

Issue	Less Than Significant or No Impact	Potential Significant Impact Adequately Addressed in MEIR	MEIR Required Additional Review: No Significant Impact	Less Than Significant Impact Due to Mitigation Measures in Project Description	New Additional Significant Impact Not Addressed in MEIR	New Additional Mitigation Measures Required
5.4 Biological Resources. Would the project:						
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/> ¹	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) Through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting

The Mountain House project is located on the San Joaquin Valley floor, north of the City of Tracy, in northwestern San Joaquin County, California. Neighborhoods I and J are located in the northwestern portion of Mountain House, north of Byron Road and south of Old River. Neighborhood I abuts the banks of Old River. The majority of the area has historically been farmed for hay or grain crops and there are a few existing residences along Kelso Road and on the banks of Old River. The residences along Old River will not be removed for the project. Two to three residences have been abandoned near the water treatment plant and one residence in this area remains occupied.

¹ Remains significant and unavoidable as stated in the 1994 MEIR.

Dry Creek flows through the project area and in large rain events there are several irrigation canals that cross through the farmed fields. The Dry Creek corridor does not support a riparian woodland community but there is in-channel wetland vegetation associated with the drainage (see Figure 5.1-1 for an aerial photograph showing Dry Creek).

The farmed fields provide low quality habitat for wildlife and botanical resources and support a limited assortment of species. In contrast, the Dry Creek and Old River corridors and their associated wetlands contain the diversity of habitats required to support a variety of wildlife species that occur in northwestern San Joaquin County.

Previous Environmental Studies

The Mountain House project area has been the subject of numerous prior environmental studies conducted over more than a decade. The methods and results of these prior studies are described in detail in the 1994 MEIR and the Master Plan (Baseline Environmental Consulting, 1994; San Joaquin County Community Development Department [SJCCDD], 1994), subsequent CEQA documents prepared for individual projects within the Specific Plan I area (SJCCDD, 2000; SJCCDD, 2003) and Specific Plan II area (SJCCDD, 2004), and CEQA documents prepared for Delta College (San Joaquin Delta Community College District, 2002; EDAW, 2003a). The Specific Plan II area, which encompasses Neighborhoods I and J, was the subject of a number of more recent field surveys undertaken specifically for the 2004 CEQA document for the adoption of Specific Plan II.

Field Surveys

A number of field surveys were conducted between 2001 and 2004 within the Specific Plan II area that includes Neighborhoods I and J. In March and August of 2001, pre-construction surveys for burrowing owl (*Athene cunicularia*) and San Joaquin kit fox (*Vulpes macrotis mutica*) were conducted for the Byron Bethany Irrigation District (BBID) raw water pipeline, water treatment plant, detention basin, and wastewater treatment plant sites (Moore Biological Consultants, 2001a and 2001b). All of these sites are situated along or adjacent to Byron Road, within portions of Neighborhoods I, J, and L. The BBID raw water pipeline extends into Alameda County. The only sensitive species observed during these surveys were a few burrowing owls observed just east of the detention basin site in Neighborhood L in March and August of 2001.

In September 2003, a focused search for rose mallow (*Hibiscus lasiocarpus* [also known as California hibiscus]) was undertaken along the banks of Old River via boat (North Fork Associates, 2003). This survey, which was conducted during the appropriate time of year when the species would have been detectable, did not find the species. In October 2003, the south bank of Old River was comprehensively searched for blue elderberry shrubs with negative results. A

general survey of current habitat conditions in Neighborhoods I and J was conducted in August 2006.

Vegetation

The vegetation within Neighborhoods I and J consists primarily of annual hay and grain crops and ornamental landscape trees and shrubs around existing residences. While some of the fields appear not to have been as intensively farmed as described in previous documents, the dominant vegetation in these fields remains cultivated non-native grass.

Disturbed California annual grassland series (Sawyer and Keeler-Wolf, 1995) best describes vegetation within the fallow fields throughout the project area. The ruderal strips along the edges of fields, roads and irrigation canals also support disturbed California annual grassland series vegetation. Some of the more common grass and weed species include yellow star thistle (*Centaurea solstitialis*), oats (*Avena* sp.), soft chess brome (*Bromus hordeaceus*), and ripgut brome (*Bromus diandrus*), filaree (*Erodium botrys*) and tumbleweed (*Amaranthus albus*).

The riparian habitats adjacent to the Old River levee and in some of the agricultural ditches along the landward side of the levee are vegetated with small tree and shrub species that include willows (*Salix* spp.), Himalayan blackberry (*Rubus discolor*), California wild rose (*Rosa californica*), and alder (*Alnus rhombifolia*). Species such as mugwort (*Artemisia douglasii*), creeping wild rye (*Leymus triticoides*), and poison hemlock (*Conium maculatum*) are found in the understory of the riparian scrub habitats and banks of the ditches on the landward side of the levee. There are a number of trees in a patchy distribution along the Old River and Dry Creek corridors. A row of eucalyptus line Kelso Road in the vicinity of where it crosses Dry Creek and there are a few pepper trees (*Schinus molle*) and palm trees planted around the residences in this same area. No blue elderberry shrubs were observed within the project area.

Notable Vegetation Communities. The California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDDB) (CDFG, 2006) contains records and classifications of sensitive, unique, or biologically important vegetation communities. Unique vegetation communities listed within the CNDDDB in this portion of San Joaquin County include Great Valley Valley Oak Riparian Forest, Valley Sink Scrub, and Alkali Meadow (Holland, 1986). These communities are entirely associated with aquatic and wetland habitat types that are not present within the project area. The riparian habitats associated with Dry Creek and Old River are not mapped as unique vegetation communities in the CNDDDB.

Wildlife

The vegetation communities found within the project area provide limited quality habitat for wildlife species. A variety of raptors forage on small rodents in agricultural fields; however, both the diversity and abundance of these small

mammals are limited by farming practices. A number of songbirds and migratory birds also forage on grains and stubble in the fields; this use is seasonal and variable as crops change over time. Wildlife use of ruderal areas adjacent to roads, agricultural fields, and canals is even more limited due to habitat disturbance and activity levels associated with adjacent farming practices.

Different bird species have been observed in the project area during field surveys conducted over the past decade. Most of these birds are common species found in agricultural settings of San Joaquin County. Some of the species observed include turkey vultures (*Cathartes aura*), Swainson's hawks (*Buteo swainsoni*), mourning doves (*Zenaidura macroura*), Brewer's blackbirds (*Euphagus cyanocephalus*), western kingbirds (*Tyrannus verticalis*), and California quail (*Callipepla californica*).

A variety of mammals occur within the project area, with the highest diversity using the riparian habitat within Dry Creek. Desert cottontail (*Sylvilagus audubonii*), black-tailed hare (*Lepus californicus*), California ground squirrel (*Spermophilus beecheyi*), and signs of coyote (*Canis latrans*) and raccoon (*Procyon lotor*) have been observed, and species such as striped skunk (*Mephitis mephitis*) and Virginia opossum (*Didelphis virginiana*) are known from the greater project area. A number of species of small rodents including mice (*Mus musculus*, *Reithrodontomys megalotis*, and *Peromyscus maniculatus*) and voles (*Microtus californicus*) also likely occur in the project area. Based on habitat types present, a number of amphibians and reptiles are also expected to occur in the area.

Special-Status Species

For the purpose of this assessment, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS); those listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Game (CDFG); plants occurring on lists 1B or 2 of the California Native Plant Society's *Inventory of Rare and Endangered Plants of California, Sixth Edition* (2001); and animals designated as "Species of Special Concern" by the CDFG.

Plants. A list of special-status plants evaluated for their potential to occur in the project area is presented in Table B-1 in Appendix B. This list was compiled through review of previous reports prepared for the Mountain House project area, a query of the CNDDb (CDFG, 2006), and review of the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2001). The CNDDb query included occurrences within a five-mile radius of the project area.

Fifteen species of special-status plants were evaluated for their potential to occur in the project area (Table B-1). Of these species, only two, rose mallow (*Hibiscus lasiocarpus*) and Mason's lilaeopsis (*Lilaeopsis masonii*), were

identified as having the potential to occur in the project area. Potentially suitable habitat for Mason's lilaeopsis and rose mallow exists in some of the wetland areas associated with Old River, and Mason's lilaeopsis has been located along Old River in the Mountain House project area in the past (Baseline Environmental Consulting, 1994). However, neither Mason's lilaeopsis nor rose mallow was observed during focused surveys conducted by North Fork Associates in 2003 along the portion of Old River that abuts Neighborhood I. No other special-status plants were observed within Neighborhoods I and J during the most recent (i.e., 2004) surveys of the Specific Plan II area.

Wildlife Species. Special-status wildlife species with potential to occur in the project area were also identified through review of previous documents and a search of the CNDDDB (CDFG, 2006). The species evaluated are listed in Table B-1. Swainson's hawk (*Buteo swainsoni*) and California burrowing owl (*Athene cunicularia*) have been reported to occur in the project area, and sensitive fish have been observed or are known to occur in habitats associated with Old River. Other wildlife species that could use habitats in the project area include black-shouldered kite (*Elanus leucurus*), tricolored blackbird (*Agelaius tricolor*), western pond turtle, and San Joaquin kit fox. These species are discussed individually below. Sensitive fish and an assortment of non-listed yet sensitive bird species are also discussed below. The remaining species listed in Table B-1 have little to no potential to occur within the project area on more than an occasional basis.

Swainson's Hawk. The Swainson's hawk is a State-listed threatened species. In the Central Valley, this hawk typically nests in oak or cottonwood trees associated with riparian habitats and agricultural fields. Swainson's hawks prefer nesting sites that provide sweeping views of nearby foraging grounds consisting of grasslands, irrigated pasture, alfalfa, hay, and wheat crops. A Swainson's hawk nest was observed in 2002 in a eucalyptus tree on the west side of Kelso Road, approximately 1/4 mile north of the junction with Byron Road. There are also several reported nest sites along Old River near the project area. Most Swainson's hawks are migratory, wintering in Mexico and breeding in California and elsewhere in the western United States. The raptor generally arrives in the Central Valley in mid-March, and begins courtship and nest construction immediately upon arrival at the breeding sites. The young fledge in early July, and most Swainson's hawks leave their breeding territories by late August to early September.

Burrowing Owl. Burrowing owls are a CDFG California Special Concern Species. These owls are typically year-long residents in a variety of grasslands as well as scrub lands that have a low density of trees and shrubs with low-growing vegetation. However, burrowing owls that nest in the Central Valley may winter elsewhere. The primary habitat requirement of the burrowing owl is small mammal burrows for nesting. The owl usually nests in abandoned ground squirrel burrows, although they have been known to dig their own burrows in softer soils. In urban areas, burrowing owls often use artificial burrows such as pipes, culverts, and piles of concrete pieces.

A juvenile burrowing owl was observed in 1989 in an open field about 50 yards west of Kelso Road, 0.9 mile north of the intersection with Byron Road. However, during surveys of the Specific Plan II area conducted in 2004, no burrowing owls or evidence of burrowing owl use (i.e., pellets, white wash, feathers) were observed within Neighborhoods I and J. Nevertheless, because burrowing owls are known to move between sites where there are available burrows and good foraging opportunities, and because they have been observed in the project vicinity, they could move into the project area on a seasonal basis.

Tricolored Blackbird. The tricolored blackbird is a CDFG California Special Concern Species and is also protected during its nesting season by the federal Migratory Bird Treaty Act (MBTA). Tricolors are colonial nesters requiring very dense stands of emergent wetland vegetation and/or dense thickets of wild rose (*Rosa* sp.) or blackberries (*Rubus* sp.) adjacent to open water for nesting. No tricolored blackbirds were observed nesting, foraging or perching within Neighborhoods I and J (including the area along Old River) during the general habitat surveys conducted in November 2003 and early 2004 (Moore Biological Consultants, 2003b). However, tricolored blackbirds likely fly over or forage in the project area on occasion and there is suitable nesting and foraging habitat along the Old River corridor.

Black-Shouldered Kite. The black-shouldered kite is protected during its nesting season by the federal Migratory Bird Treaty Act. Black-shouldered kites forage in grasslands and agricultural fields and may nest in the project area, especially in trees associated with the Dry Creek and Old River corridors.

Western Pond Turtle. The western pond turtle is a CDFG California Special Concern Species. This turtle requires permanent or nearly permanent freshwater aquatic habitats with adequate basking sites such as logs or islands. Their nest sites may be found up to 0.5 mile from water. Old River provides suitable habitat for western pond turtle, and the turtle was observed in Old River adjacent to the project area by Baseline Environmental Consulting in 1994.

San Joaquin Kit Fox. The San Joaquin kit fox is a federally listed endangered and State-listed threatened species. The kit fox dens in subterranean burrows and forages primarily for small mammals and insects in annual grasslands, pasturelands, and cultivated fields, and along the edges of orchards. The majority of the project area is considered potential San Joaquin kit fox wandering and foraging habitat, although intensive agricultural operations, residential buildout on adjacent properties, and human activity have substantially reduced habitat suitability.

No San Joaquin kit fox or concrete evidence of kit fox (i.e., scat, tracks, photographs) has been observed in the project area. However, there are two recorded sightings within a couple of miles. In 1991, prints of a San Joaquin kit fox were observed on a track plate about 1.1 miles north-northwest of the Henderson and Bethany Road junctions. In 2000, several recent dens were observed on Bureau of Reclamation property approximately 0.45 mile northwest

of the intersection of Kelso Road and Mountain House Road, west of Neighborhood I.

Other Special-Status Bird Species. The project area contains patches of habitats that may be used by a number of non-listed birds that are either protected during their nesting seasons by the MBTA and/or Fish and Game Code of California. For example, northern harrier (*Circus cyaneus*) is widespread in the Central Valley and may nest on occasion in agricultural fields or the few patches of emergent marsh habitat associated with Dry Creek. Similarly, California horned lark (*Eremophila alpestris actica*) may forage in agricultural fields within the project area and could conceivably nest in on-site grasslands. Loggerhead shrike (*Lanius ludovicianus*) and snowy egret (*Egretta thula*) could nest in on-site trees. Species such as white-face ibis (*Plegadis chihii*) and Aleutian Canada goose (*Branta canadensis leucopareia*) may forage on-site, but the site is not within the breeding range of these species.

Sensitive Fish. There are two sensitive salmonids that may potentially migrate through Old River on their way to or from upstream spawning grounds on a seasonal basis: fall-run Chinook salmon (*Oncorhynchus tshawytscha*) and Central Valley steelhead (*O. mykiss*). While no suitable salmonid spawning habitat occurs along the section of Old River adjacent to the project area, fish likely pass through this waterway on occasion in the fall and spring. While fall-run Chinook salmon are known to occur in Old River, federally listed winter-run Chinook salmon only use Central Valley drainages located farther to the north. Both fall-run Chinook salmon and steelhead use areas farther upstream in the San Joaquin River system that are suitable for spawning and rearing.

In addition to salmonids, both the federally listed threatened Delta smelt (*Hypomesus transpacificus*) and now de-listed Sacramento splittail were identified in the 1994 MEIR as potentially occurring in Old River on a seasonal basis. The Master Plan includes a requirement for future surveys for these species (as well as salmonids) in Old River, using otter trawls prior to project development along Old River. However, due to elimination of the proposed marina on Old River that was part of original Mountain House proposal, the listing of Chinook salmon as a threatened species, and the associated need for a federal take permit to handle the species, these surveys have not been undertaken. Furthermore, since publication of the 1994 MEIR, the seasonal distribution of Delta smelt has been better documented and the likelihood of occurrence in Old River or nearby waterways is considered extremely low as this species rarely, if ever, migrates so far upstream from the Bay and lower Delta. Additionally, potential impacts on Delta smelt are routinely mitigated through construction scheduling pursuant to a programmatic agreement between USFWS and U.S. Army Corps of Engineers (USACOE), negating the need for project-specific surveys.

San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

Neighborhoods I and J are located within the Central/Southwest Transition Zone designated by the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJCMSHCP) (San Joaquin COG, 2001). The SJCMSHCP was adopted in 2001 and is intended to provide a strategy for conserving agricultural lands and wildlife habitat while accommodating a growing population and property rights of individual landowners. The SJCMSHCP has established an assessment process for conversion of land to non-open space uses when such conversion might affect the plant and animal species covered by the SJCMSHCP. The species of concern known to or potentially occurring in the project area and covered by the SJCMSHCP include but are not limited to San Joaquin kit fox, Swainson's hawk, western pond turtle, and burrowing owl. Sensitive species that have even a remote potential for occurrence in the Specific Plan II area, such as California tiger salamander and California red-legged frog, are addressed under the SJCMSHCP.

The ultimate goal of the SJCMSHCP is to provide 100,841 acres of habitat preserves over the projected 50-year lifetime of the SJCMSHCP. Most of the land for these preserves would be designated as conservation easements over existing agricultural lands in the areas covered by the SJCMSHCP. All of the Specific Plan II lands within the boundaries of the Mountain House community are within the area covered by the SJCMSHCP and would be subject to the adopted fee. Participation in the SJCMSHCP includes payment of a fee for each acre of land converted to urban use and compliance with incidental Take Minimization Measures defined in Section 5.2 of the SJCMSHCP. The Incidental Take Minimization Measures pertinent to Neighborhoods I and J include pre-construction surveys for covered species, as well as measures to prevent and control ground squirrel occupation of the area early in the planning process.

Waters of the U.S. and Wetlands

A number of wetland delineations have been conducted that have documented the types, locations, and areal extent of waters of the U.S. and wetlands within the Mountain House Master Plan area. The history of wetlands determination and mapping within Mountain House, as documented in the 1994 MEIR, began in 1990. The most recent wetland delineation in the Mountain House area was undertaken by Gibson & Skordal (2002) and subsequently verified by the USACOE in January 2003. Delineated waters of the U.S. within Neighborhoods I and J, according to this delineation, include Dry Creek (1.48 acres) and the wetlands within and along Dry Creek (7.18 acres) (see Figure 5.4-1). The jurisdictional determination issued by the USACOE that included Neighborhoods I and J remains valid until January 30, 2008.

The Dry Creek corridor was originally planned for habitat restoration that would have increased wetland acreage and associated wetland functions and values through the portions of the drainage that passes through the overall Mountain House project area (Zentner & Zentner, 1993; Gibson & Skordal, 2002, 2004a,

2004b). An application to the USACOE was made for the proposed Dry Creek Restoration Project in June 2005. In response to that application, the USACOE and the U.S. Environmental Protection Agency commented that the creek restoration project could not be supported because total avoidance of the jurisdictional area was a less environmentally damaging alternative in their view.

In order to accommodate the desires of these resource agencies, the currently proposed plan avoids any disturbances or discharges to the Dry Creek jurisdictional area and now uses the golf course and detention basin area as the exclusive areas for storm water treatment. Under the current proposal, in the downstream reaches of the Dry Creek jurisdictional area, slopes would be created outside of the jurisdictional area in conjunction with raising the elevations of the adjacent residential areas. All storm water discharges from the developed areas would now bypass the Dry Creek jurisdictional area, which would only accept flows from its historic undeveloped drainage basin (i.e. primarily in Alameda County) to the west.

Significant Impacts Identified in 1994 MEIR

The following biological resource impacts were identified as potentially significant in the 1994 MEIR:

- 1) Project implementation would result in the elimination of over 4,000 acres of agricultural land and associated wildlife habitat on the site.
- 2) Project implementation would result in the elimination of suitable on-site foraging and dispersal habitat for San Joaquin kit fox.
- 3) Project implementation would result in the elimination of all existing and potential on-site foraging habitat for Swainson's hawk.
- 4) In addition to San Joaquin kit fox and Swainson's hawk, proposed development would affect a number of other special-status taxa.
- 5) The project would block the movement of most terrestrial species between the eastern base of the Altamont Hills and the Delta farmland region to the east.
- 6) Development of the project site would eliminate seasonal wetlands and temporarily flooded areas such as irrigated pasture and drainage swales.
- 7) Construction and operation of the proposed 60-acre marina would affect the productive inshore zone and riparian edge of Old River (no longer relevant since the marina has been removed from Specific Plan II).
- 8) Off-site improvements, such as the raw water conveyance pipeline and pumping facilities, wastewater storage ponds, and application of wastewater irrigation, would adversely affect sensitive biological resources.

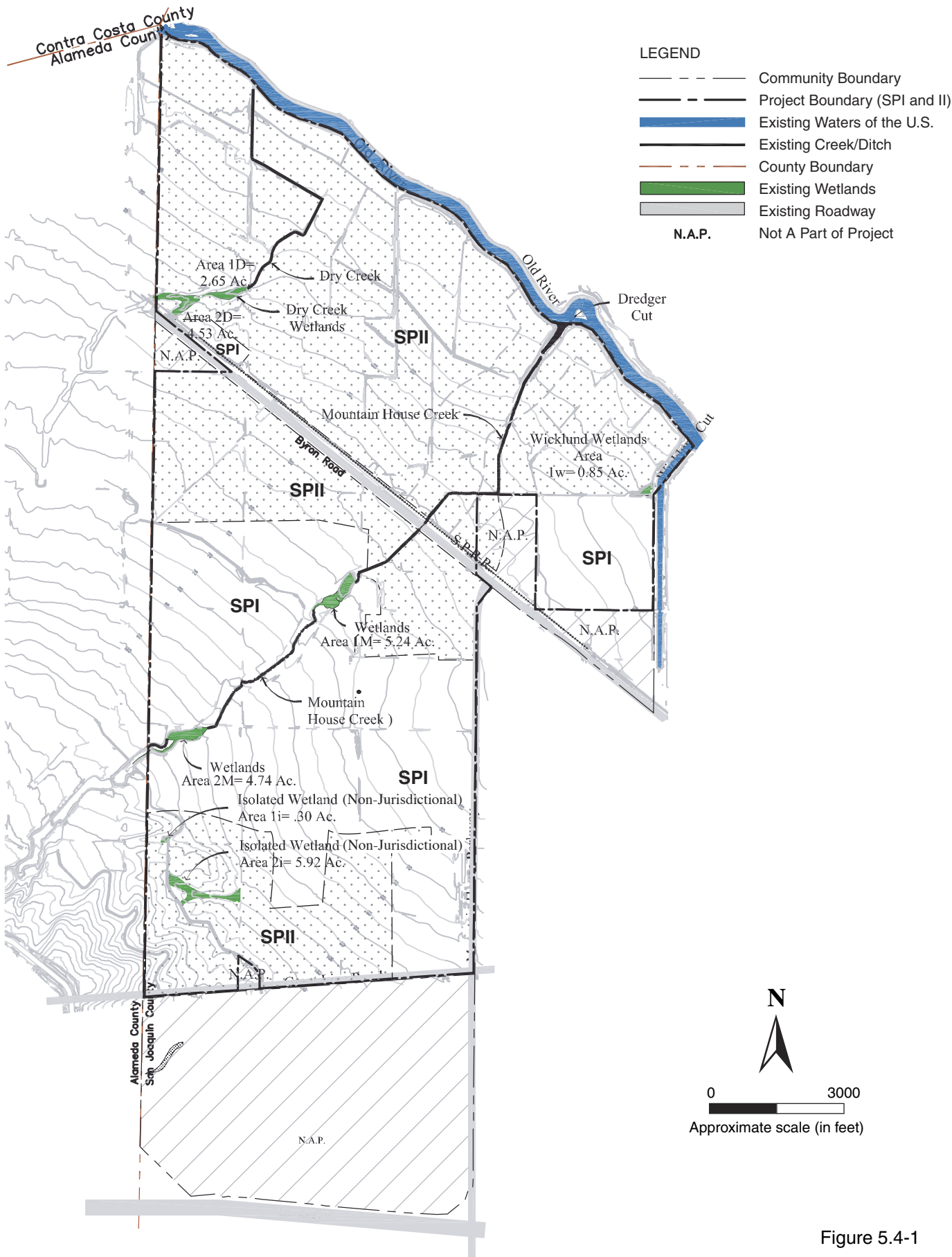


Figure 5.4-1

ON-SITE WETLANDS MAP

SOURCE: Gibson & Skordal, 08/31/04

Findings Related to Significant Impacts Identified in 1994 MEIR

The following discussion addresses the status of mitigation measures recommended in the 1994 MEIR for biological resources impacts that apply to construction of Neighborhoods I and J.

Mitigation Measure M4.11-1: The 1994 MEIR found that full mitigation that would offset project impacts of overall loss of farmland and open space was unachievable. While specific measures recommended to mitigate potential adverse impacts on San Joaquin kit fox, Swainson's hawk, other special-status species, the Mountain House Creek corridor, wetlands, and habitats associated with Old River would serve to partially mitigate the loss of existing wildlife habitat, the loss of over 4,000 acres of wildlife habitat was identified as a significant and unavoidable impact that could not be fully mitigated to a less-than-significant level.

Mitigation Measure M4.11-2: Mitigation for project impacts on San Joaquin kit fox consisted of a number of mitigation scenarios for off-site compensatory habitat mitigation and implementation of take avoidance measures during construction. The mitigation measures set forth in the 1994 MEIR were contingent upon further negotiation with regulatory and resource agencies, and increased compliance with the County General Plan, State and federal Endangered Species Acts, and State Fish and Game Code. The findings determined that there was the little support for the 1994 MEIR determination that implementation of the Master Plan would result in loss of San Joaquin kit fox habitat. Mitigation Measure M4.11-2 was modified to consist only of standard take avoidance measures during construction. These take avoidance measures were revised to be consistent with the USFWS *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS, 1997b).

Mitigation Measure M4.11-3: Mitigation for project impacts on Swainson's hawk consisted of a number of mitigation scenarios for on-site and/or off-site compensatory habitat mitigation and implementation of take avoidance measures during construction. The mitigation measures set forth in the 1994 MEIR were contingent upon further negotiation with regulatory and resource agencies, and increased compliance with the County General Plan, State Fish and Game Code, and CDFG's draft mitigation guidelines for Swainson's hawk in the Central Valley (CDFG, 1994). The findings determined that adoption of the Mountain House Multi-Purpose Habitat Management Plan (HMP) with revisions proposed in this mitigation would reduce impacts on Swainson's hawks to less-than-significant levels. While the Mountain House Multi-Purpose HMP was not adopted, the County has adopted the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJCMSHCP) that will accomplish the desired mitigation objectives.

Mitigation Measure M4.11-4: Mitigation to protect any special-status species that may occur along the Old River corridor in the 1994 MEIR consisted of future surveys and preparation of habitat protection plans. This mitigation measure called for a focused survey for California hibiscus along the banks of Old River. This mitigation measure also called for trawling surveys in Old River to confirm presence or absence of Delta smelt, winter-run Chinook salmon, and Sacramento splittail. This mitigation measure further called for preparation of a habitat protection plan for special-status species that may occur along the Old River corridor prior to approval of a Specific Plan in this area.

Focused surveys for California hibiscus were conducted in 2003 as part of the environmental review for Specific Plan II. No California hibiscus was observed along the banks of Old River during these surveys. Trawling surveys in Old River were not done for Specific Plan II due to elimination of the proposed marina on Old River, the listing of Chinook salmon as a threatened species, and the associated need for a federal take permit to handle the species. Furthermore, since publication of the 1994 MEIR, the seasonal distribution of Delta smelt has been better documented and the likelihood of occurrence in Old River or nearby waterways is considered extremely low as this species rarely, if ever, migrates so far upstream from the Bay and lower Delta. Additionally, potential impacts on Delta smelt are routinely mitigated through construction scheduling pursuant to a programmatic agreement between USFWS and U.S. Army Corps of Engineers (USACOE), negating the need for project-specific surveys. Specific Plan II was approved in February, 2005.

Mitigation Measure M4.11-6: Mitigation for potential project impacts on wetlands called for a revision of the Draft Master Plan provisions regarding wetlands management to ensure adequate setbacks from wetlands and coordination with jurisdictional agencies. The findings determined that the requirement for increased setbacks should not be adopted due to inappropriate habitat value assumptions. The Master Plan addresses wetlands under Policies 7.2.8 (a - j), 7.2.9 (h), and 7.3.6 (a - g).

Mitigation Measure M4.11-7: Mitigation for potential impacts of the proposed marina on the Old River corridor called for future studies to determine if marina impacts could be mitigated to less-than-significant levels. This mitigation measure also reiterated the necessity of implementing Mitigation Measure M4.11-4 and posting boat speed limit signs (5 miles per hour) along the length of the Old River frontage. This mitigation is no longer relevant since the marina proposal has been eliminated.

Discussion Regarding Neighborhoods I and J

Construction of the residential areas, utilities, golf course, parks, and associated facilities in Neighborhoods I and J would result in potentially significant impacts on existing vegetation and wildlife habitats. Implementation of the 1994 MEIR mitigation measures listed above would reduce the majority of these potential impacts to less-than-significant levels. Further, the Neighborhood I and J project includes several implementation measures designed to reduce any outstanding impacts to less than significant levels. These implementation measures focus on reducing potential project impacts on existing habitats, sensitive species, jurisdictional waters of the U.S. (including wetlands), and trees. A discussion of each of the Initial Study checklist items, as it pertains to Neighborhoods I and J, is provided below.

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Potential Habitat Loss

Development of Neighborhoods I and J would result in the conversion of approximately 771 acres of land that is primarily in agricultural production. This impact was evaluated in the 1994 MEIR. Virtually all of the project area has been leveled at some time in the past to support flood irrigation of crops. Ongoing cultivation and maintenance of fence lines, roads, and canal banks have precluded tree and shrub growth; trees in the project area only occur along creek corridors, major roads, and in the vicinity of residences.

The project area is known to have provided habitat for sensitive wildlife species, including Swainson's hawks, burrowing owl, and other raptors such as black-shouldered kite and northern harrier. Although the San Joaquin kit fox has not been documented in this area in the recent past, the project area may be used on occasion by foraging kit fox. Sensitive aquatic species, including Delta smelt, fall-run Chinook salmon and western pond turtle, may occur in Old River but are not likely to be directly affected by the project, since the project provides for a regional park along Old River.

Master Plan and Specific Plan II Provisions

The Mountain House Master Plan calls for a combination of mitigation lands for impacts on wildlife and preservation of agricultural land. The Master Plan further indicates that reclaimed wastewater may be used on lands designated for habitat conservation. Off-site lands dedicated to habitat mitigation are intended to offset the loss of Swainson's hawk, black-shouldered kite, and northern harrier foraging habitat from development projects. The Master Plan calls in a general sense for preservation of a suite of sensitive plant and animal species that may occur in the area. Finally, the Master Plan identifies the need for future surveys of each

Specific Plan area focused on identifying sensitive species. Such surveys were completed for Specific Plan II, which includes Neighborhoods I and J, as discussed earlier in this section.

To offset the loss of general habitat and open space as well as obtain authorization for incidental take of listed species, one of the primary Specific Plan II implementation measures involves participation in the SJCM SHCP, including all required take avoidance and pre-construction measures. Alternately, if the SJCM SHCP terminates or is unable to serve the project, applicants within the Specific Plan II area would use the HMP (see discussion under "Mitigation Measure M4.11-3" above) that would require adoption. A second general Specific Plan II implementation measure requires compliance with state and federal Endangered Species Acts and assures that the applicant will take sole responsibility for such compliance. A third general Specific Plan II implementation measure directs preservation of the existing Old River levee and associated habitats for both common and sensitive plant and wildlife species.

Detailed mitigation measures addressing the potential impacts of development on special-status species were incorporated into the Master Plan during the 1994 CEQA review process. No new significant impacts on biological resources have been identified related to development of Neighborhoods I and J that were not addressed during the 1994 CEQA review process or the Specific Plan II CEQA review process. The policies outlined in Sections 7.3.1, 7.3.2, and 7.3.4 of Specific Plan II would ensure that no significant impacts would occur.

- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Riparian habitats within the project area include Dry Creek and Old River. No project activities are proposed within these habitats. The entire Dry Creek corridor through the project area would be avoided and no restoration activities are proposed along the creek. A minimum 50-foot buffer from the channel would be maintained. Therefore, the project would not result in substantial adverse impacts on riparian habitat.

There are no other sensitive natural communities identified in local or regional plans, policies, or regulations, or by the CDFG or USFWS, within the project area. The project would not result in substantial adverse impacts on sensitive natural communities.

- c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Federally protected wetlands, as defined by Section 404 of the Clean Water Act, within the project area include Dry Creek and its associated wetlands, and Old River. The Master Plan requires maximum practicable preservation of jurisdictional waters of the U.S. and wetlands and mitigation for unavoidable impacts. The Master Plan also identifies the need for buffers around preserved and enhanced wetlands, while still allowing passive recreation within the buffered areas. Further, urban (i.e. storm water) runoff must be treated prior to discharge into the jurisdictional areas contained within Dry Creek.² The Master Plan requires preparation of a Wetlands Management Plan for every Specific Plan area that contains wetlands.

The project would not have a substantial adverse effect on wetlands as it would avoid direct removal, filling, or hydrological interruption of the Dry Creek corridor and the levee bank of Old River. A minimum 50-foot buffer would be maintained around the Dry Creek corridor and its associated wetland areas. The proposed plan avoids any disturbances or discharges to the Dry Creek jurisdictional area and now uses the golf course and detention basin area as the exclusive areas for storm water treatment. Under the current proposal, in the downstream reaches of the Dry Creek jurisdictional area, slopes would be created outside of the jurisdictional area in conjunction with raising the elevations of the adjacent residential areas. All storm water discharges from the developed areas would now bypass the Dry Creek jurisdictional area, which would only accept flows from its historic undeveloped drainage basin (i.e. primarily rural lands in Alameda County). The built-up slopes adjacent to the jurisdictional area would be landscaped and would contain a trail in certain locations.

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Construction of Neighborhoods I and J would result in the conversion of open cropland to urban uses, and increased outdoor lighting along or near the Dry Creek corridor could result in a reduction in the habitat suitability of the riparian corridor. The loss of habitat and increased human activities could generate potentially significant impacts on species that occasionally move through the project area. The 1994 MEIR Mitigation Measure M4.11-5, which was subsequently incorporated into the Master Plan, would serve to mitigate the potential impact to a less-than-significant level.

Due to intensive agriculture, movement of native resident or migratory fish or wildlife species through the project area is limited. Lack of cover and the presence of structures, including fences, canals, and roads, currently limit movement of wildlife species, and no established native resident or migratory wildlife corridors are known to exist within the project area. However, conversion

² This Master Plan requirement no longer applies because no storm water runoff is proposed for discharge to Dry Creek.

of open cropland to urban uses would contribute to a cumulative loss of habitat and limit the future movement of any species that occasionally move through the open fields. This cumulative loss of habitat was addressed in the 1994 MEIR and would be mitigated through participation in the SJCMShCP.

The Old River and Dry Creek corridors provide opportunities for wildlife movement, as these corridors contain variable topography, trees, shrubs, and a source of water conducive to movement of species. No direct riparian corridor impacts are anticipated for the project. However, increased outdoor lighting along or near these corridors could result in a reduction in their habitat suitability. Outdoor lighting throughout the neighborhoods may further reduce the movement of any species that opt to move through the urban areas. The potential impact of increased lighting throughout the project area on wildlife movement is considered a minor yet potentially significant impact. However, implementation of adopted Master Plan policies addresses this issue and would mitigate the impact to a less-than significant level.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The Master Plan requires maximum practicable preservation of healthy trees. The project area contains only a few notable patches of trees; all of these trees are along creek corridors or roads or are associated with older residences. The blue gum trees along Kelso Road would be removed. There are also a number of trees in a patchy distribution along the Dry Creek corridor but these would not be removed. None of the trees along Old River would be removed. The trees to be removed are not considered "heritage oaks" or "historical" trees in San Joaquin County. Therefore, the project would not conflict with any policy or ordinance protecting biological resources.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?*

Construction of Neighborhoods I and J would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. The project area is located within lands covered by the SJCMShCP, which was approved and adopted by San Joaquin County. The project applicant has complied with the SJCMShCP Incidental Take Minimization Measures for all areas of Neighborhoods I and J to be disturbed, and thus is in compliance with the applicable Habitat Conservation Plan and the 1994 MEIR. In the event that the SJCMShCP terminates, the applicants within the project area would be required to comply with the Habitat Management Plan (HMP) but this HMP would need to be adopted formally. Use of the HMP would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan.

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