



SECTION 3.0 ENVIRONMENTAL SETTING

This section provides a brief description of the current environmental conditions in the proposed project site and area.

3.1 REGIONAL SETTING

The Newhall County Water District (NCWD) Vasquez Water Main project site is located in the Mint Canyon area of the southern portion of the Liebre Mountains, in the unincorporated area of Los Angeles County, California (Figure 3-1, Regional Location Map). The Liebre Mountains represent the easternmost end of the Western Transverse Ranges (Hickman 1993). The northeastern base of the Liebre Mountains (the Liebre Mountains are located just north of Mint Canyon) defines the southwestern edge of the Mojave Desert. The San Gabriel Mountains are located just south and southeast of Mint Canyon and the southern border of the Liebre Mountains range. The Santa Clara River represents the dividing line between the Liebre Mountains and the San Gabriel Mountains. The Santa Susana Mountains are west-southwest of Mint Canyon.

3.1.1 Physiography

The physiography of the Liebre Mountains region (Mint Canyon exists within the southern portion of the Liebre Mountains region) is strongly controlled by two of Southern California's major fault systems, including the San Andreas on the north and northeast, and the San Gabriel on the west and south (Dibblee 1982). The eastern boundary of the range, and its general separation from the San Gabriel Mountains, is defined by the Soledad Fault. The range can generally be divided into two physiographically and geologically discrete parts: (1) the rugged, mountainous north and northeastern section; and (2) the lower area of rolling hills and small erosional valleys in the west and south.

To the south of the Liebre Mountain-Sawmill Mountain-Sierra Pelona crest lays the body of the mountainous portion of the range. The topography in this area is characterized by steep rugged ridges and narrow winding canyons. A series of subsidiary faults, of generally a northeast trend, divide this block between the San Andreas and San Gabriel fault zones and are mirrored by the principal drainages of the Liebre Mountains range. These drainages include Soledad, Mint, Bouquet, San Franciquito, and Elizabeth Lake Canyons, which drain from the Liebre Mountain-Sawmill Mountain-Sierra Pelona crest southward to the Santa Clara River and ultimately to the Pacific Ocean (Boyd 1999). Figure 3-2, Santa Clarita Area Physiography, illustrates the geographic and physiographic nature of the Vasquez Water Main Project area as it relates to the region.

3.1.1.a Topography

Topography of the service area consists of low hills and valleys, with some steeper canyons, hillsides, and hilltops. The service area ranges in elevation from 1,702 feet at the intersection of Mint Canyon Creek and Vasquez Canyon Road to a high point of 2,384 feet in elevation. Topography is generally low hills and valleys, although some steep hillsides and hilltops and their associated canyons exist in the vicinity.

Figure 3-1. Regional Location Map

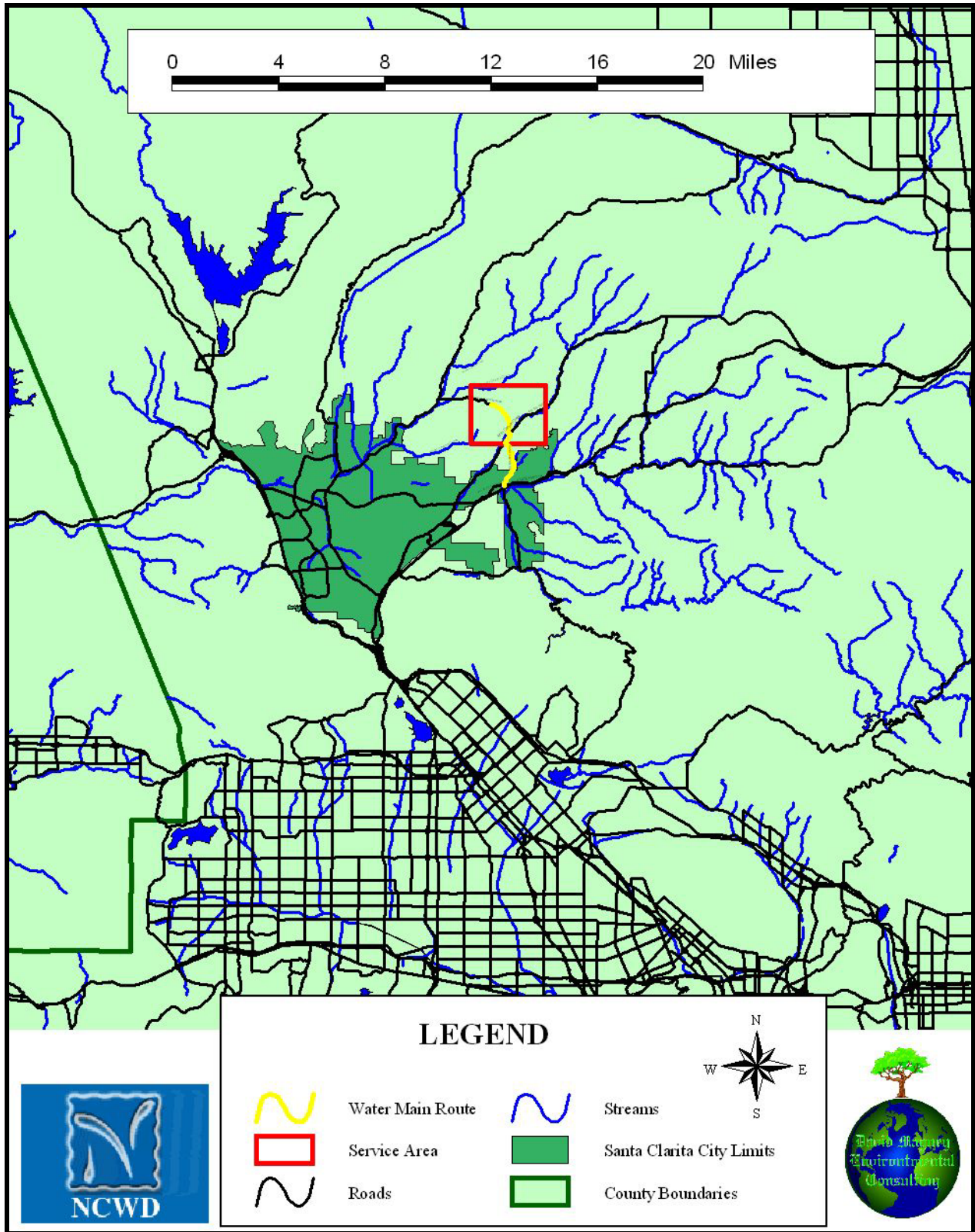
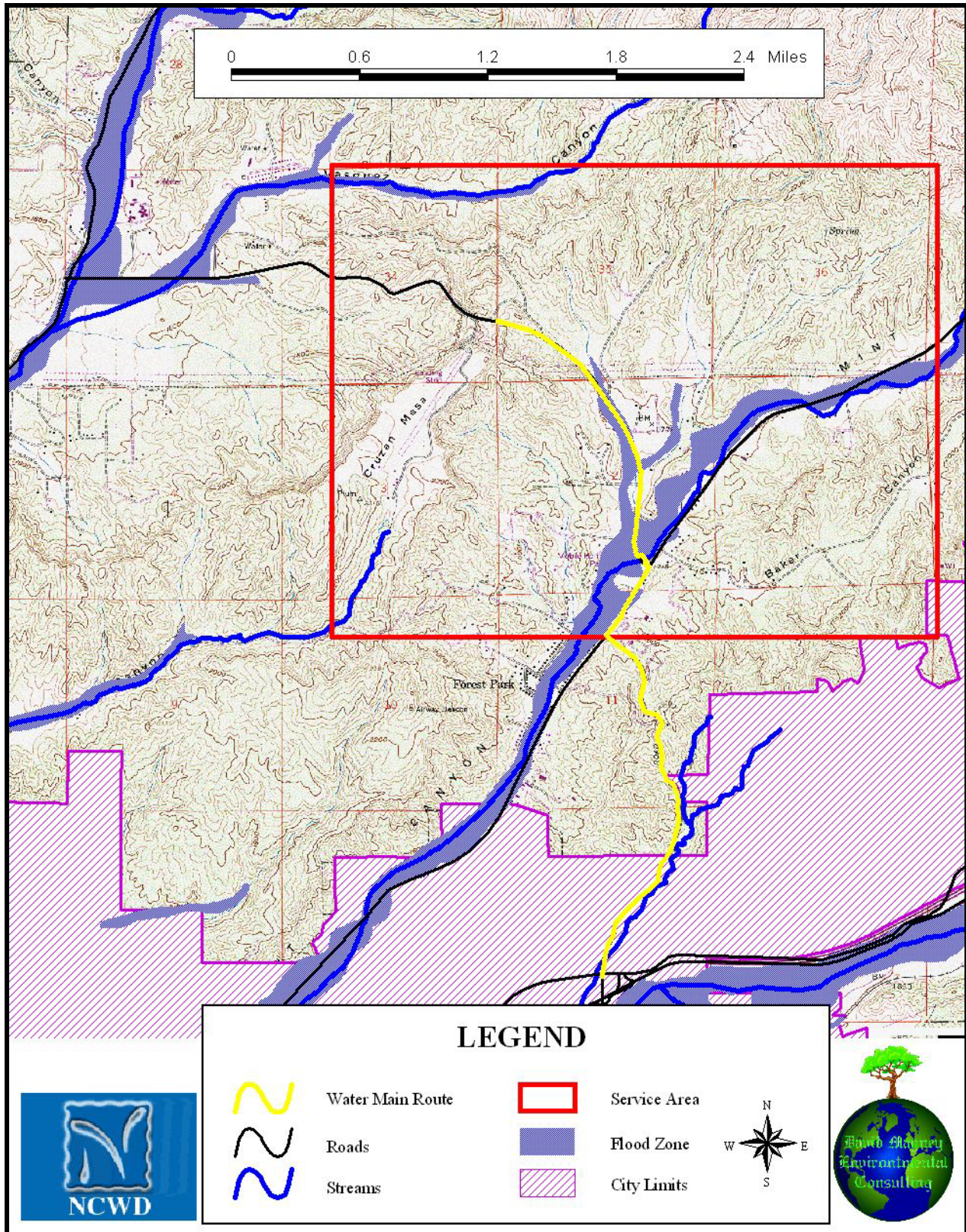


Figure 3-2. Santa Clarita Area Physiography





3.1.2 Geology

The Liebre Mountains region, in which Mint Canyon lies, is geologically complex (Jennings & Strand 1969). The Liebre Mountain-Sawmill Mountain-Sierra Pelona crest and adjacent uplands are eroded largely from pre-Cenozoic basement complex, as are significant portions of Portal Ridge. Liebre Mountain itself is predominantly composed of granitic rocks, while Sawmill Mountain is dominated by gneiss. An extensive area of ancient Pelona schist nearly bisects the range from Sierra Pelona and adjacent Portal Ridge southwestward to San Franciquito Canyon. The lower, hilly regions to the west, south, and southeast of the crest are characterized by Cenozoic sedimentary and volcanic rocks, which are often deformed and eroded. The area occupied by these substrates represent two ancient depositional basins, including the Ridge Basin along the west and Soledad Basin along the southeastern edges of the range. These sediments were originally deposited under largely marine conditions. Subsequently, they have been extensively uplifted and deformed, resulting in areas of striking badlands topography, as well as the unusual formations in the Vasquez Rocks area near Agua Dulce. (Dibblee 1982; Boyd 1999).

3.1.3 Climate

The Liebre Mountains region exists within the foothills and interior mountainous areas of Los Angeles County, and this region borders the Mojave Desert, resulting in a diverse topography and a wide variation of climates. The Liebre Mountains region experiences a typical Mediterranean-type climate of warm, dry summers and cool, moist winters. Under this regime, most precipitation falls as rain resulting from Pacific frontal storms during the months of November through March. Winter snow, although generally light and short-lived, is frequent along the highest ridges of the Liebre Mountain-Sawmill Mountain-Sierra Pelona crest. Exceptionally strong, cold storms bring snow to extensive areas above 1,000 meters in elevation. While precipitation patterns are relatively uniform throughout the range, there is considerable variation in average annual precipitation between different sites within the Liebre Mountain range. Topography, regional rainshadow effects, marine layer penetration, and cold air drainage all exert their effect on local microclimates, and are reflected in the distribution of various floristic elements and vegetation types (Boyd 1999).

The mean annual precipitation increases (with altitude) from 12 to 16 inches within the foothills and interior mountainous areas of Los Angeles County (Natural Resources Conservation Service 1969). Table 3-1, Precipitation Summary for Santa Clarita Valley Region, 1961-1991, provides monthly precipitation averages for three separate weather stations in the Santa Clarita Valley. The mean high temperature for Piru is 76 degrees Fahrenheit, the mean low temperature for Piru is 48 degrees Fahrenheit, and the average temperature for Piru is 61 degrees Fahrenheit, based on data between 1961 and 1991 for the Piru climate station (the nearest station to the project site vicinity with temperature data). Temperatures for Mint Canyon will be slightly lower and higher, respectively.

3.2 PROJECT SITE SETTING

The project site is approximately 18 miles east of the Ventura County line, and two miles northwest of State Route 14 (SR14). Mint Canyon is bordered by Bouquet Canyon to the west and Soledad Canyon to the east. The project site is approximately eight miles east of the Saugus (a part of the City of Santa Clarita), and approximately 13 miles west of the town of Acton. The Vasquez Water Main Project service area is approximately 4,480 acres.





Table 3-1. Precipitation Summary for Santa Clarita Valley Region, 1961-1991 (inches)

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Newhall Soledad FC32CE (34.23N, 118.32W, Elev. 1,243 feet)	3.53	3.73	2.96	1.19	0.23	0.03	0.02	0.13	0.34	0.45	2.65	2.49	17.75
Saugus Power Plant 1 (3435N, 11827W, Elev. 2,105 feet)	3.15	3.23	3.08	1.47	0.39	0.09	0.02	0.20	0.41	0.48	2.54	2.49	17.55
Soledad (36.26N, 121.19W, Elev. 2,050 feet)	2.05	20.6	2.10	0.82	0.17	0.05	0.05	0.06	0.28	0.53	1.53	1.85	11.55

The total project site follows an approximate 2.4-mile path beginning on Sand Canyon Road (where a portion of the water main has already been installed), heads northeast on Sierra Highway. The pipeline route then heads northwest on Vasquez Canyon Road, intersecting Mint Canyon Creek, and ending on Vasquez Canyon Road.

The Mint Canyon Creek portion of the project site flows generally in a southwesterly direction and runs more or less parallel with Sierra Highway. In addition to Mint Canyon Creek, two unnamed tributaries to Mint Canyon Creek also cross the water main route.

A portion of the water main has already been installed immediately south of the southern project site boundary. The installed water main begins on Sand Canyon Road and heads northwest for approximately 0.53 mile. The installed water main then heads northeast on Sierra Highway for approximately 0.78 mile, and ends where the proposed water main begins. There is a small amount of dry farming of small grains in this area.

3.2.1 Natural Resources

The project site landscape includes important, moderately diverse habitats that are composed of several unique plant species requiring specific microhabitats and microclimates. The NCWD project site is inhabited primarily by Chenopod Scrub and Coastal Sage Scrub, which dominate the upland areas above the channel banks and along the streets' right-of-way of the Vasquez Water Main path. These habitat types consist of an intermittent canopy of drought-adapted shrubs with an herbaceous understory. California Annual Grassland and Ruderal Grassland also occur throughout openings in the scrub habitats. Riparian Woodland predominates along the banks of Mint Canyon Creek. The Riparian Woodland onsite is dominated by winter-deciduous, water-loving trees and shrubs. The creek bed, comprised primarily of Riverwash materials and is predominantly unvegetated, is less diverse than the creek banks, as this habitat is prone to frequent natural disturbances (materials deposition by active flows) and unnatural disturbances (human influences, horseback riding).

While only one special-status wildlife species was observed onsite (*Phrynosoma coronatum blainvillei* [San Diego Horned Lizard]), and while no special-status plant species were observed onsite, many special-status plant and wildlife species are expected and known in the vicinity of the project site. The Riparian Woodland (Southern Cottonwood-Willow Riparian Forest) mentioned above is a sensitive habitat type that was observed on the banks of Mint Canyon Creek.





The portion of Mint Canyon Creek that will be altered due to NCWD construction activities generally flows in a southwesterly direction; however, no active flows were present onsite during the biological survey. Although the project site portion of Mint Canyon Creek consists of a moderately species-rich flora, the project site exists in an area that is frequented often by humans, is littered with foreign material and trash, and is subject to high levels of air and noise pollution. Although the project site does not show significant evidence of a diverse fauna, several wildlife species are expected to frequent the area.

3.3 CUMULATIVE PROJECTS SETTING

CEQA defines “cumulative impacts” as two or more individual events that, when considered together, are considerable or will compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately; however, they could have a significant impact when analyzed together. This method of cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

Cumulative impacts are discussed within each of the issue area’s Impact Analysis Subsections in Section 5.0, Environmental Impact Assessment.

The Vasquez Water Main Project path is adjacent to, or intersects with, the following parcels, identified by Assessor’s Parcel Numbers (APNs):

- 3231-007-903 (the parcel in which the Mint Canyon Creek portion of the project is located);
- 3231-005-006, -010, -011, -013, -014, -060, -500, and -501;
- 3231-004-025, -014, -015, -033, and -034;
- 3231-001-015 and -019;
- 3231-017-024 and -026; and
- 2813-015-024.

Table 3-2, Cumulative Projects Summary, summarizes the pending, approved, expired, and recorded tracts within the Vasquez Water Main Project service area that existed as of 12 December 2002. Cumulative projects in the area include ten tracts with a total of 1,008 lots, for approximately 691 single-family dwelling units (DU) (applications for approximately 119 DU have expired).

Figures 3-3A and 3-3B, Cumulative Projects Location Maps, are essentially the same map, but they show different levels of detail. Figures 3-3A and 3-3B show the location of these tract projects with respect to the proposed project site.

Table 3-2. Cumulative Projects Summary

Tract Number (Refer to Figures 3-3A & 3-3B below)	Land Use Designation ¹	No. of Lots	No. of Dwelling Units ²	Proposed land Use/ Status of Project ³	Tract Acreage
43147	A-2-1	26	26	Expired	-
43737	NU, U1, C, HM, A-1-1, C-3	7	80	SCM* Hold (1986)-Pending	9.85
45123	NU, HM, A-1-1	10	10	10 SF (currently active)-Pending	36
46760	NU, HM A-1-1, C-3	8	8	No activity since 1994-Pending	40
47573	A-1-1, C-3	25	25	SCM* Hold-Expired (in review)	250
47574	-	152	7	Approved 2002	139
48354	NU, HM, A-1-1	63	63	Expired	80
49024	U1, HM, A-1-1	84	~84	SCM* Hold 1990-Pending	55
50262	U2, HM, A-2-1	22	~22	SCM* Hold-Pending	40
50467	NU, HM, A-1-1	172	172	SCM Hold 1991-Pending	478
46716	NU, HM, A-1-1	30	~30	Expired	40
44967	NU, HM, A-2-1, A-1-1	200	160	Recorded	360
23635	NU, A-2-1	4	4	Recorded	20
10 Tracts	-	803 Lots	~691 Dwelling Units	6 Pending, 1 Approved, 2 Recorded 4-Expired	Total Acreage 1547.85

¹ U1 = Urban 1 (1.1 to 3.3 dwelling units per acre [DU/ac]); U2 = Urban 2 (3.4 to 6.6 DU/ac); NU = Non-Urban (1 DU/20 acre); A = Agricultural; C = Commercial; HM = Hillside Management.

² The number of proposed DU is unknown for three tracts, and have been estimated at one DU per lot in the absence of more accurate information (~ = approximately.).

³ SCM = Subdivision Committee Meeting.

Figure 3-3A. Cumulative Projects Location Map

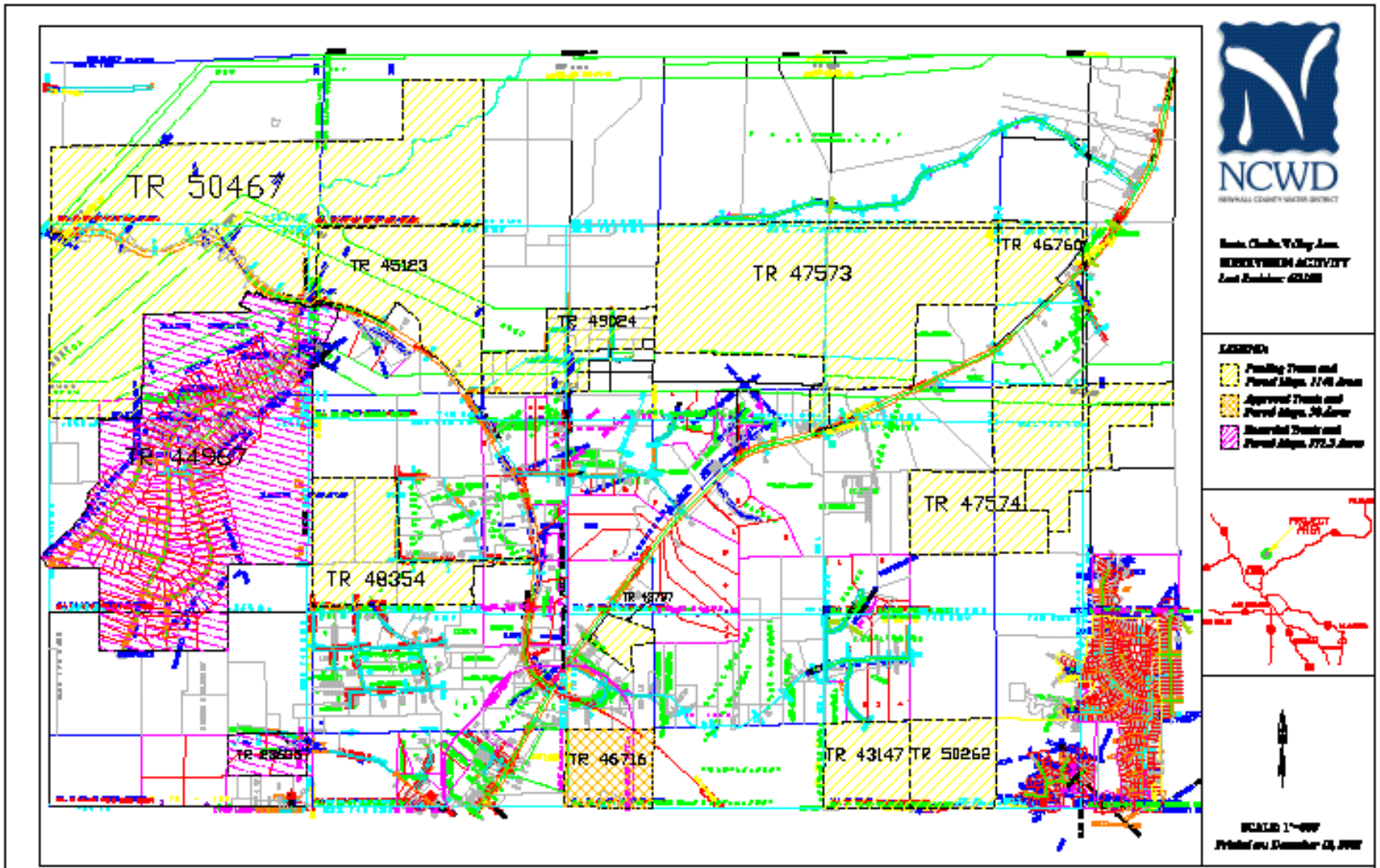


Figure 3-3B. Cumulative Projects Location Map

