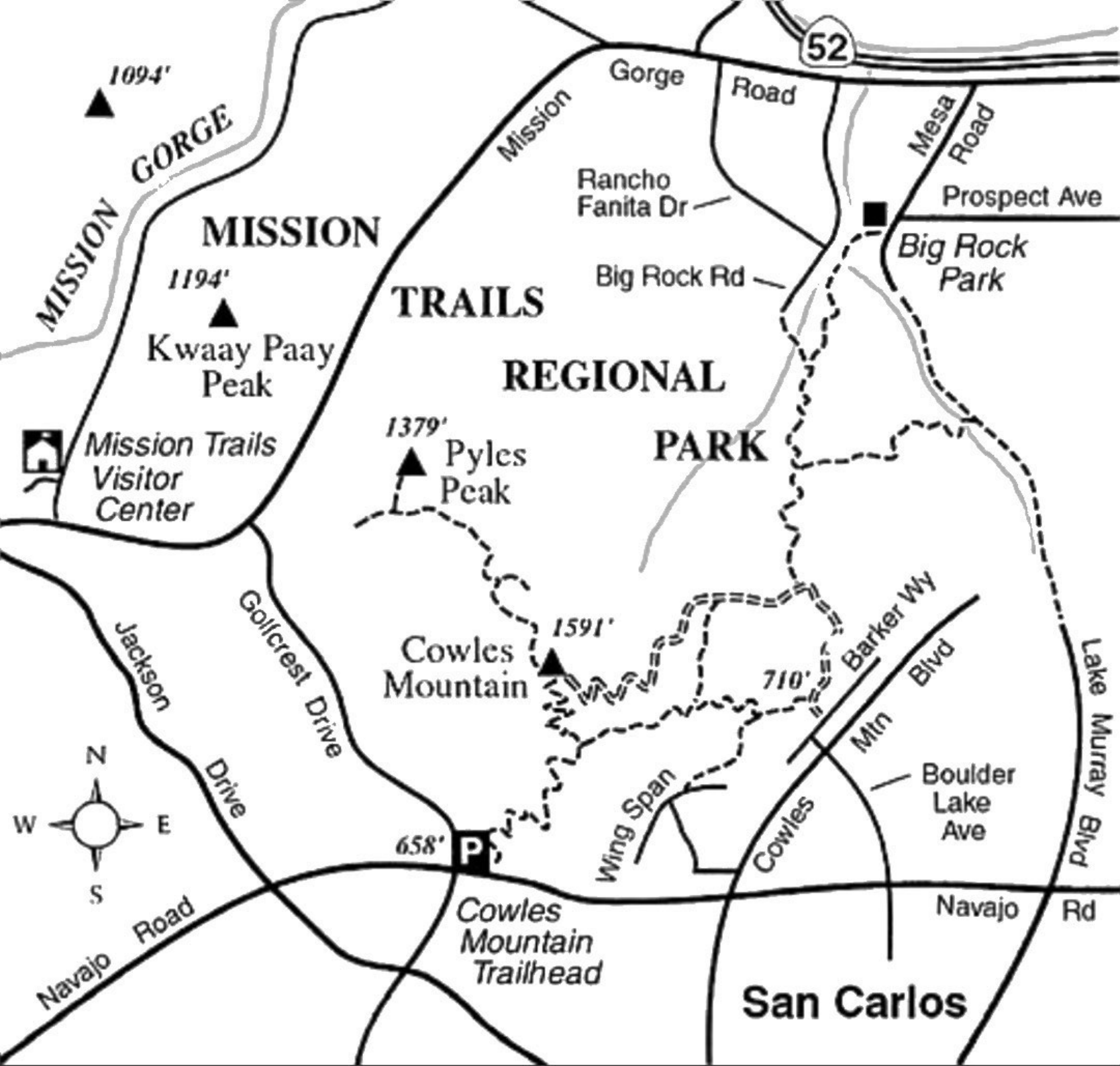
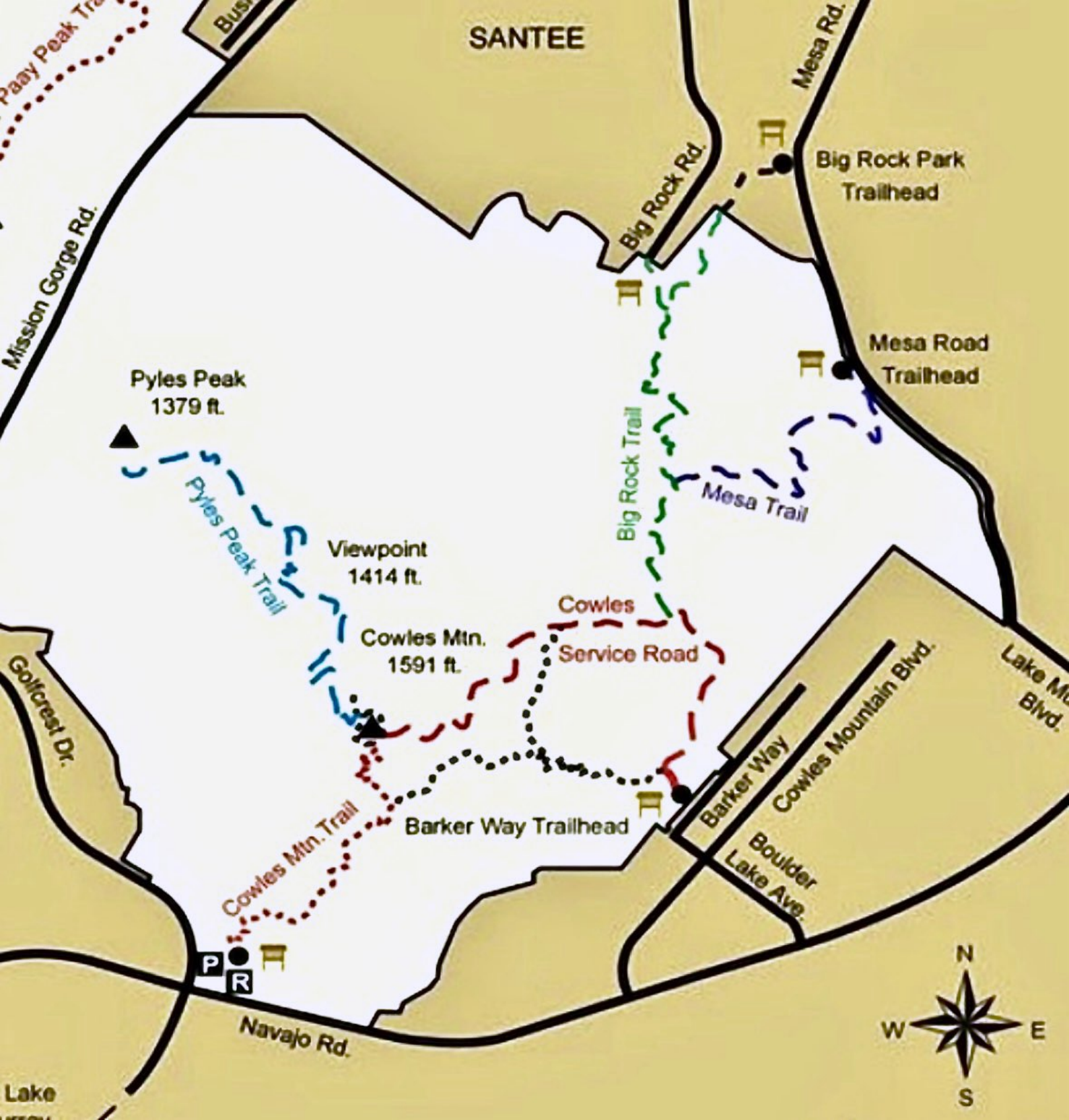
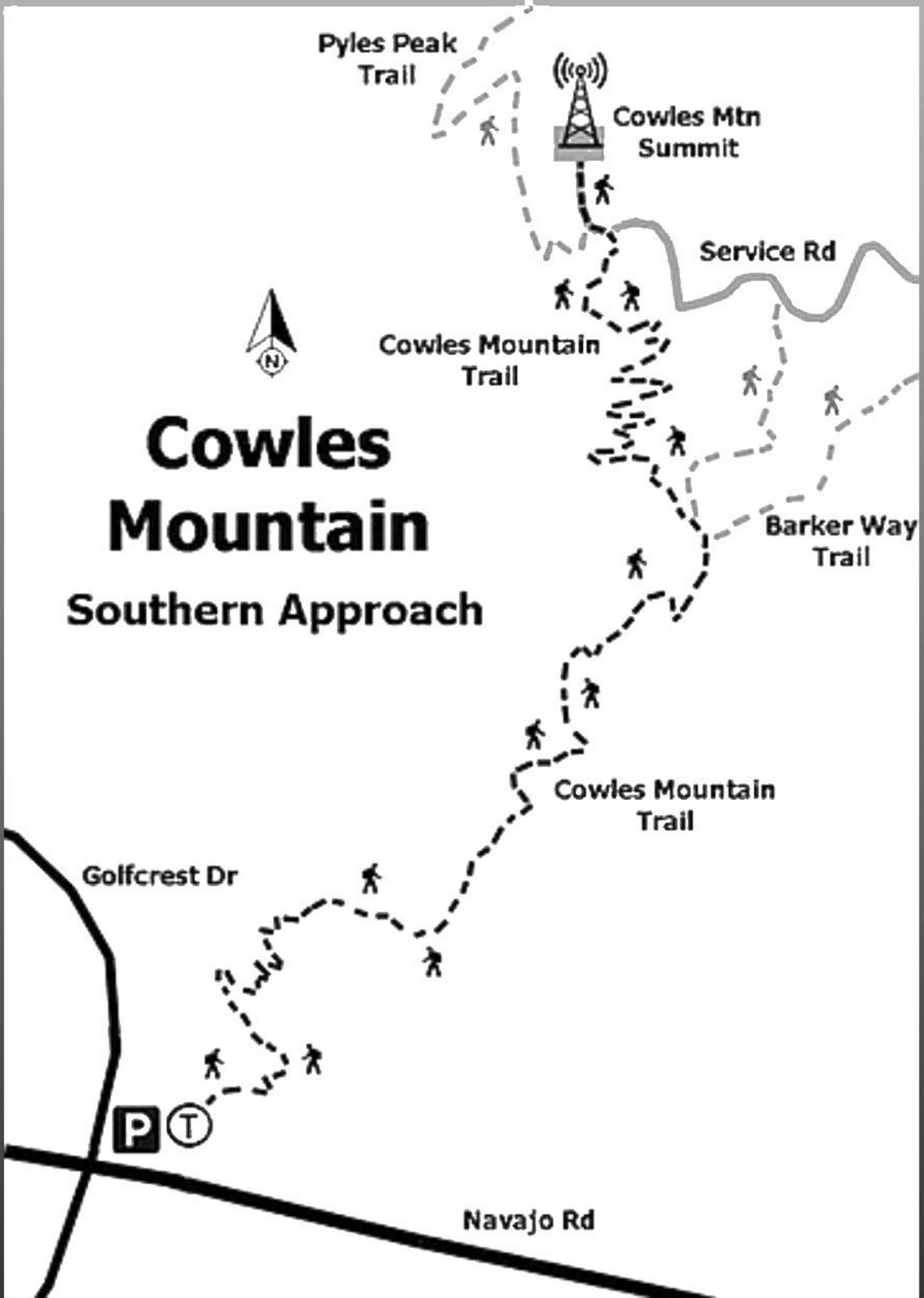
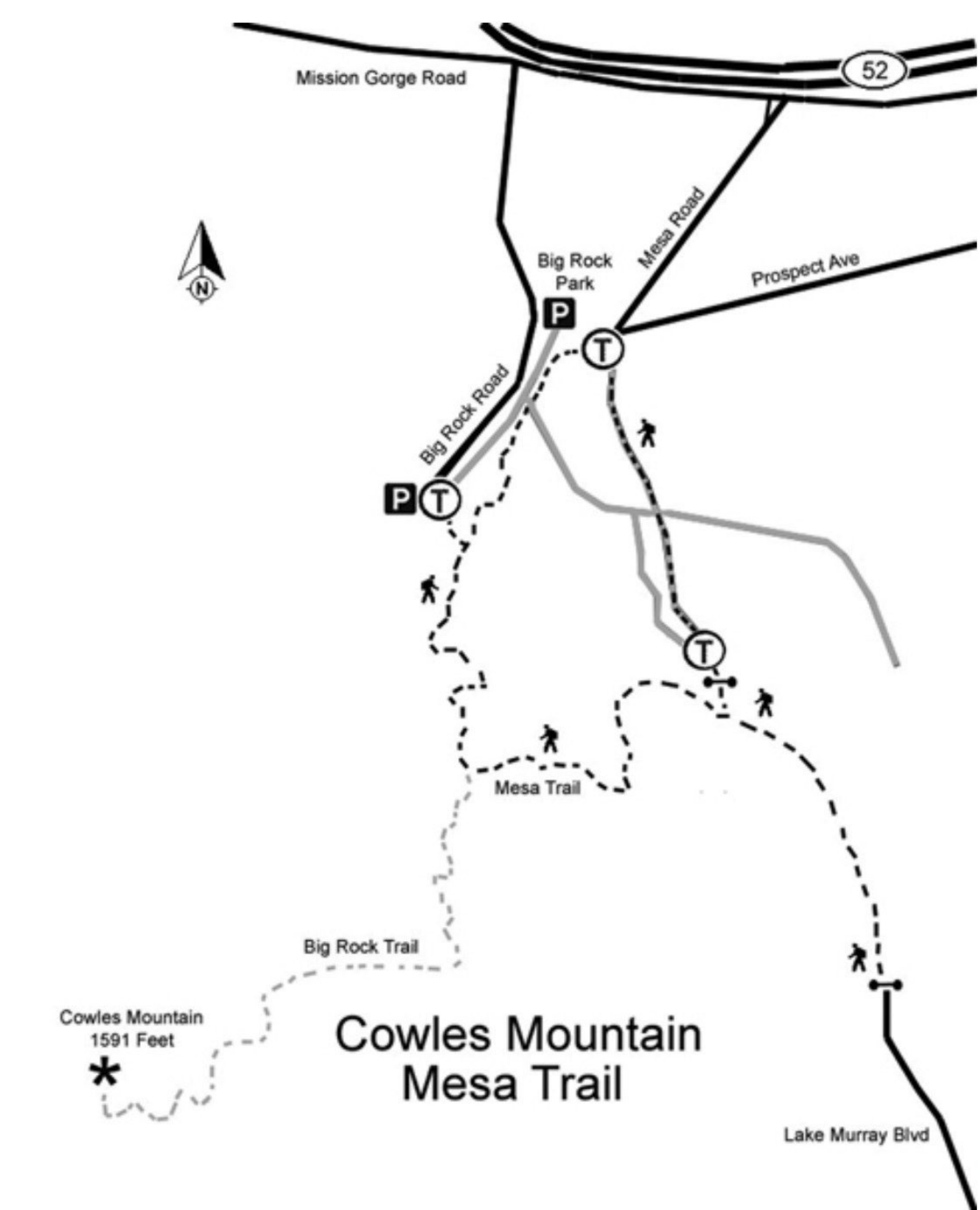
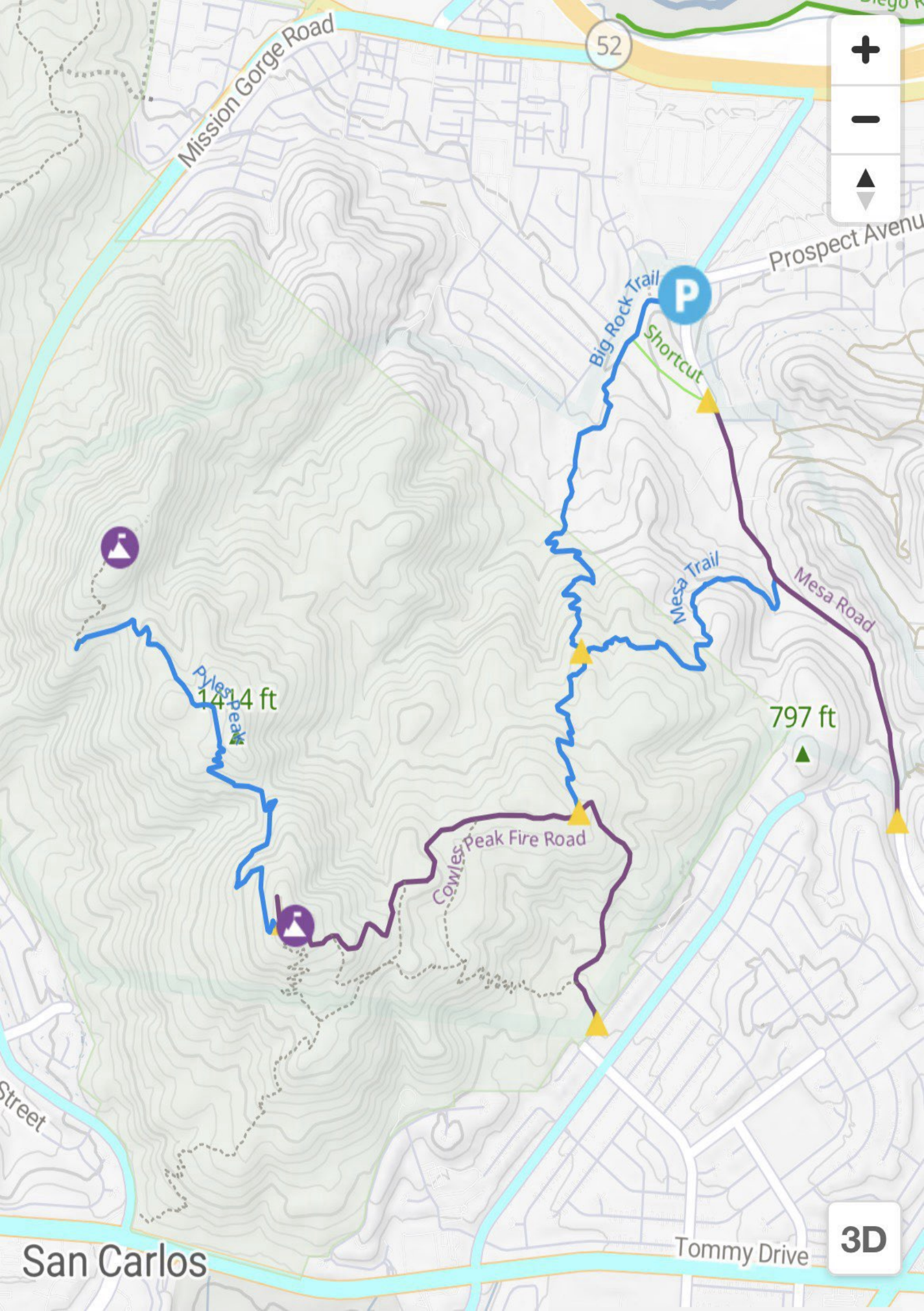
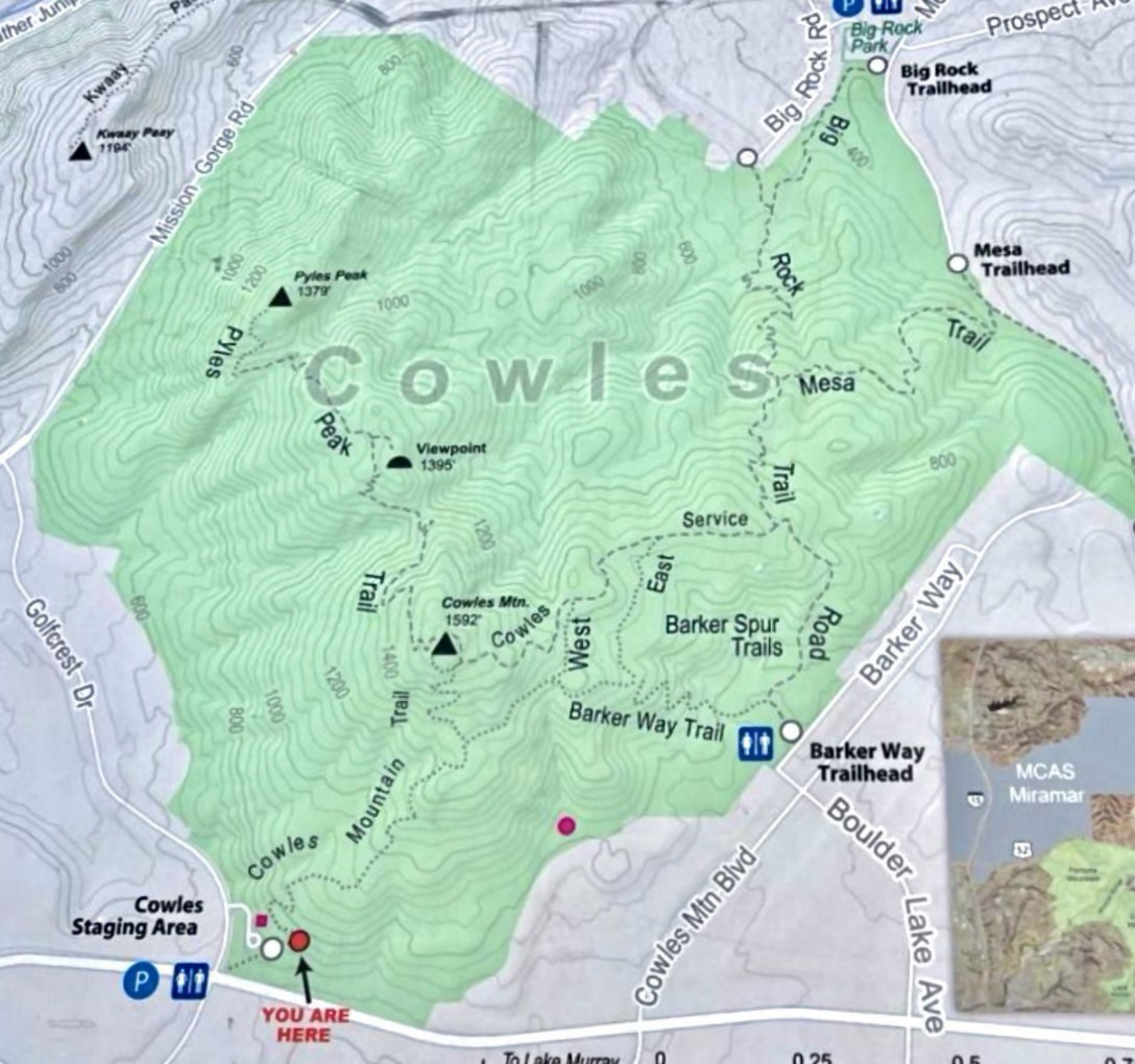

52
1094'
MISSION GORGE
Gorge
Road
Mission
Mesa
Road
Rancho
Fanita Dr
Prospect Ave
MISSION
TRAILS
REGIONAL
PARK
Big Rock
Park
Big Rock Rd
1194'
Kwaay Paay
Peak
1379'
Pyles
Peak
Mission Trails
Visitor
Center
Jackson
Drive
Golfcrest Drive
1591'
Cowles
Mountain
710'
Barker Wy
Mtn
Blvd
Lake Murray Blvd
Boulder
Lake
Ave
Wing Span
Cowles
658'
P
N
W
E
S
Navajo
Road
Cowles
Mountain
Trailhead
Navajo
Rd
San Carlos

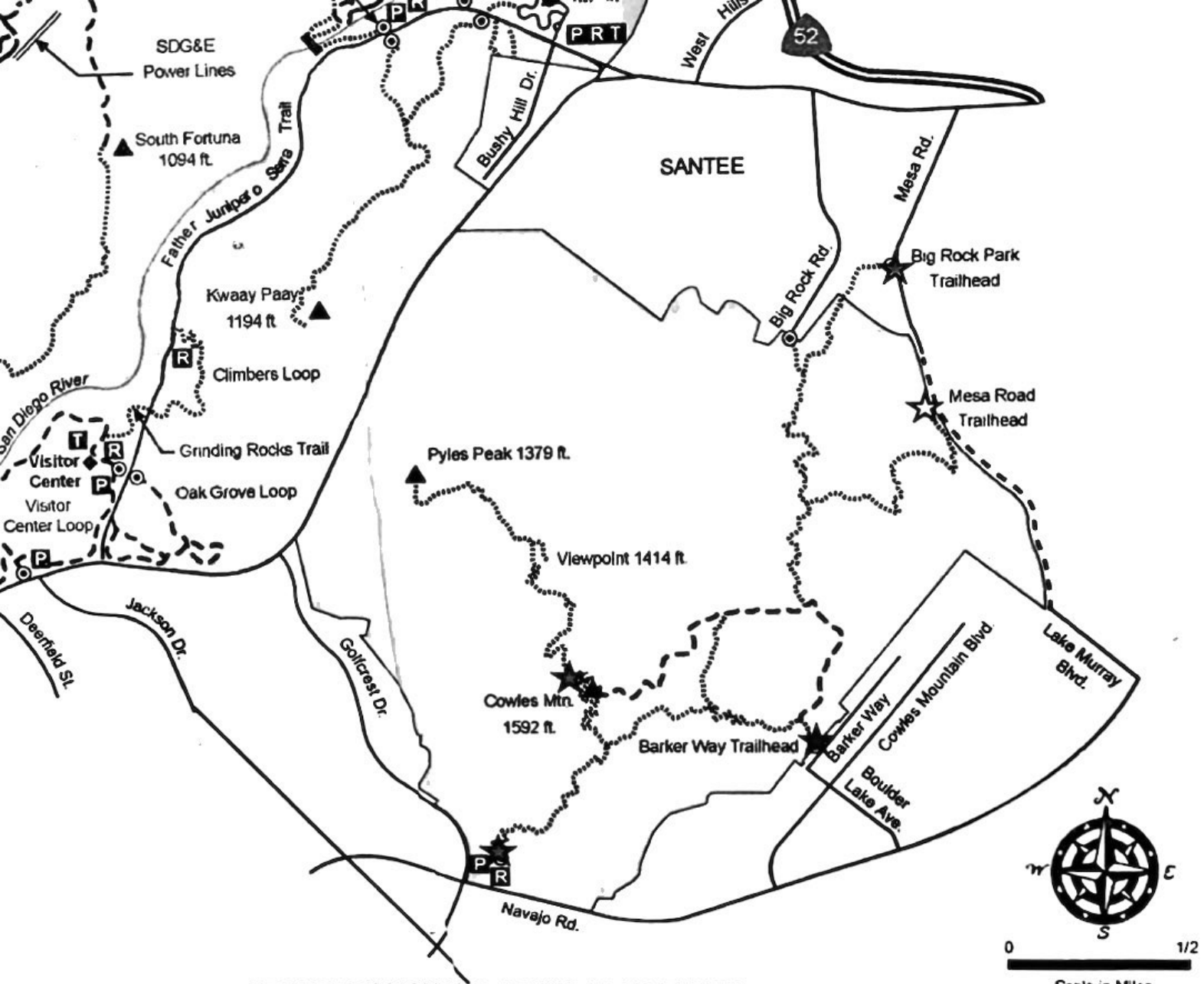

SANTEE
Mesa Rd.
Big Rock Rd.
Big Rock Park
Trailhead
Mission Gorge Rd.
Mesa Road
Trailhead
Pyles Peak
1379 ft.
Big Rock Trail
Mesa Trail
Pyles Peak Trail
Viewpoint
1414 ft.
Cowles
Service Road
Cowles Mtn.
1591 ft.
Golfcrest Dr.
Cowles Mountain Blvd.
Barker Way
Barker Way Trailhead
Cowles Mtn. Trail
Boulder
Lake Ave.
P
R
Navajo Rd.
N
W
E
S


Pyles Peak Trail
Cowles Mtn Summit
Service Rd
Cowles Mountain Trail
Cowles Mountain
Southern Approach
Barker Way Trail
Cowles Mountain Trail
Golfcrest Dr
P
T
Navajo Rd


Mission Gorge Road
52
Mesa Road
Prospect Ave
Big Rock
Park
Big Rock Road
Mesa Trail
Big Rock Trail
Cowles Mountain
1591 Feet
Cowles Mountain
Mesa Trail
Lake Murray Blvd


Mission Gorge Road
52
Prospect Avenu
Big Rock Trail
Shortcut
Mesa Trail
Mesa Road
1414 ft
797 ft
Cowles Peak Fire Road
Tommy Drive
San Carlos
3D


Cowles
Kwaay Paay
1194'
Pyles Peak
1379'
Viewpoint
1395'
Cowles Mtn.
1592'
Big Rock Park
Big Rock Trailhead
Mesa Trailhead
Barker Way Trailhead
Cowles Staging Area
YOU ARE HERE
Mission Gorge Rd
Big Rock Rd
Prospect Ave
Golfcrest Dr
Barker Way
Boulder Lake Ave
Cowles Mtn Blvd
Pyles Peak Trail
Big Rock Trail
Mesa Trail
Service Road
East Barker Spur Trails
West Cowles Mountain Trail
Barker Way Trail
MCAS Miramar
To Lake Murray
0
0.25
0.5




STAY ON DESIGNATED TRAILS AT ALL TIMES!

## Mission Trails Regional Park Trail Map

LEGEND

| | |
|---|---|
| Multi-Use Trails | Trailhead |
| Hike and Bike Trails | Structure |
| Hiking Only Trails | Creek Crossing |
| Parking Lot | Bridge |
| Restroom | Public Telephone |

| Cowles Mountain Region | Distance in miles | Elevation Gai |
|---|---|---|
| Cowles Mtn. from Golfcrest & Navajo | 1.5 | 950' |
| Cowles Mtn. from Barker Way (via service rd.) | 1.6 | 870' |
| Cowles Mtn. from Big Rock Park in Santee | 2.5 | 1192' |
| Cowles Mtn. from Mesa Road in Santee | 2.1 | 1150' |
| Cowles Mtn. Summit to Pyles Peak | 1.5+ | (gained/lost) 834' |

# COWLES MOUNTAIN

**SND02W**

**WUI Name:** COWLES MOUNTAIN

**Location:** Cities of San Diego and Santee

**Public Safety Grids:** 2530-2832 **WUI Grid No.:** 23 **Thomas Guide Grids:** 1250-1251

Insp'd Date: 7/10/2014
By: Rohde & Assoc.

Risk Assessment | Tactical Plan | Tactical Map | Area Map | Aerial Map | Additional Info

## RECOMMENDED STRATEGIES & TACTICS (FIRESCOPE/PACE)

### Primary Plan (Offensive)
Initial Attack- Anchor fire at origin and conduct both aggressive flank attack and simultaneous structural defense for perimeter homes. Conduct aerial search for hikers ahead of fire (200+ any given day). Air attack to attack flanks, defend structures, hold fire to involved drainages, and support direct attack. Hold fire south of Mission Gorge Rd. through aggressive perimeter control. Evacuate perimeter homes near fire.

### Alternate Plan (Offensive)
Fire escapes initial attack- anchor & hold burning perimeter homes to prevent fire extension into interior homes. Hold fire at Cowles Mountain Ridge with aircraft if possible, deploy resources to opposite side of Cowles Mountain for structural defense and prepare to evacuate. Continue aggressive perimeter control efforts along Mission Gorge Rd. Watch for spotting across Cowles Mountain to down-wind locations. Concentrate aircraft to pickup spots, protect structures, slow fire to buy time for perimeter evacuation, and to hold the fire to key drainages south of Mission Gorge Rd. Structure defense to concentrate on "prep and defend" structures in perimeter neighborhoods, maintain high mobility.

### Contingency Plan (Defensive - Responder Safety)
With dangerous rates of spread and fire behavior, responders seek temp. refuge by falling back from perimeter homes into tracts when necessary, or seek temp. shelter inside fire resistive homes.

### Emergency Plan (Defensive)
Developing conflagration- Resources focus ahead of fire to move civilians into urban tracts or safety zones. Fire attack focused to prevent structural ignition, keep fire from extending across Mission Gorge, and prevent long range spotting. Anchor and hold, and conduct fire front following to prevent loss of entire tracts. Activate medical group.

**Perimeter Control Plan:** Contain fire to key canyons when possible. Use aircraft to establish anchor and follow with crews and dozers. Hold fire south of Mission Gorge Rd. to protect Tierrasanta. With availability of qualified resources (ex: CAL FIRE), favorable winds and weather, consider firing for two locations: 1. For perimeter tracts, on the opposite side of Cowles Mountain from the origin, using fire-on-fire lighting tactics, and 2. Along Mission Gorge Rd., for 1-2 miles in undeveloped area, to prevent fire extension to the north and west. Resources required for this assignment: 4 crews, 2 Type 3 STs, 2-4 water tenders, aircraft. Firing with IC approval only!

## EVACUATION PLAN

### Primary Evacuation Plan
Initially conduct limited evac. of threatened homes near fire perimeter. Activate Alert SD as required. Immediately evac. hikers from trails. For fires likely to, or escaping initial attack- prepare to evacuate perimeter on opposite side of Cowles Mountain from origin, and along both flanks. Evacuate senior mobile home parks in Santee S/O Mission Gorge Rd. early. NO EVACUATION VIA MISSION GORGE RD. THROUGH WILDLAND AREA WITH NEARBY FIRE (mile or less).

### Evacuation Trigger Point
Establishment of an aggressive fire escaping initial attack with potential to continue fire spread. Any fire cresting or flanking Cowles Mountain ridge with continuing forward progress. If fire crosses the Mesa Rd. area, consider evacuation of Community of Tierrasanta in San Diego.

### Temp. Evacuation Assembly Points (Human & Animal)
1. Town Center Community Park, 550 Park Center Dr., Santee
2. Qualcomm Stadium, 9449 Friars Rd., San Diego

## POPULATION & STRUCTURES AT-RISK

| | |
|---|---|
| **Population** | 8,896 |
| **Planning Unit Acreage** | 2,553 |
| **Structures** | 3905 |

## STRUCTURAL TRIAGE

| | |
|---|---|
| **Threatened/ Non-Defensible** | 1% Wood roofed or sided homes with no defensible space, few but throughout area |
| **Threatened/Defensible** | 79% |
| **Non-Threatened** | 20% |
| **W/ Defensible Space** | 10% |

## EMERGENCY RESOURCE NEEDS - FIRST SIX HOURS
(In addition to Initial Attack Resource)

**Fire Ordering Point:** SDFD Dispatch (858) 974-9895; Heartland Fire Dispatch (619) 441-1621

**Law Enforcement Ordering Point:** SDPD Dispatch (619) 531-2000; SDCo. Sheriff (858) 565-5030

**Engines: The number range reflects the number of "minimum" to "preferred" resources.**

| | | |
|---|---|---|
| **Type 1 Strike Teams:** 4-6 | **Type 3 Strike Teams:** 2-4 | **Water Tenders:** 6 |
| **Crews** Single: 8 STs: 0 | **Dozers** Single: 2 STs: 0 | **Overhead:** 4-6 Div. Sup.: 3-5 |

**Aircraft:**
**Type 1 Helicopter (Large):** 1
**Type 2 Helicopter (Med.):** 4
**Type 3 Helicopter (Light):** 0
**Air Tankers:** 4-6

**WUI Engine Deployement - High Risk**
1 engine/2-4 perimeter structures, 1 engine/isolated structure, 2 engines/multi-family structure

**WUI Engine Deployement - Moderate Risk**
1 engine/2-4 perimeter structures, 1 engine/isolated structure, 2 engines/multi-family structure

**WUI Engine Deployement - Low Risk**
1 strike team/2 blocks of perimeter homes

### Law Enforcement:
100 officers/deputies, 50% to evacuation, 50% to traffic management. IC- Lt., Capt., or Patrol Chief

### Logistics
Open City EOC to support aggressive fire and large evacuation need. Consider responder fuel, water, and food needs. File F-MAG application with CAL-OES.

### Other
Notify public works to assist in traffic management, Red Cross and Animal Control to assist in evacuation., Logistics: Open City EOC's to support aggressive fire and large evacuation need. Consider responder fuel, water, and food needs.

# WUI Name: COWLES MOUNTAIN

**Location:** Cities of San Diego and Santee

**Public Safety Grids:** 2530-2832 **WUI Grid No.:** 23 **Thomas Guide Grids:** 1250-1251

**SND02W**

Insp'd Date: 7/10/2014
By: Rohde & Assoc.

Risk Assessment | Tactical Plan | Tactical Map | Area Map | Aerial Map | Additional Info

## RISK ASSESSMENT MATRIX

**COWLES MOUNTAIN**
***RISK ASSESSMENT MATRIX***

| *SAFETY* | *STATIC* | *ATTACK* |
|---|---|---|
| FF Safety 2 | Fuels 1 | Access 2 |
| Civ.Safety 2 | Topography 1 | Water 3 |
| Air Safety 2 | Clearance 1 | Comms 3 |
| Hazmat 3 | Construct 2 | Tac Air 2 |
| | Density 1 | |

| | | | | | |
|---|---|---|---|---|---|
| SAFETY | FF Safety | FF Safe | No Safety Zones | Marginal Safety Zones | Adequate Safety Zones |
| | Civilian Safety | Civ Safe | Mandatory Evacuation | Evacuate if Time Permits | Shelter in Place |
| | Air Safety | Clear | Restrictions, Steep Cyns | 30' to 70' | More than 70' |
| | HazMat | HazMat | Bulk LPG, Chemicals | Hazards in Barn | None |
| STATIC | Fuels | Fuels | Heavy or Dead Trees, Brush | Moderate | Light |
| | Topography | Topog | Steep | Medium Slope | Flat |
| | Clearance | Clear | 30' or Less | 30' to 70' | More than 70' |
| | Construction | Const | Abundant Combustable | Some Combustable | Non-Combustable |
| | Structural Spacing | Density | Dense Spacing | Subdivision Tracts | Rural, dispersed |
| ATTACK | Access | Access | Narrow, Dirt Rds No turnarounds | 1 Ln, paved, 1-way in/out | 2-Lane Rds. Good Ingress/ Egress |
| | Water | Water | No Water Source | Ponds, pools, low flow hyds | Good Hydrants |
| | Communications | Comm | Poor Radio, Cell Coverage | Some Weak Spots | Good Coverage |
| | Tac Air Support | Tac Air | 20+ Min Re-load, No LZs | 10-15 Min Re-load, No LZs | 5 Min re-load, LZs |

## CRITICAL INFORMATION

**Response Safety**
Limited access to wildlands except by trail or Cowles Mtn. fire road. Many residential streets abut wildlands. Limited access to Mesa Rd. area of Santee. Critical need for hiker evacuation in any fire. High probability for spotting across Mission Gorge Road during operations.

**Aviation Hazards**
Turbulence in Mission Gorge area during high winds

**Potential Choke Points/Entrapments**
Mission Gorge Rd., along wildland stretch between San Diego and Santee.—close to vehicle traffic for fire within 1 mile or wind driven fire with Gorge in downwind trajectory. Near Mesa Rd, City of Santee: Short one-way in and out for Intermix homes.

## BRIEFING INFORMATION

| | |
|---|---|
| **Fuels** | Heavy old age class mixed chaparral with residential interface. Little defensible space. Intermix conditions for a dozen homes on Mesa Rd. in City of Santee. |
| **Last Year(s) Burned** | Majority of area burned in 1971. 600 acre fire in 1989 and 50 acre fire in 2011 along Mission Gorge Rd. |
| **Expected Fire Behavior** | During critical offshore wind days with dry fuels- rapid rates of spread, 60+ ft. flame lengths in heavy fuels, extreme fire behavior including fire whirls, rapid runs, & long range spotting. Potential for strong slope & fuel driven runs, especially with wind alignment. Can run from interface to top of Cowles Mtn. in 30 min. Potential for rapid ignition of many perimeter homes. |
| **Topography** | Steep coastal hills rising from near sea-level to near 1,600 ft. elevation. |
| **Access** | Congested urban area surrounding a large open space island. Limited access to canyons, mostly by trail or one fire road. Oneway in & out access for Mesa Rd. area of Santee. |
| **Special Hazards** | None |

**Safety Zones/ Temporary Safe Refuge Areas**

| Type | Location | Limits of Use |
|---|---|---|
| SZ | Retreat back into suburban streets | None |
| | | |
| | | |
| | | |
| | | |

| | |
|---|---|
| **Water Supply** | No water supply in Mission Gorge. Good supply and pressure in tract homes. Protect water pump station at Lake Murray (Mission Gorge Rd., nearest cross: Jackson) if threatened. Water pressure low at top of Mesa Rd. |

## UNIFIED COMMAND

| | |
|---|---|
| **Potential Incident Command Post Location** | 1. Mission Gorge Visitor Center, 1 Father Jun. Serra Trail, San Diego<br>2. Lake Murray Parking lot, off Hwy. 8, 5540 Kiowa Dr., La Mesa<br>3. Grossmont College |
| **Unified Command Participants** | San Diego Fire & Police Depts., Santee Fire Dept, SD County Sheriff |
| **Staging Areas** | 1. Lake Murray Parking Lot, 5540 Kiowa Dr.<br>2. Grossmont College Parking Lot, 8800 Grossmont College Dr.<br>3. West Hills high School, 8756 Mast Blvd.<br>4. Mission Trails Regional Park Visitor Center, 1 Junipero Serra Trail |

## LARGE FIRE DEVELOPMENT FACTORS

| *Weather* | |
|---|---|
| **Temperature** | 93+ degrees/F |
| **Relative Humidity** | <10% |
| **Wind Speed** | 18+ MPH Sustained, 28+ MPH Gusts |
| **Fuel Moisture** | Seasonally dry or long term drought |
| ***Fire Behavior*** | |
| **Rate of Spread** | 5280-6600 ft./hr. |
| **Spotting** | 1/4 mile |
| **Flame Length** | 8-10' Avg, 40'+ Peak* |

* Peak flame lengths occur when fire growth is in alignment with heavy fuel, slope and wind.

## WUI ARRANGEMENT

Interface: Y Intermix: Y Urban: Y
Suburban: N Rural: Y Other: N