

## 25 STUDY AREA 25: THERMALITO AFTERBAY AREA

Study Area 25, Thermalito Afterbay Area, consists of approximately 410 acres located west of the City of Oroville and the Oroville Municipal Airport that are proposed for a specific plan and annexation into the City of Oroville. The majority of this study area is currently undeveloped, although there is limited single-family residential development.

- ◆ Alternative 1 designates the entire area as Rural Residential, allowing approximately 100 new homes.
- ◆ Under Alternative 2, the entire study area would be designated for Agriculture.
- ◆ Alternative 3 designates the majority of the study area for a mix of residential densities, allowing about 2,400 new homes, and about 5 acres of retail uses along Highway 162.
- ◆ The existing General Plan and Zoning Ordinance designates this study area for rural residential uses, allowing five- and ten-acre parcels. Although Alternative 1 is similar, it allows five-acre parcels throughout the study area.

### A. *Economics*

#### 1. Market Viability

##### a. Alternative 1

With a modest number of new residential units planned under Alternative 1, market support would likely be adequate to absorb the planned development within the General Plan time horizon. Alternative 1 receives an A.

##### b. Alternative 2

Alternative 2 plans no significant new residential or commercial development; market viability is not a concern.

##### c. Alternative 3

Given Study Area 25's attractive, central location within Butte County, and relatively easy access to job opportunities in Chico, Oroville, and

Biggs/Gridley, this study area could prove desirable to a sufficient number of households to support the development of 2,400 residential units during the General Plan planning period, but it is questionable whether Alternative 3 could be fully absorbed during the General Plan horizon. These new homes would likely mean that some limited, local-serving retail uses such as a gas station, convenience store, small grocery store, and/or fast food restaurant would locate in the study area. Therefore, Alternative 3 receives a B.

## 2. Fiscal Impacts

### a. Alternative 1

This study area spans TRAs in which the County's property tax share is either a relatively low 16.6 percent or a relatively high 20.1 percent. Although Alternative 1 provides only a modest number of single-family residential units, the revenue generation potential of Alternative 1 is sound. The study area lies just outside of the eight-minute travel time range of the nearest full-time staffed fire stations (Butte County Station #71 and El Medio Station #3). However, the planned development of 100 new homes would not be likely to trigger a need to upgrade service standards from the current rural levels of fire service. Alternative 1 receives a B.

### b. Alternative 2

This alternative does not plan any new residential or commercial development; therefore, its fiscal impacts would be neutral and it receives a C.

### c. Alternative 3

Alternative 3 has the potential to lead to fiscal deficits because it would be inefficient to provide new services to the study area due to service provision inefficiencies. The increased residential density associated with 2,400 new residential units means that existing service levels would likely be deemed inadequate, thus triggering expensive fire service upgrades and associated costs. While this risk would be offset slightly by the potential revenues from the 5 acres of new retail development planned under Alternative 3, the potential for fiscal deficits means that Alternative 3 receives a D.

### 3. Jobs/Housing Balance

#### a. Alternative 1

Because Alternative 1 provides no new jobs, and about 100 new residential units, Alternative 1 would make a minor contribution to a deterioration of the jobs/housing balance in the Oroville area. Alternative 1 therefore receives a C.

#### b. Alternative 2

Since this alternative does not allow any significant new residential or commercial development, it would not have any effect on jobs/housing balance.

#### c. Alternative 3

The estimated jobs/housing ratio for new development under Alternative 3 is barely above zero, meaning that Alternative 3 would contribute to a reduction in the jobs/housing ratio for Oroville area. Alternative 3 receives a D.

### *B. Public Services*

#### 1. Fire and Emergency Services

The Butte County Fire Department and CAL FIRE provide fire protection and emergency services to Study Area 25. In general, there is not adequate staffing to handle more than two serious fire events or several less-serious emergencies at once in Butte County. Any new development would impact the level of fire protection and emergency services.

There are no fire stations within the boundaries of Study Area 25. The closest fire station is the El Medio Fire District Station, which is located less than 5 miles away.

Study Area 25 has adequate service levels for rural residential development, as it is located within a 10- to 14-minute travel area for a first-due unit. In

addition, the roadway frontage along Highway 162 has adequate service levels for very low density residential development, as it is within eight minutes of a first-due unit.

a. Alternative 1

Alternative 1 calls for approximately 100 new homes at a rural density. This development would have adequate fire and emergency service levels. Because this alternative allows more than a minimal amount of new development, all of which would have adequate fire and emergency service levels, it receives a B.

b. Alternative 2

There would be no new development under Alternative 2, so fire and emergency services are not an issue.

c. Alternative 3

Alternative 3 calls for approximately 2,400 new homes at suburban densities, as well as retail uses, which typically require high fire and emergency service levels because they include assets of high economic value and generate customers that depend on those services. This development would not have adequate fire and emergency service levels due to high travel times and a low concentration of fire stations in the immediate area. Moreover, the level of development under this alternative would not support a new fire station, so there would be little opportunity to improve fire protection. Therefore, this alternative receives a D.

## 2. Sheriff Services

Study Area 25 is served by the Southern Division of the Butte County Sheriff's Office (BCSO). The BCSO is currently understaffed and has limited capacity for expansion of its services. The Southern Division typically has about three to four deputies on duty in the Oroville area. Because Study Area 25 is located near the Oroville area, response times to this location are quick.

There is no police station located within the boundaries of Study Area 25; however, the Butte County Sherriff station in the City of Oroville is located less than 5 miles away.

a. Alternative 1

Alternative 1 allows approximately 100 new homes in this study area with quick response times. Because this development would not generate the need to hire a new officer, this alternative receives an A.

b. Alternative 2

There would be no new development under Alternative 2, so sheriff services are not an issue.

c. Alternative 3

Alternative 3 allows approximately 2,400 new homes, generating the need for more than five new officers in an area with quick response times. Therefore, this alternative receives a C.

### 3. Capacity of School Districts

Roughly half of Study Area 25 is served by the Thermalito Union School District (TUSD) (K-8) and the Oroville Union High School District (OUHSD) (9-12). The remaining half is served by the Biggs Unified School District (BUSD). According to TUSD staff, the TUSD requested a transfer of territory to place this study area entirely within the TUSD boundary. However, the BUSD and OUHSD both rejected the transfer. The developer of this site is now petitioning the County Board of Supervisors to approve the transfer. Because a transfer has not yet been approved, it is assumed that the students generated within this study area would be split between the TUSD/OUHSD and the BUSD.

The TUSD has maintained a stable enrollment for the past five years, although a decline is expected next year. Its current enrollment is approximately 1,450 students, while it has the capacity for 1,570 students, meaning the District has the capacity for approximately 120 more students.

The TUSD has completed all of its recent expansion plans, and is beginning a facilities master planning process to identify future school sites.

The OUHSD has been experiencing declining enrollment. As discussed in more detail under the Concow and Thermalito study areas, the District currently has capacity for approximately 440 additional students, with a project underway that would expand capacity by another 100 students.

The enrollment of the BUSD in the 2006-07 school year was approximately 820 students. Current capacity information is unavailable. Although the District owns a vacant, 44-acre site next to the Biggs schools, there are no plans to build a new school facility at this time.

a. Alternative 1

Under Alternative 1, Study Area 25 could generate approximately 20 new students within the TUSD, which could be accommodated by the existing capacity. The total amount of development foreseen under Alternative 1 in all of the study areas within the TUSD could generate approximately 2,330 new students, about 2,210 students beyond current capacity.

Under Alternative 1, Study Area 25 could generate approximately ten new students within the OUHSD, which could be accommodated by the existing capacity. The total amount of development foreseen under Alternative 1 in all of the study areas within the OUHSD could generate approximately 7,250 new students, more than double the current enrollment and about 6,810 students beyond current capacity.

Under Alternative 1, Study Area 25 could generate approximately 20 new students within the BUSD. The total amount of development foreseen under Alternative 1 in all of the study areas within the BUSD could generate approximately 1,200 new students, one and a half times the 2006-07 enrollment.

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Because the new students generated by this study area could be accommodated by the existing capacities, this alternative receives an A.

b. Alternative 2

Under Alternative 2, Study Area 25 would not generate any new students, so schools are not an issue.

c. Alternative 3

Under Alternative 3, Study area 25 could generate approximately 400 new students within the TUSD, which would exceed its current capacity by about 280 students. The total amount of development foreseen under Alternative 3 in all of the study areas within the TUSD could generate approximately 890 new students, about 770 students beyond current capacity.

Under Alternative 3, Study Area 25 could generate approximately 190 new students within the OUHSD, which could be accommodated by the existing capacity. The total amount of development foreseen under Alternative 3 in all of the study areas within the OUHSD could generate approximately 3,220 new students, about 2,780 students beyond current capacity.

Under Alternative 3, Study Area 25 could generate approximately 590 new students within the BUSD. The total amount of development foreseen under Alternative 3 in all of the study areas within the BUSD could generate approximately 2,900 new students, more than triple the 2006-07 enrollment.

Because this study area would generate more students than can be accommodated by the existing capacity, but would not generate enough students to support the construction of new schools, this alternative receives a D.

*C. Water*

**1. Water Supply**

Study Area 25 is located within the Sacramento Valley Inventory Unit, where groundwater is stored in the Tuscan, Laguna, Riverbank and Modesto Formations. Groundwater in these formations primarily exists within the spaces between sand and gravel deposits, which generally allows greater recharge and access to groundwater than aquifers relying on the fractures and joints of rocks. The Tuscan and Laguna Formations provide water for deep irrigation and municipal wells, while the Riverbank and Modesto Formations provide water for shallower domestic wells.

Study Area 25 is located within the Thermalito Inventory Sub-Unit. Water demands in this Sub-Unit are primarily urban, although there are also agricultural water users. Although there are no water service providers currently operating within Study Area 25, it is close to the western boundary of the Thermalito Irrigation District (TID), which supplies primarily surface water from Concow Lake to a combination of residential, industrial and governmental users. The District also has five backup groundwater wells. TID has sufficient water supply for current and expected demand, and is planning an expansion of its treatment plant to improve service during periods of maximum demand. It may be possible to serve urban development in this study area by connecting to the TID network.

a. Alternatives 1 and 3

Alternatives 1 and 3 call for residential development, and Alternative 3 also calls for limited retail development. Although this development would currently rely on groundwater, TID could expand its district west to encompass this development and provide it with surface water. Therefore, these alternatives receive a B.

b. Alternative 2

There would be no new development in this study area under Alternative 2, so water supply is not an issue.

## 2. Groundwater Recharge Potential

Study Area 25 is located within the Valley Inventory Unit. It may serve as a moderate or high potential recharge area.

### a. Alternative 1

Alternative 1 allows minor residential development in this region that may serve as a moderate or high potential recharge area, and therefore receives a C.

### b. Alternative 2

There would be no new development in this study area under Alternative 2. Therefore, this alternative receives an A.

### c. Alternative 3

Alternative 3 calls for significant development in this region that may serve as a moderate or high potential recharge area, and therefore receives a D.

## *D. Wastewater*

There is currently no publicly managed sewer service in Study Area 25. The current wastewater treatment method is individual septic systems.

Study Area 25 is located within the Thermalito Irrigation District (TID) Sphere of Influence, although it is currently outside of the TID District Boundary. TID provides wastewater collection services to portions of the City of Oroville and adjacent unincorporated areas. TID is also part of a Joint Powers Agreement with the Sewerage Commission – Oroville Region (SC-OR), which handles wastewater treatment and disposal. According to LAFCO's 2006 Municipal Service Review for Domestic Water and Wastewater Services in Butte County, TID is expecting growth westward along Highway 162 to Highway 99, the western boundary of TID's Sphere of Influence. This expected growth area includes Study Area 25. Therefore, it is

expected that, in the future, Study Area 25 will be connected to TID's sewer system.

It is also possible that, in the future, this study area may be connected to Oroville's municipal sewer system if the City were to annex this study area. The City is also part of a Joint Powers Agreement with SC-OR.

TID's collection system currently has no significant capacity issues and is generally in good condition. There are no current plans to expand the capacity of TID's collection system, but significant developments may be required to upgrade the existing collection system downstream if additional capacity is required.

Recently, SC-OR has indicated that its collection system and treatment plant may not have sufficient capacity to serve additional development in areas that would rely on the West Interceptor, which includes the areas within TID.

a. Alternative 1

Alternative 1 calls for approximately 100 new homes at a rural residential density. This development can effectively be served by septic because of the low density and amount of development. Therefore, this alternative receives a B.

b. Alternative 2

There would be no new development under Alternative 2, so wastewater would not be an issue.

c. Alternative 3

Alternative 3 calls for approximately 2,400 new homes at a variety of densities, as well as limited retail uses. This amount of development could create the ability to expand the sewer system.

Although SC-OR's system is currently at capacity in this area, additional development could help fund needed improvements to SC-OR's system.

However, because SC-OR's ability to serve this additional development is in question, Alternative 3 receives a C.

*E. Circulation*

Study Area 25 is served by one major regional roadway, Highway 162. The study area is served by a single paved road.

**1. Proximity to Freeways and Major Roadways**

Highway 162 runs along the northern boundary of the study area and provides a connection to both Highway 70 and Highway 99. This study area receives an A for access proximity to major roadways. Since Alternative 2 does not include any new development, proximity to roadways is not an issue.

**2. Bicycle Circulation**

Within the Thermalito Afterbay area, a bicycle facility is planned along Highway 162. Due to the study area's high level of access to planned bicycle facilities and location more than 1 mile from an existing urban area, the study area receives a C. Since Alternative 2 does not include any new development, bicycle circulation is not an issue.

**3. Transit Service**

The service is within 1 mile of the study area. This receives a C. Since Alternative 2 does not include any new development, transit service is not an issue.

*F. Airport Compatibility Zone Conflicts*

Portions of Study Area 25 are located within Airport Compatibility Zones C and D.

The land uses assigned under all alternatives are compatible with the 2000 Airport Land Use Compatibility Plan. Therefore, airport compatibility issues would not affect development under Alternatives 1, 2 or 3.

### *G. Potential Loss of Agricultural Land*

The entire study area, 410 acres, is identified as Grazing Land.

#### a. Alternatives 1 and 3

Under Alternatives 1 and 3, the entire area is designated for non-agricultural uses, which would contribute to the conversion of 410 acres of Grazing Land to non-agricultural uses. Therefore, Alternatives 1 and 3 receive a D.

#### b. Alternative 2

Alternative 2 designates the entire study area in agriculture, which would not contribute to the conversion of Grazing Land acres to non-agricultural uses. Therefore, Alternative 2 receives an A.

### *H. Biological Resources*

Study Area 25 is within the Butte Regional Conservation Plan (HCP/NCCP) area. The predominant land cover types are grassland and grassland with vernal swale complex, which occupies the southern approximately two-thirds of the study area.

There are no plant or animal occurrences in the study area.

There is Butte Regional Conservation Plan (HCP/NCCP)-modeled habitat in this study area for the following 15 species:

- ◆ Ahart's dwarf rush
- ◆ Bald eagle
- ◆ Conservancy fairy shrimp

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- ◆ Greene's tuctoria
- ◆ Hairy Orcutt grass
- ◆ Hoover's spurge
- ◆ Northwestern pond turtle breeding habitat in pond
- ◆ Peregrine falcon
- ◆ Swainson's hawk
- ◆ Tricolored blackbird
- ◆ Vernal pool fairy shrimp
- ◆ Vernal pool tadpole shrimp
- ◆ Western burrowing owl
- ◆ Western spadefoot
- ◆ White-tailed kite

There is no Critical Habitat or other protected lands in the study area. The study area is adjacent to Department of Water Resources lands to the south.

Grassland with vernal swale complex occupies approximately two thirds in the southern portion of the study area.

There is no deer herd habitat in the study area.

a. Alternative 1

Under Alternative 1 the whole area would be designated Rural Residential, allowing 100 new homes throughout the study area. Although the development would be sparse and dispersed throughout the study area, there is a large area of sensitive vernal pools and swale complex habitat that would be impacted directly by development with the potential for hydrological impacts on the vernal swale complexes. Therefore, this alternative receives a C for Special-Status Animal and Plant Species, an A for Critical Habitat and other protected lands, a D for Sensitive Habitats, and an A for Deer Herd Habitat.

b. Alternative 2

Under Alternative 2 the entire area would be designated Agriculture, but because conversion of the large area of vernal swale complex to any type of agriculture other than grazing could significantly alter this sensitive habitat. Therefore, this alternative receives a C for Special-Status Animal and Plant Species, an A for Critical Habitat and other protected lands, a C for Sensitive Habitats, and an A for Deer Herd Habitat.

c. Alternative 3

Under this alternative, the entire area would be converted to Residential Mix, with the construction of 2,400 new homes. This development would occur on a large area of sensitive vernal swale complex habitat that provides potential habitat for special-status species. Therefore, this alternative receives a C for Special-Status Animal and Plant Species, an A for Critical Habitat and other protected Lands, a D score for Sensitive Habitats, and an A for Deer Herd Habitat.

*I. Safety and Hazards*

**1. Fire Hazards**

Study Area 25 is located in low and moderate fire hazard severity zones. Fire hazards would not affect development under Alternatives 1, 2 or 3, therefore, these alternatives receive an A.

**2. Flood Hazards**

Study Area 25 is not included in the 100-year and 500-year FEMA flood zones. Therefore, Alternatives 1, 2 and 3 receive an A.

**3. Geologic Hazards**

There are no known geologic hazard areas in Study Area 25. This study area has slight erosion potential, zero to low subsidence potential, zero to low landslide potential, moderate potential for soil expansion, no earthquake faults and low liquefaction potential. All three alternatives receive an A.

*J. Cultural Resources*

Study Area 25 lies within the Biggs USGS 7.5' quadrangle. Approximately 10 percent of the land in the Biggs Quadrangle has been surveyed for cultural resources. To date, no cultural resources sites have been recorded in Study Area 25. This study area lies within in a valley region and has no local water source. This, coupled with the lack of previously recorded sites, indicates that this study area is of low sensitivity for cultural resources.

a. Alternative 1

Under Alternative 1 the entire study area would be designated Rural Residential, with no Resource Conservation land use areas that could be used to protect significant cultural resources. Despite the lack of Resource Conservation, because of the low sensitivity of the study area and the low density of the planned development, Alternative 1 receives a B.

b. Alternative 2

Under Alternative 2 the entire study area would be designated Agriculture, and devoted to grazing. Grazing is not particularly destructive to most types of cultural resources. Because of the low risk of destruction of cultural resources from grazing, Alternative 2 receives an A.

c. Alternative 3

Under Alternative 3 almost all of the study area would be designated Mixed Residential, with 5 acres set aside for retail development. Despite the low sensitivity of the study area, because of the lack of Resource Conservation that could be used to protect significant cultural resources and the higher density of the planned development, Alternative 3 receives a D.

*K. Notes*

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