- ♦ Θ A moderate amount of Prime Farmland, soils with a Class 1 or 2 Land Capability Classification, soils with high Storie Index ratings and/or areas that grow wine grapes or almonds would be converted to urban uses.
- ♦ Ø Little or no Prime Farmland, soils with a Class 1 or 2 Land Capability Classification, soils with high Storie Index ratings and/or areas that grow wine grapes or almonds would be converted to urban uses.

2. Biological Resources

This criteria assesses the potential effects on sensitive habitats, plants and animals, called special-status species, of development foreseen under the alternatives.

Special-status species include plants and animals legally protected under Sate and federal Endangered Species Acts, or other regulations, as well as those considered sufficiently rare by the scientific community.

Analysis of biological resources are based generally on two data sources:

a. California Natural Diversity Database (CNDBB)

The CNDDB lists both "specific" and "non-specific" occurrences of special status species and their habitats. Specific occurrences are shown on CNDDB maps in their exact known locations, while non-specific occurrences are mapped with circles indicating the general area where a biological resource could occur. For this evaluation, both types of occurrences were considered, although non-specific occurrences were given slightly less weight since the exact location of the resource in question is conjectural.

b. Ecological Baseline Report

This report, prepared for the Yolo County Habitat Conservation Plan / Natural Communities Conservation Plan (HCP/NCCP), examines potential habitat of 28 species and includes an inventory of ecosystems and natural resources throughout Yolo County. DC&E reviewed each habitat map for all 28 species to gain a broad understanding of where effects to individual species might occur.

The two data sources reviewed revealed that there are 17 sensitive species that could be affected by development under the alternatives. While the United States Fish and Wildlife Service has named "Critical Habitat" in Yolo County to protect species in Vernal Pools (west of Clarksburg), no development under the alternatives is proposed there, and it was not further analyzed.

Each species with habitat or known sightings where development is proposed is described below:

- **Alkali milk-vetch** is an annual herb, growing on alkaline soils which are seasonally flooded, such as vernal pools. Known sightings in the county were made west of Clarksburg, southeast of Woodland and north of Davis. The plant's habitat clusters between Woodland and Davis between Roads 102 and 103. Alkali milk-vetch is not on the Federal or State Endangered Species Lists, but is ranked in the CNDDB as "very threatened."
- **Brittlescale** is an annual herb, native to California. The plant's habitat clusters in the central portion of the county, and around West Sacramento. This plant is a Federal Species of Concern.
- **California tiger salamander** requires vernal pools for successful breeding. In 2005, the United States Fish and Wildlife Service named parts of the Dunnigan area as Critical Habitat for the California tiger salamander. The habitat unit is bounded generally by Interstate 5 in the east, Road 86 to the west, Road 2 to the north and Highway E4 to the south. This amphibian's status is "Threatened" on the Federal Endangered Species List and is listed as a "Species of Special Concern" by the State of California. See Figures B-7 and B-8 for maps of this Critical Habitat.
- **Giant garter snake** inhabits agricultural wetlands and other waterways. Habitat in the county includes areas southeast of Dunnigan, Woodland and along the west bank of the Deep Water Ship Channel. The snake's status is "Threatened" on both State and Federal Endangered Species Lists.

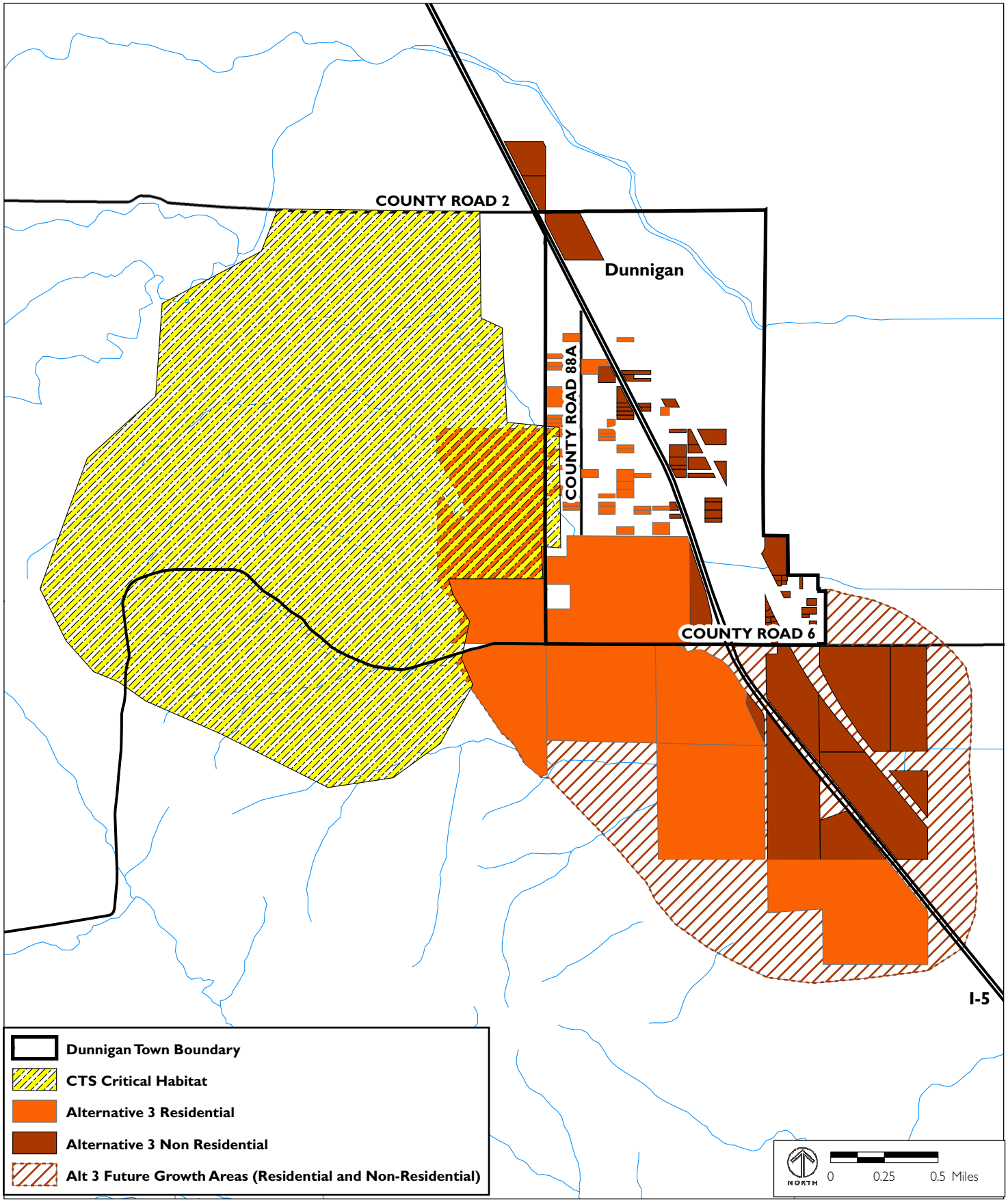

FIGURE B-7

CALIFORNIA TIGER SALAMANDER CRITICAL HABITAT IN ALTERNATIVE THREE

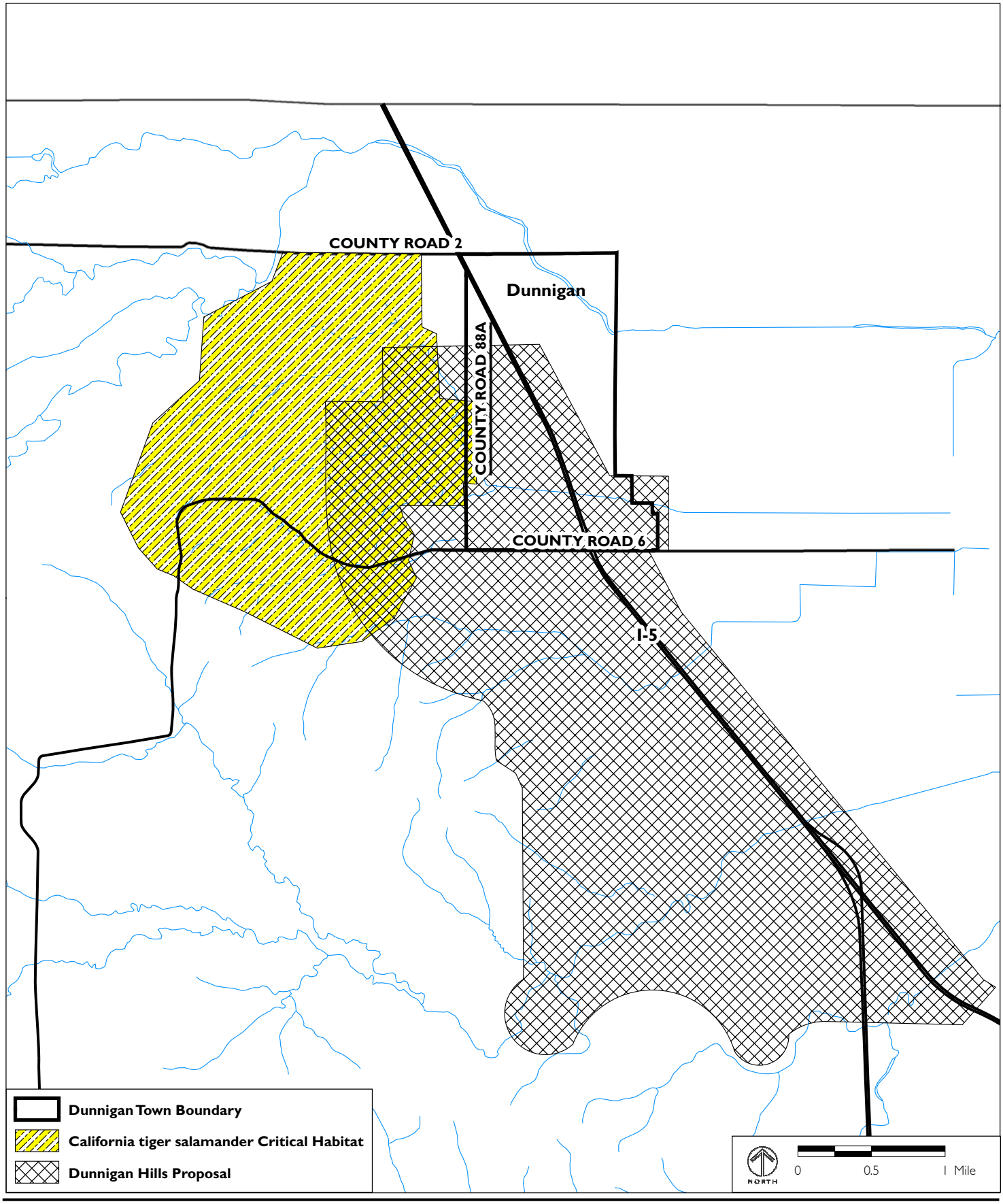

FIGURE B-8

CTS CRITICAL HABITAT IN PROPOSED DUNNINGAN HILLS DEVELOPMENT

- **Heckard's peppergrass** is an annual herb native to California. Dunnigan and southeast of Woodland are two of the few instances of habitat for this plant in the county. This plant is a Federal "Species of Concern."
- **Loggerhead shrike** is a predatory songbird that lives in prairie provinces. The shrike's habitat covers the non-urban parts of the Central Valley and Yolo Bypass ecoregions, east of Winters. The bird's status is a "Species of Conservation Concern" on the Federal Endangered Species List and is listed as a "Species of Special Concern" by the State of California.
- **Northern harrier** is a hawk of open grassland and marshes. Its habitat is located in the central and southern portions of the county, particularly in the Dunnigan Hills. The bird is listed as a "Species of Special Concern" by the State of California.
- **Palmate-bracted birds-beak** is an annual herb that grows in saline-alkaline soils that are seasonally flooded, primarily on the edges of channels and drainages. The plant is listed on both the Federal and California Endangered Species Lists.
- **San Joaquin spearscale** is an annual herb native to California. Its habitat is present in the central and southern portions of the county. This plant is not listed on Federal or State Endangered Species Lists, but is ranked in the CNDDB as "Endangered".
- **Short-eared owls** inhabit wide open spaces such as grasslands, prairie, agricultural fields, salt marshes and estuaries. Its habitat is mostly in the central portion of the county, including the Dunnigan Hills. The bird is listed as a "Species of Special Concern" by the State of California.
- **Swainson's hawk** can be found in open grasslands, prairies and farmlands that have some trees for nesting. It forages and breeds in habitat that covers most of the non-urbanized land in Yolo County, east of Winters and Dunnigan. This bird is listed as "Threatened" by the State of California.
- **Valley elderberry longhorn beetle** lives on the elderberry shrub, a part of the riparian forests and wetlands of the county's Central Valley ecore-

gion. Known sightings were made in the northern section of West Sacramento, south of Winters, and in the Capay Valley. This insect is listed as "Threatened" on the Federal Endangered Species List.

- **Vernal pool tadpole shrimp** is a crustacean that lives in the seasonal wetlands of a vernal pool. Habitat in the county is found west of Clarksburg. In 2006, this crustacean was listed as Endangered on the Federal Endangered Species List.
- **Western burrowing owl** is a small, ground nesting bird of grasslands and prairies. Its habitat encompasses the non-urbanized parts of the county, east of Winters. This bird is listed as a "Species of Conservation Concern" by the United States Fish and Wildlife Service, and as a "Species of Special Concern" by the State of California.
- **Western spadefoot toad** is an amphibian that lives in vernal pools and wetlands. Its habitat is dispersed around the county, but clusters in the Dunnigan Hills and north of Winters. This amphibian is listed by the State of California as a "Species of Special Concern."
- **White-faced ibis** is a wading bird that breeds colonially in marshes, usually nesting in bushes or low trees. Its habitat covers most the eastern county, from Dunnigan to Knights Landing and on both sides of the Sacramento Deep Water Ship Channel. The bird is listed a "Species of Special Concern" by the State of California.
- **Yellow-billed cuckoo** is a migratory bird that lives in Cottonwood trees, such as those of the Great Valley Cottonwood Riparian Forest in the north of the city of West Sacramento. The bird is a "Candidate" for the Federal Endangered Species List and is listed as Endangered by the State of California.

It should be noted that the two data sources used for this analysis are general, and the development areas under consideration in the alternatives are also only generally identified. Therefore, this analysis is broad. Further analysis would need to occur on parcel-specific basis before exact conflicts could be identified. Moreover, it may be possible to avoid effects to special status spe-

cies in any given area by carefully siting development, or by complying with adopted mitigation protocols.

The potential effects of development under the alternatives were ranked as follows:

- ΘΘ The alternative would result in development on proposed Critical Habitat for the California tiger salamander or on lands where specific occurrences of a special status species are known to occur.
- Θ The alternative would include development in areas with significant potential habitat for special-status species, but not in areas where specific occurrences are documented or Critical Habitat is named.
- Ø The alternative would include development on infill parcels. Additionally, or exclusively, no occurrences of special-status species would be affected by development under the alternative, and any potential habitat for special status species that would be affected is common throughout the county.

3. Proximity to Airports

This section evaluates the proximity of the development areas under each alternative to airports in and near Yolo County. Proximity to airports is an important consideration due to the exposure of the public to noise and safety hazards, the safety of aircraft operations, and protecting the airport and the public resources it represents from encroachment by incompatible land development.

There are four airports in Yolo County: the Yolo County Airport near Davis, the UC Davis Airport on the UC Davis campus, the Watts-Woodland Airport in Monument Hills, and the Borges-Clarksburg Airport north of Clarksburg. Additionally, Sacramento International Airport is located just outside the county near Elkhorn.

The development in the alternatives received rankings as follows:

- ΘΘ New developments would be within the airport's Overflight Zone (5,000 feet around the airport)
- Θ New development would be within two miles of an airport
- ⊕ New development would be more than two miles from an airport

Figure B-9 shows airport proximity in Yolo County.

E. Smart Growth

Smart Growth is a series of planning and land use principles which generally encourages future development to preserve open space and to favor compact communities which reduce the need for automobile trips. This report looks at two separate smart growth principles:

1. Preservation of Open Space

Preservation of open space and natural areas is a longstanding value of the residents of Yolo County; it is also a tenet of the smart growth movement around the country. This analysis considers the degree to which open space would be converted in each location in the County under each of the alternatives.

For the purposes of this evaluation, "Open Space" is defined as land in the county with current land use designations by the Assessor's office of "open space" or any agricultural land use.

The effects on current open space resources from each Alternative and each community are scored with the following scale:

- (ΘΘ) The majority of future development requires the loss of open space (approximately 50 percent of the total acreage or number of units.

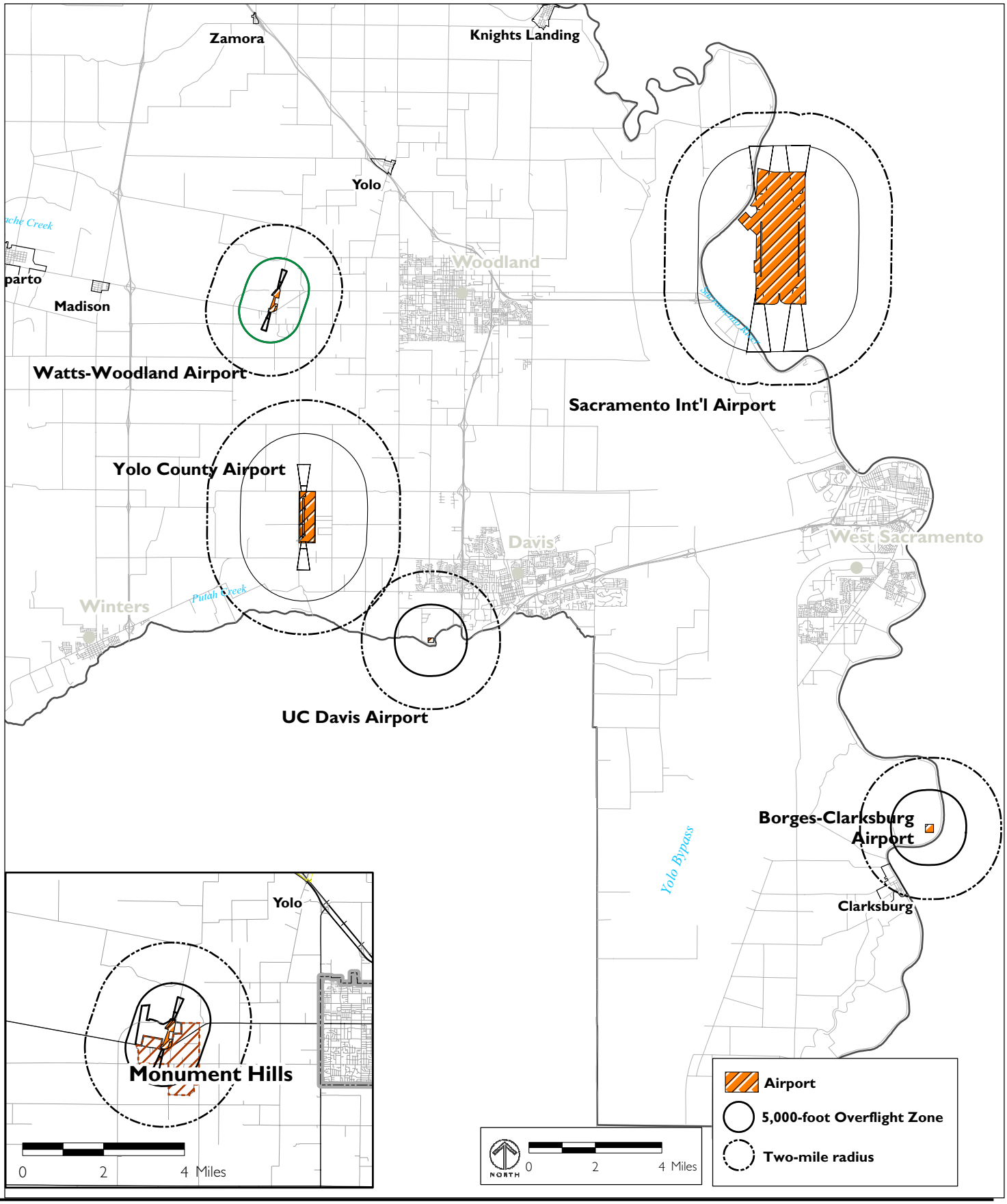

FIGURE B-9

AIRPORT PROXIMITY

- (Θ) future development requires loss of open space (generally, between 25 and 50 percent of total acreage or number of units)
- (Ø) Little or no loss of open space would occur due to future development (less than 25 percent of total acreage or number of units), or very little development is projected

2. Compact Development and Healthy Design

Most proponents of smart growth agree that communities should be compact and walkable, thereby minimizing reliance on the automobile, minimizing air quality effects that result from high vehicle usage, and encouraging a healthy lifestyle. In particular, compact, healthy communities include the following features:

- Compact, efficient use of land.
- Walkable neighborhoods with a mix of land uses and interconnected streets, sidewalks and paths, and short distances between destinations.
- Support for existing development communities.

Since no designs for developments within the alternatives have been proposed, it is impossible to say with certainty how compact, efficient, mixed or walkable any new development would be. However, the overall densities foreseen for each area, coupled with the proximity of new development to existing towns and services, gives some idea of the likely level of smart growth that might occur in each area. Therefore, the alternatives are ranked as follows:

- ΘΘ Projected development would be at a low density, and/or far from existing towns and services, thereby most likely resulting in inefficient use of land and heavy reliance on automobiles, with little support for existing communities.
- Θ Projected development might be built at moderate density, but still outside of current town or city limits.

- ⊕ Projected development would be at a moderate density and in proximity to existing towns and services, thereby resulting in moderately efficient use of land and allowing new residents and workers to walk or bike for some trips.
- ⊕⊕ Projected development would be at a relatively high density and/or would occur as infill within existing towns and near services, thereby resulting in efficient use of land and allowing new residents and workers to walk or bike for many trips.