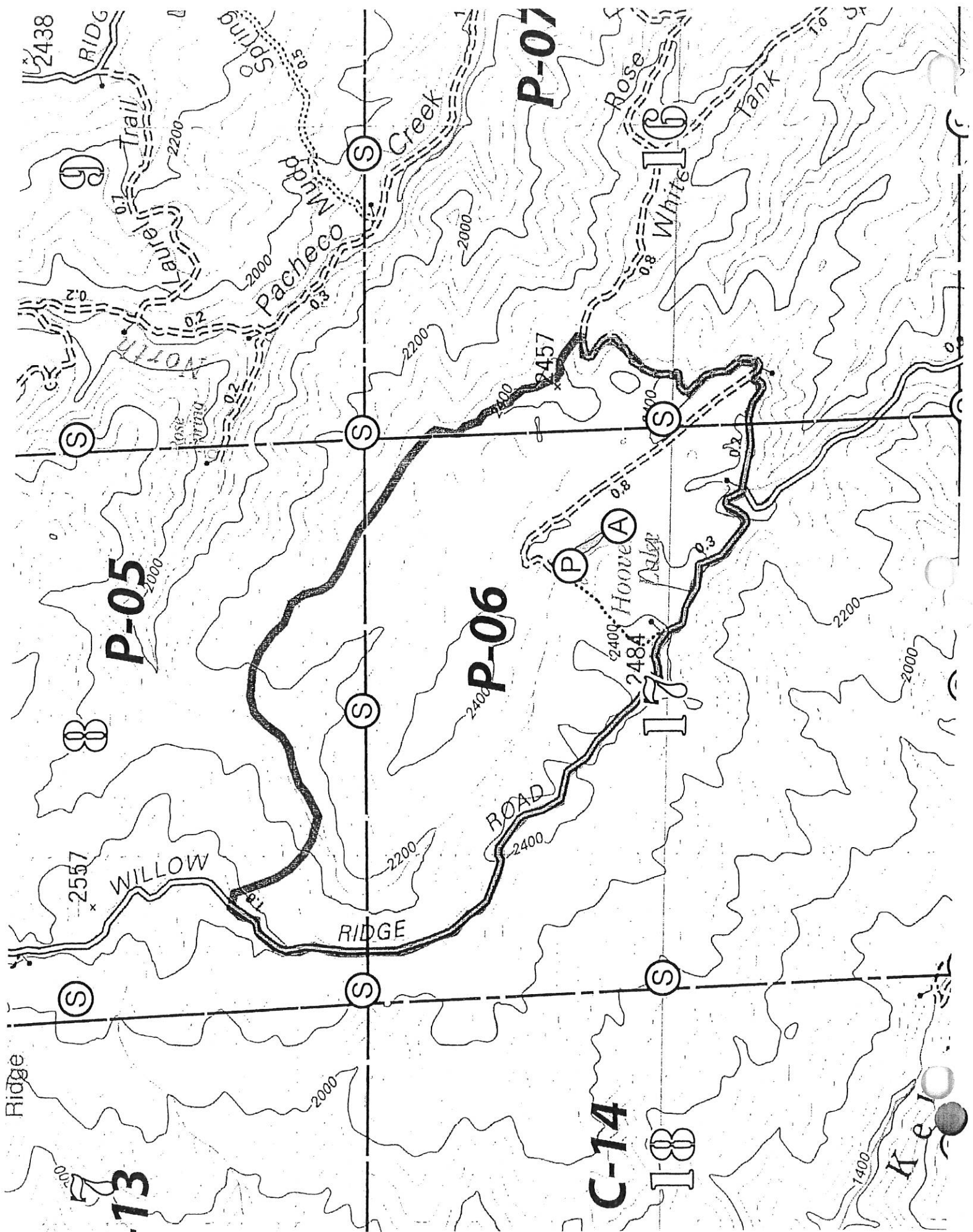




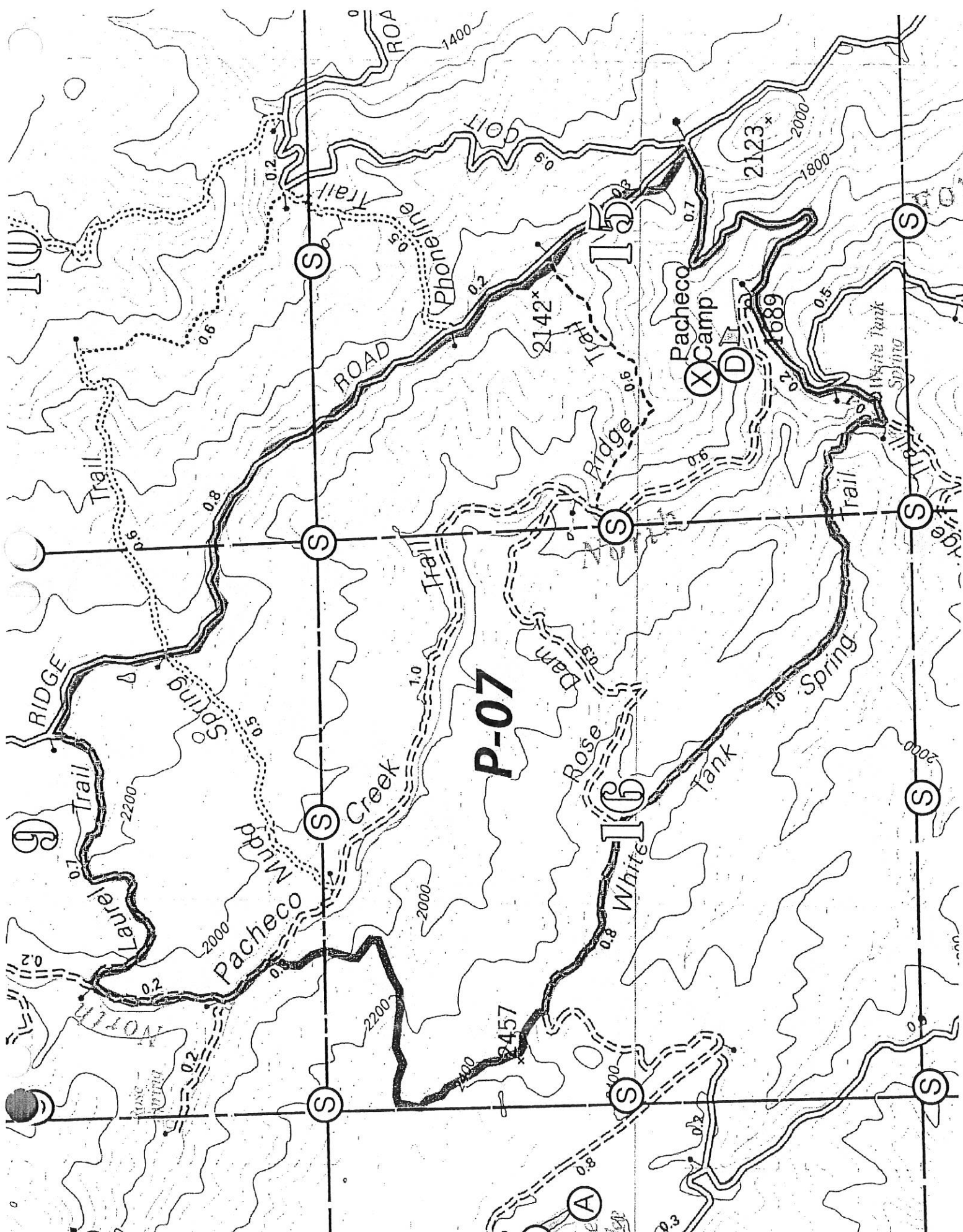


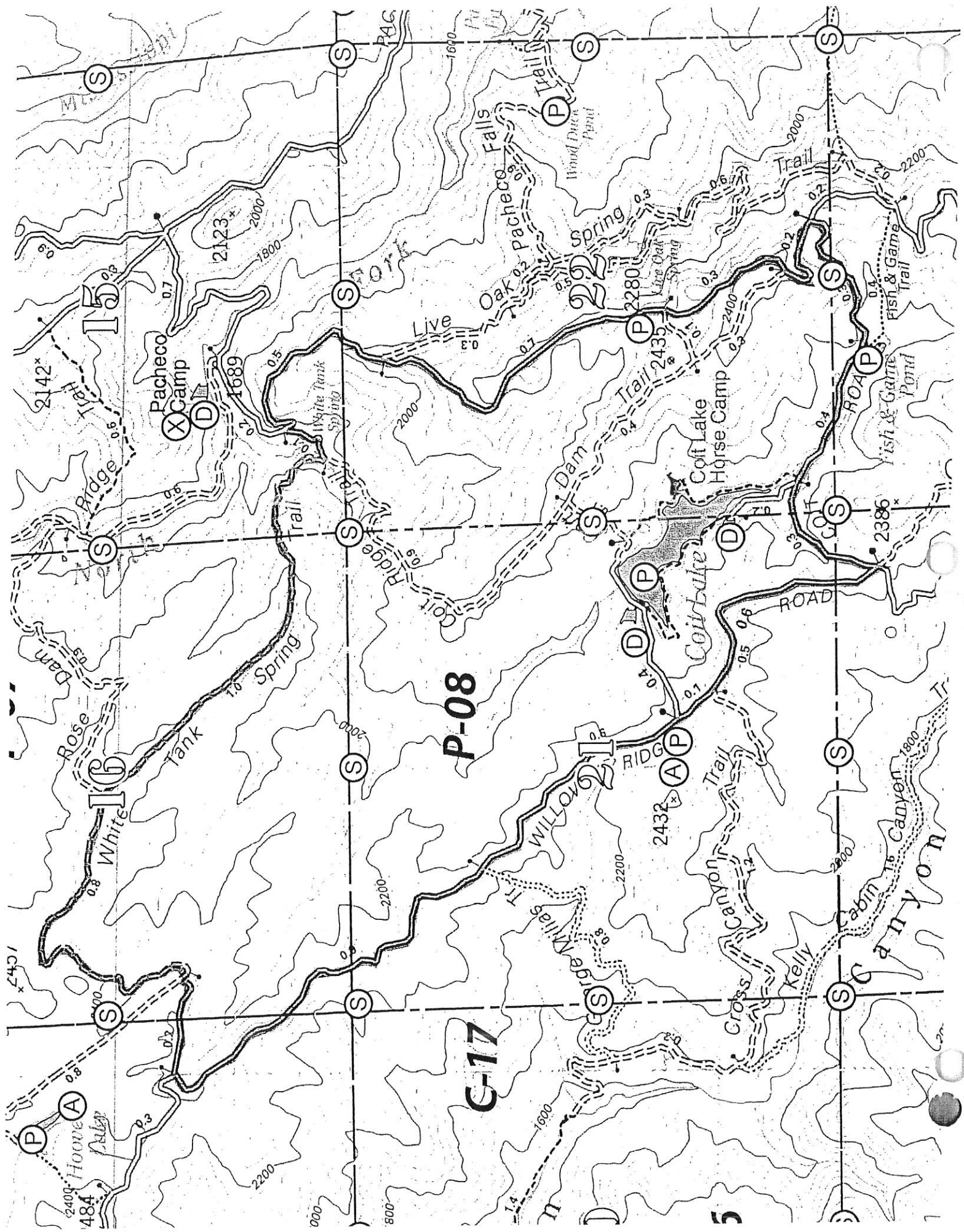








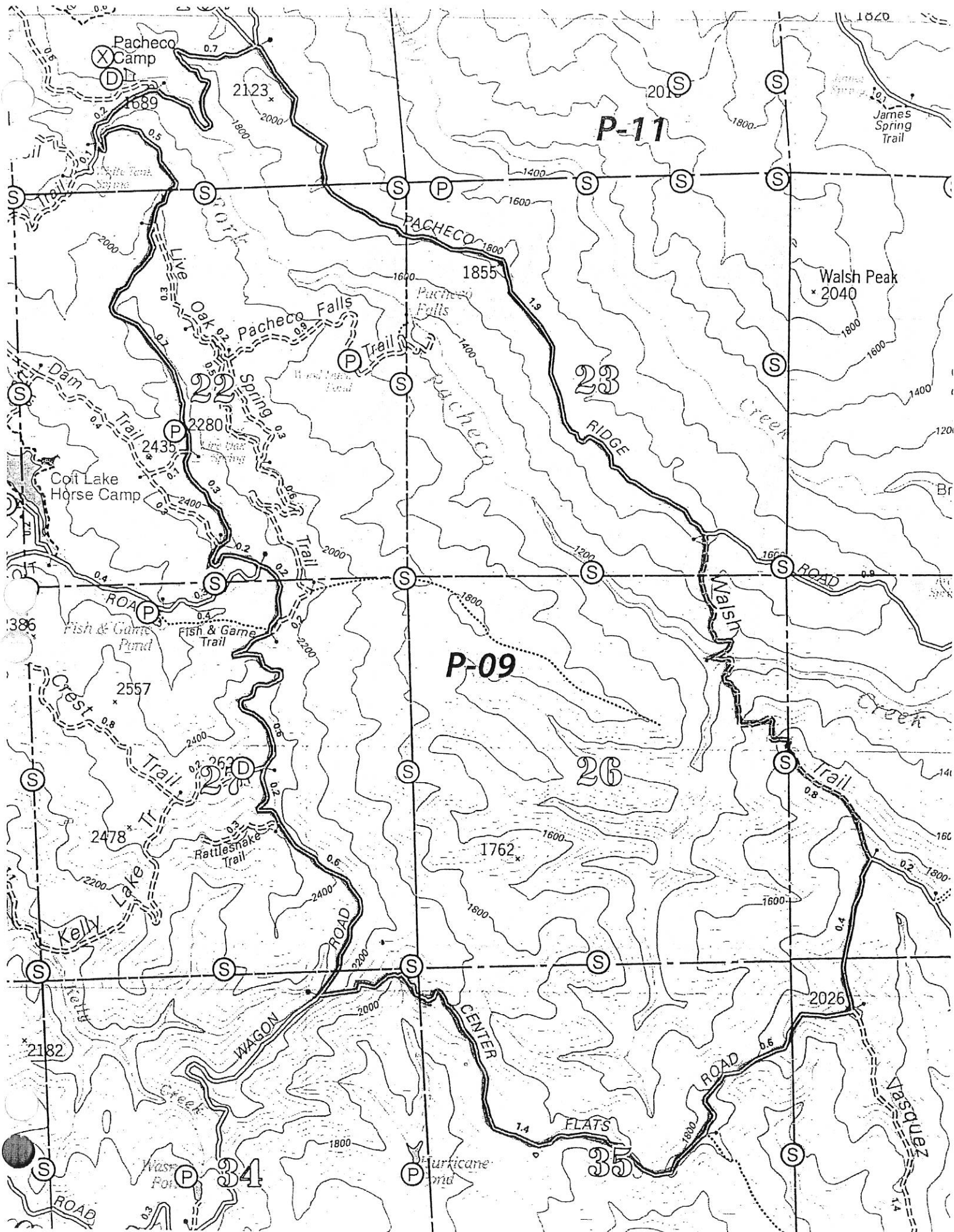


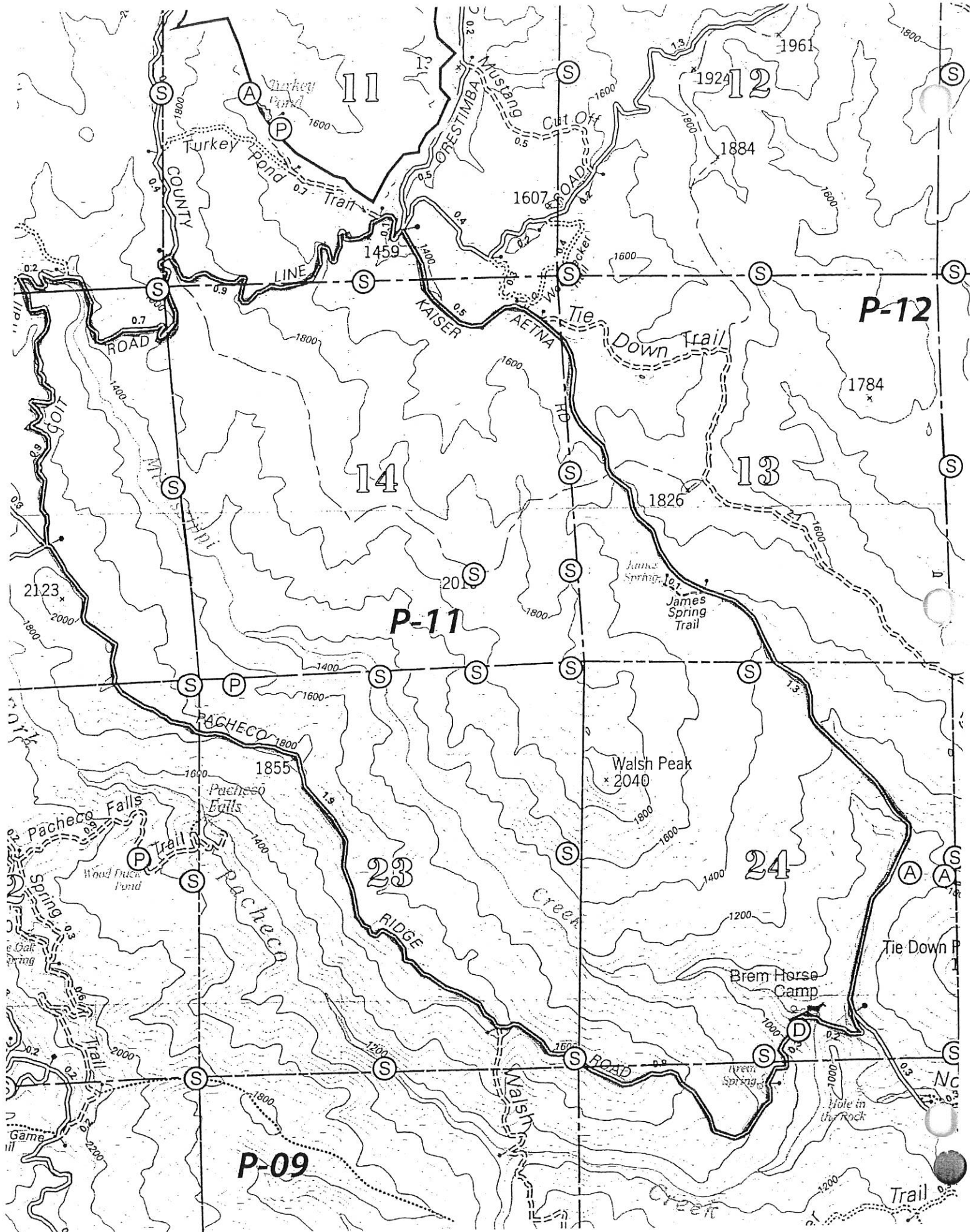


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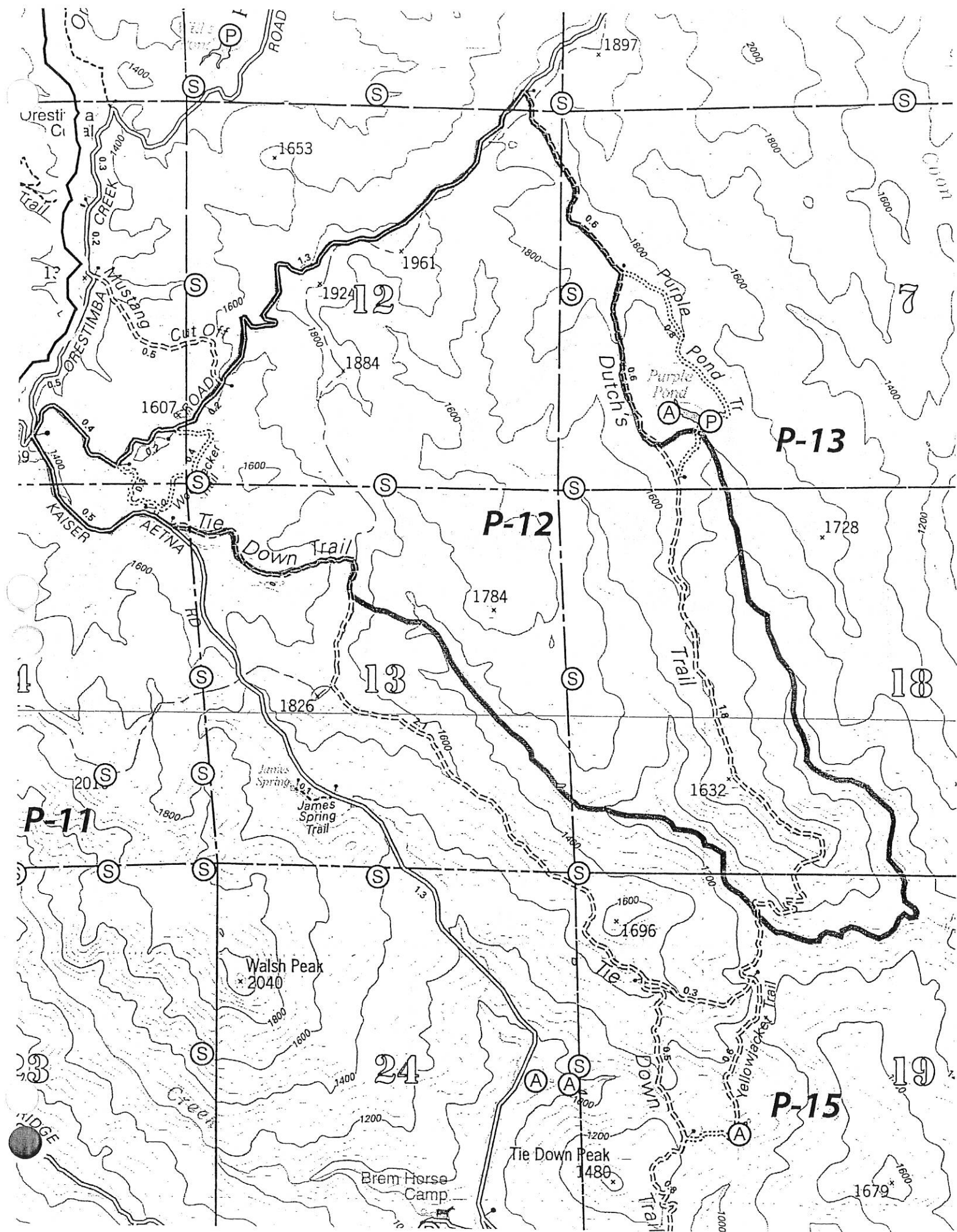
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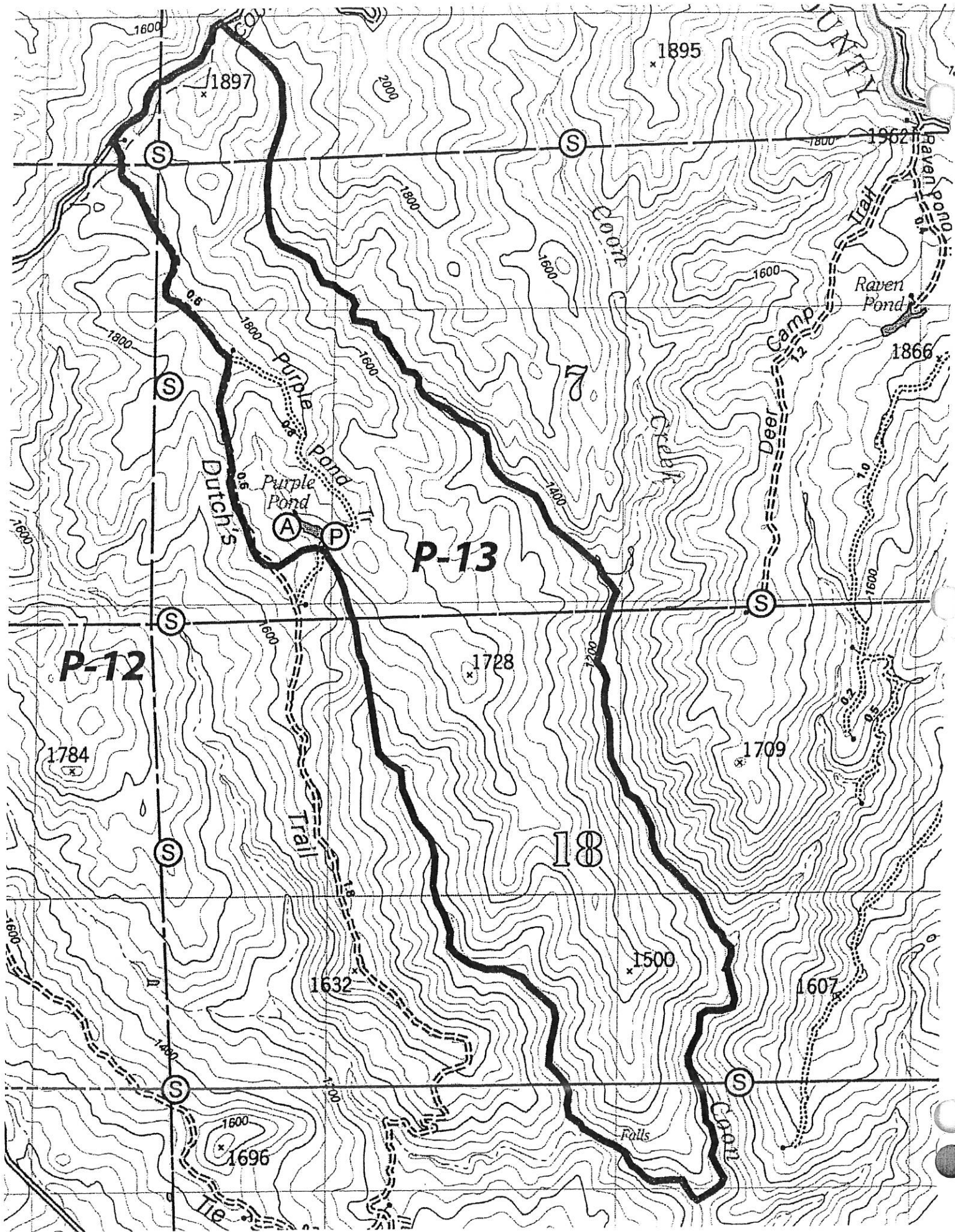




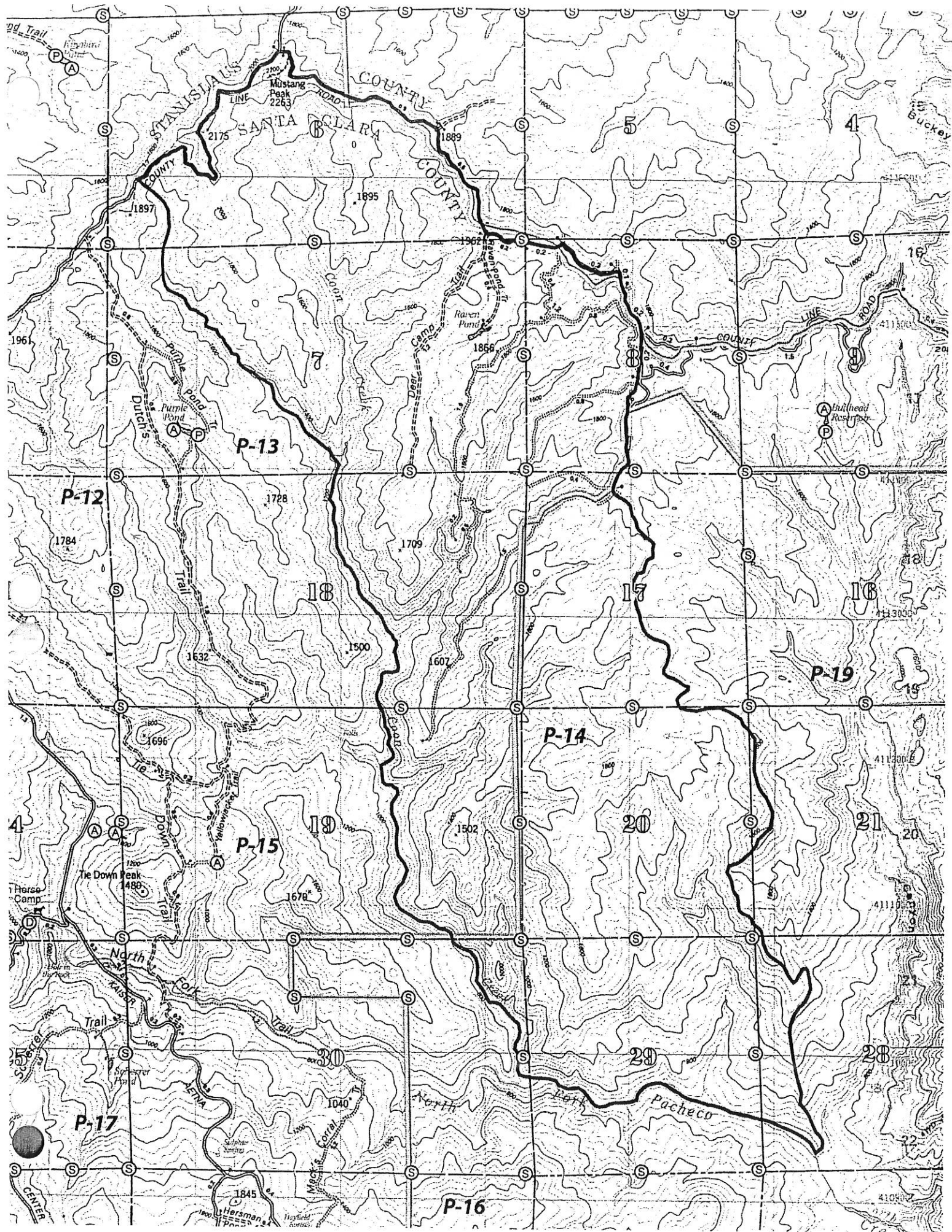




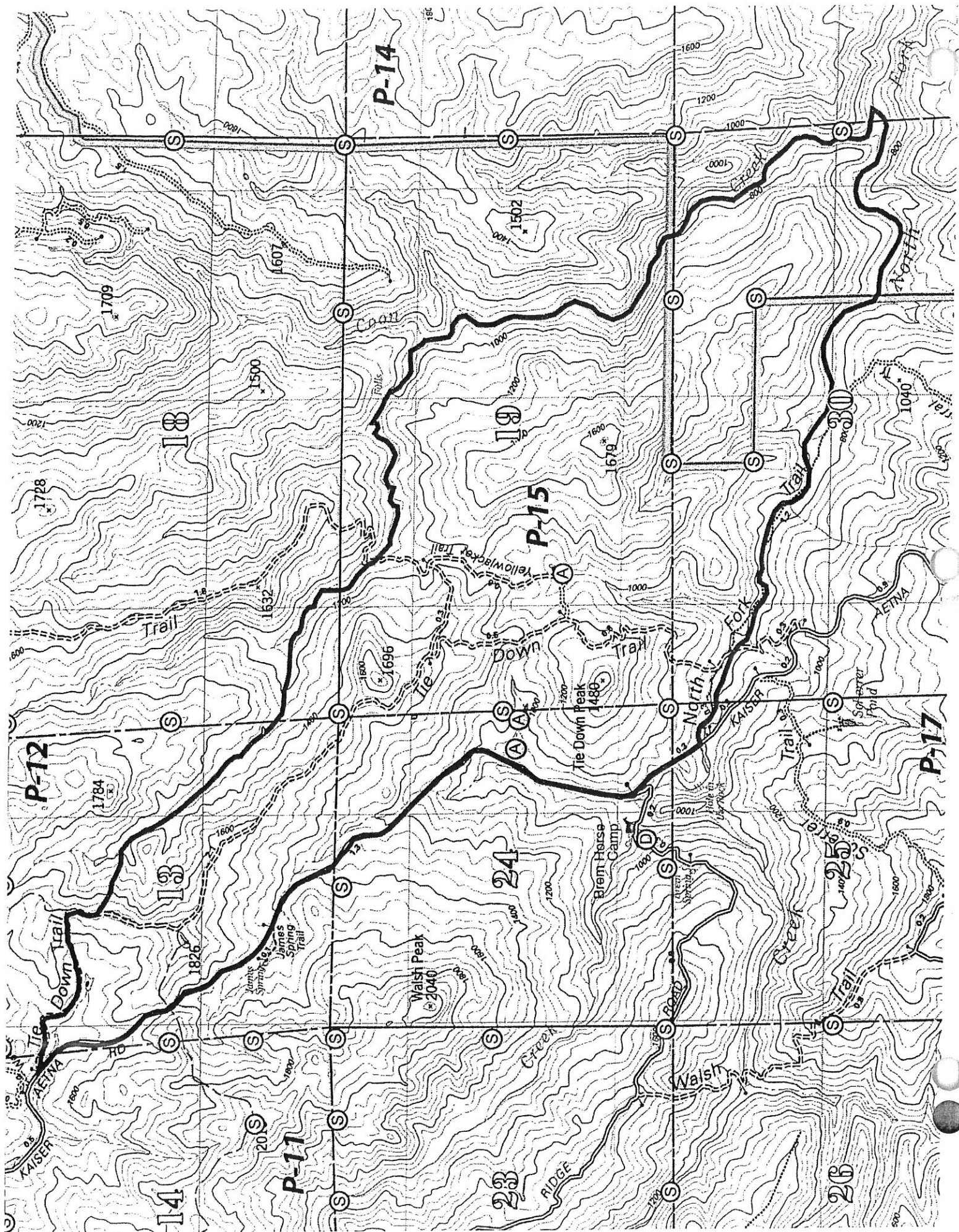




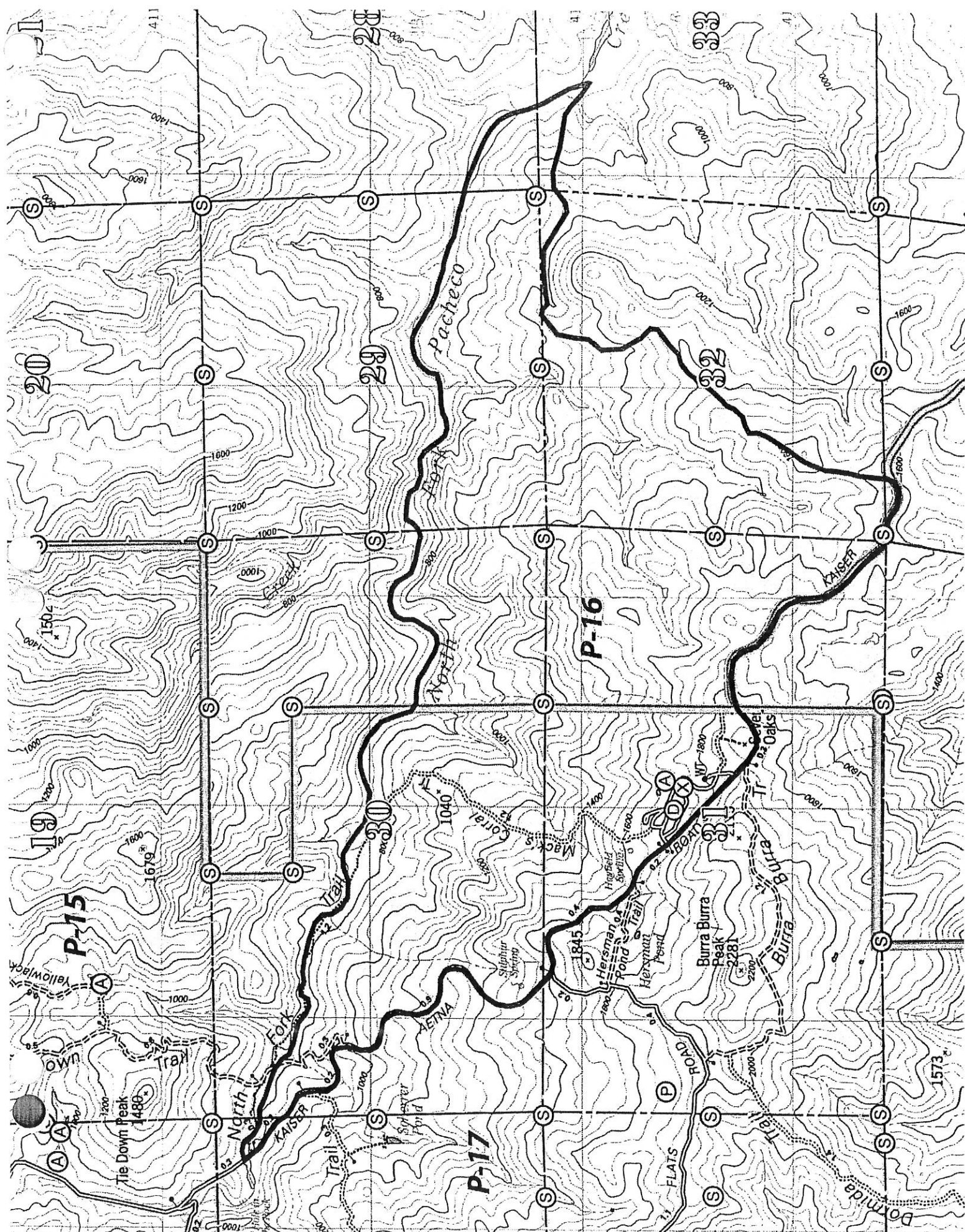


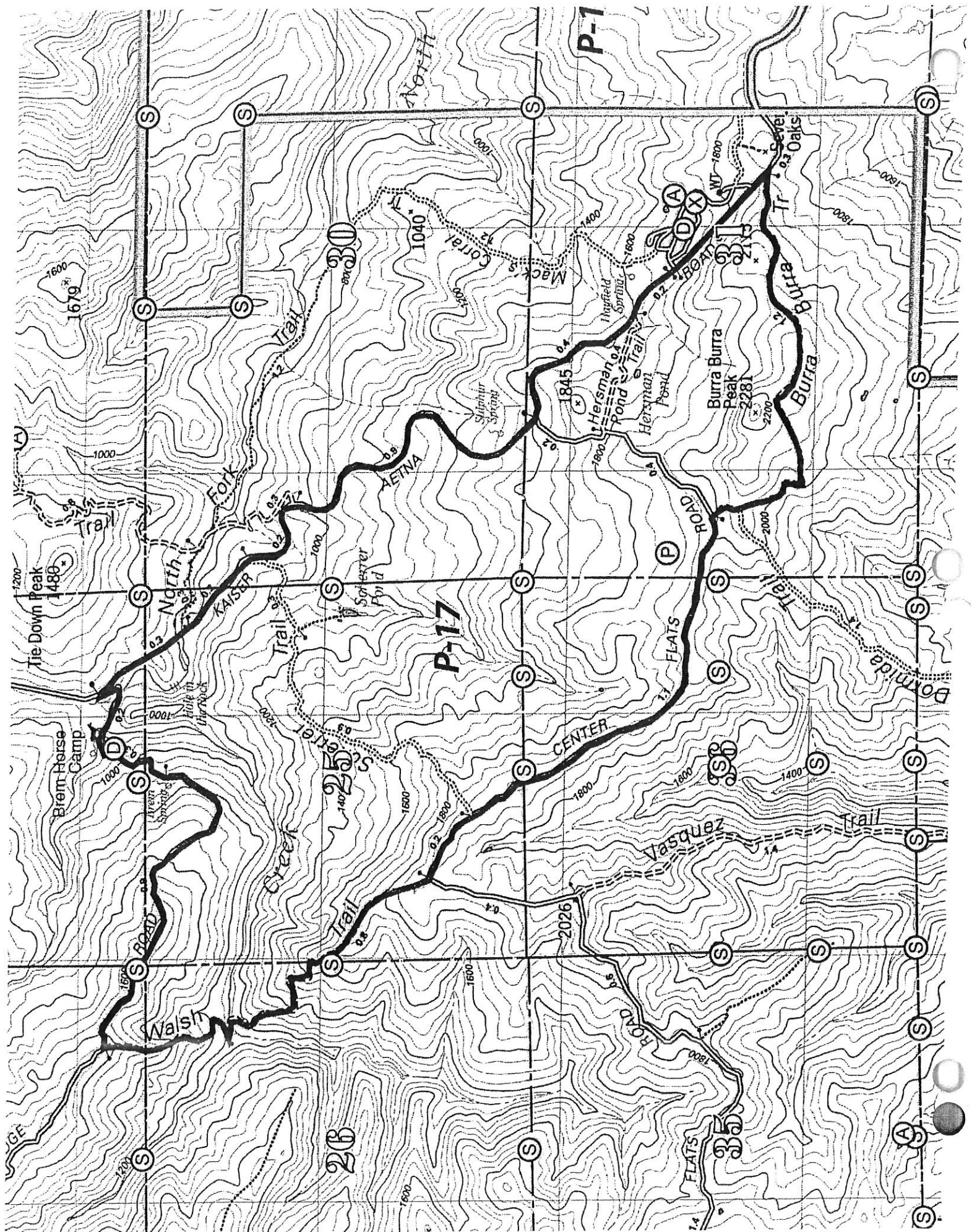




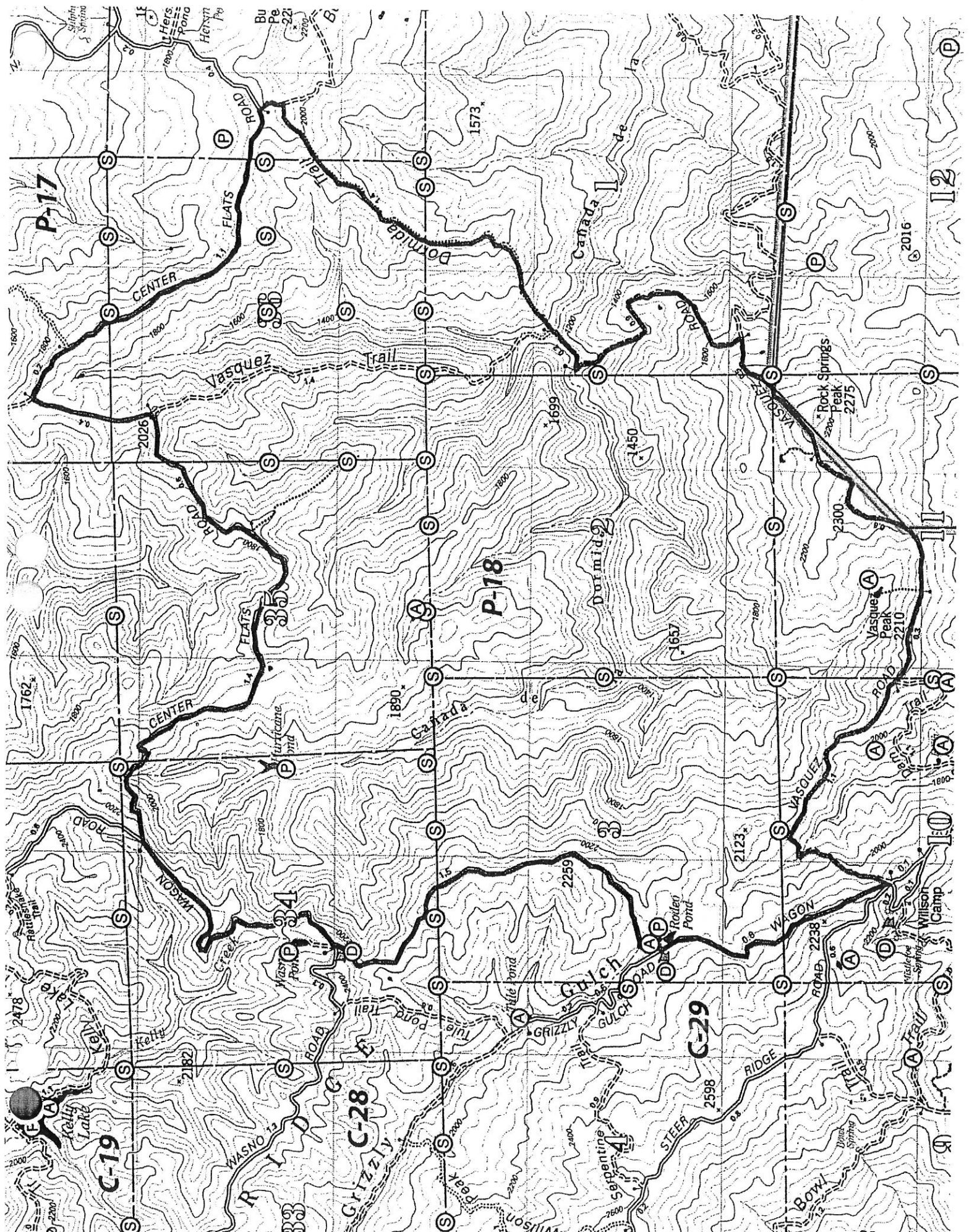


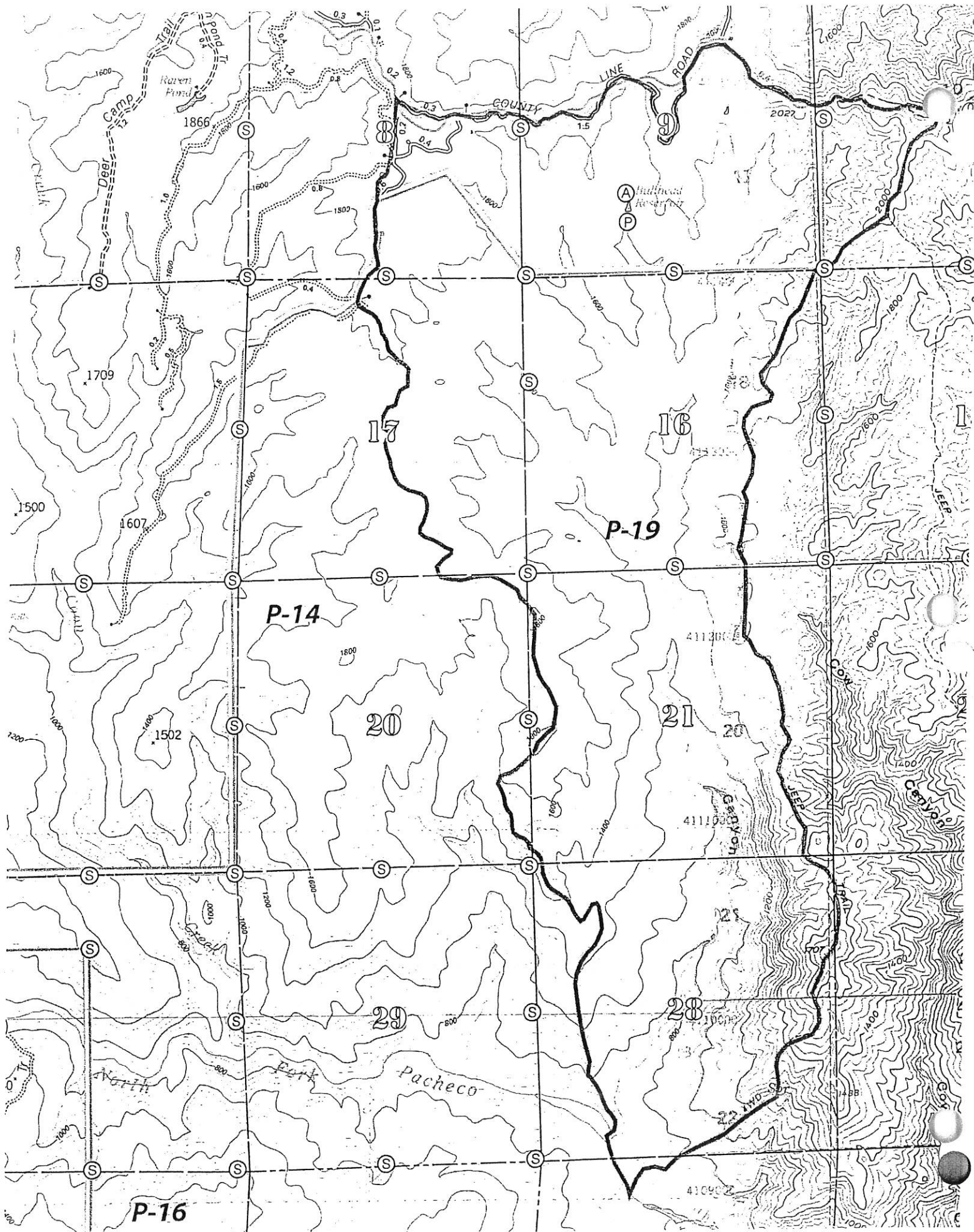




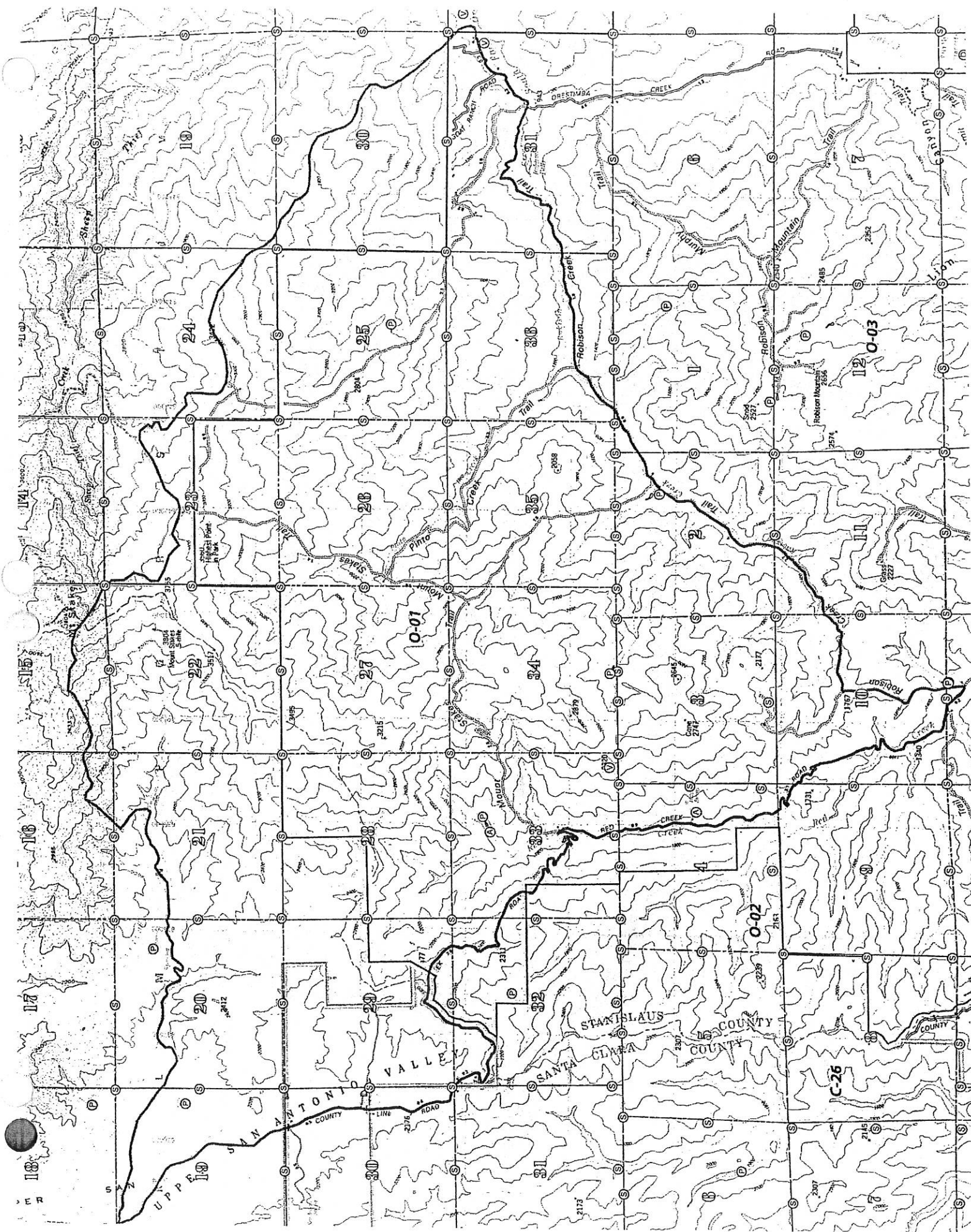


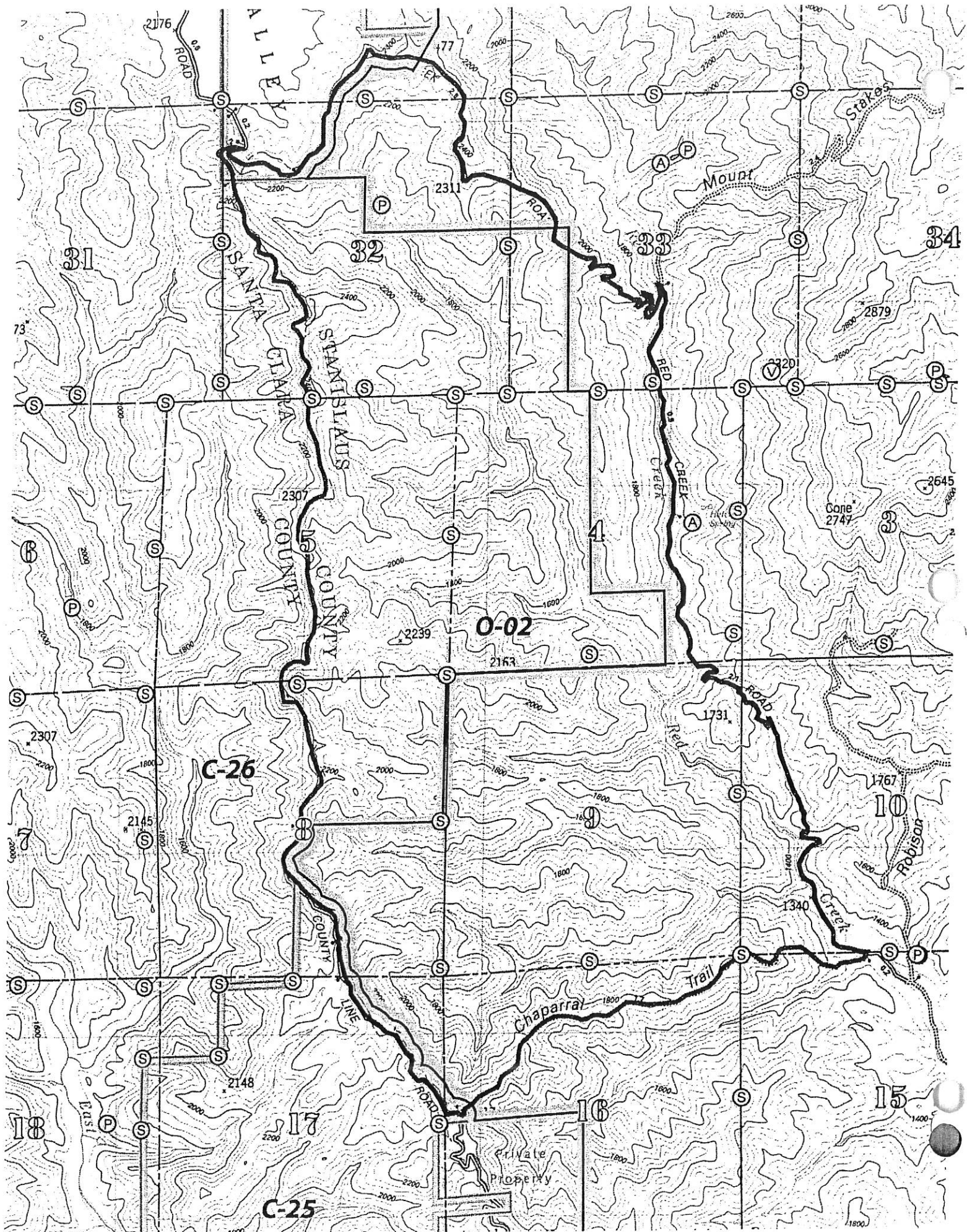




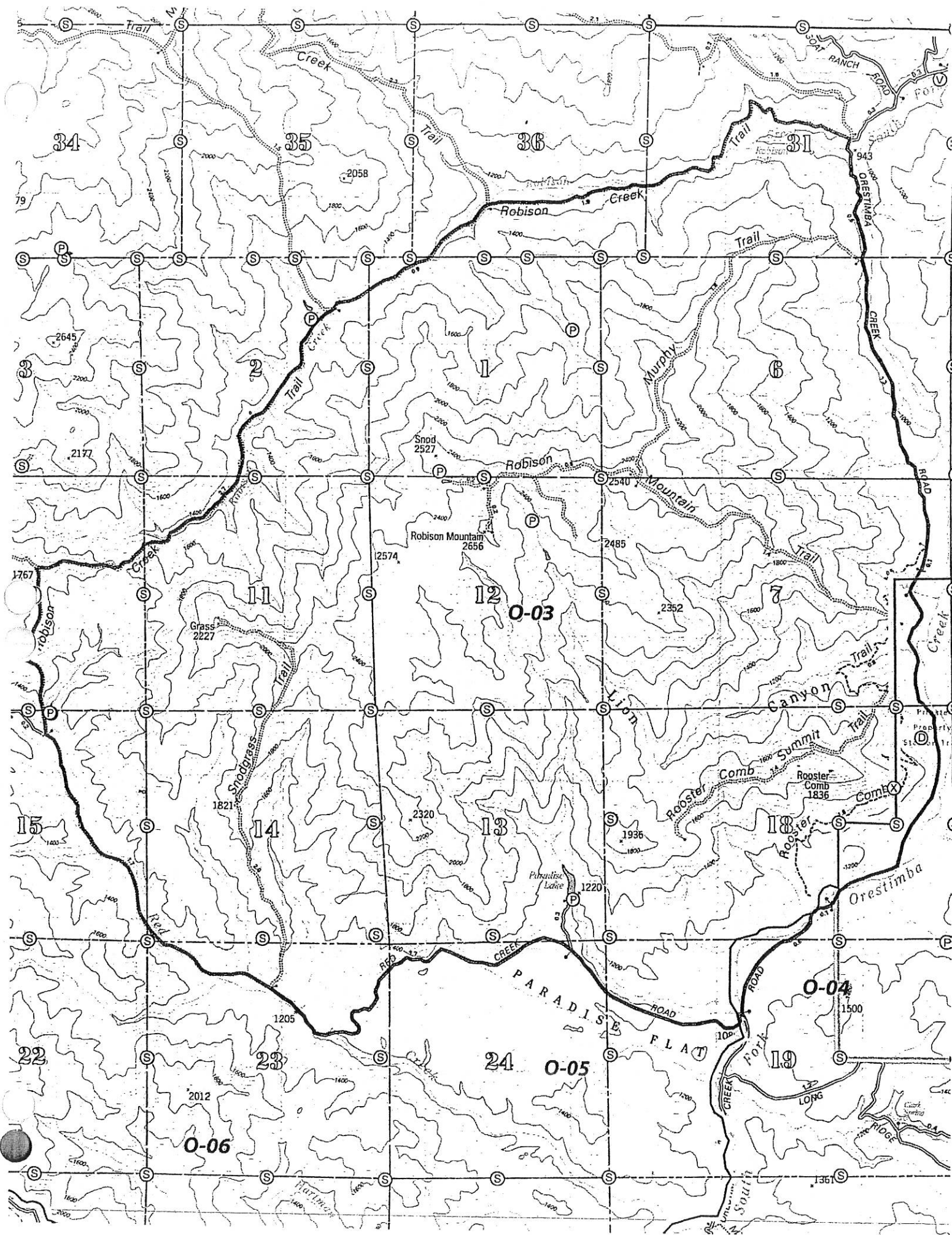












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