

23. APPENDICES

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APPENDIX 23.1
NOTICE OF PREPARATION

Notice of Preparation

Form B

To: _____

Subject: Notice of Preparation of a Draft Environmental Impact Report

Lead Agency:

Agency Name Solano County

Street Address 675 Texas St., #5500

City/State/Zip Fairfield, CA 94533

Contact Matt Walsh / Michael Yankovich

Consulting Firm (if applicable):

Firm Name Wagstaff and Associates

Street Address 2512 Ninth St., Ste. 5

City/State/Zip Berkeley, CA 94710

Contact John Wagstaff

Solano County will be the Lead Agency and will prepare an Environmental Impact Report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study is attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but **not later than 30 days** after receipt of this notice.

Please send your response to Matt Walsh or Michael Yankovich at the address shown above. We will need the name for a contact person in your **agency**.

Project Title: Middle Green Valley Specific Plan & EIR

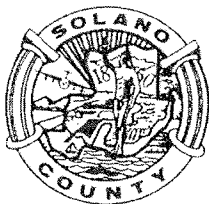
Project Location: Fairfield Solano
City (nearest) County

Project Description: -- See Attached --

Date June 6, 2009

Signature Matt Walsh
Title Principal Planner

Phone 707-784-6765



Department of Resource Management
675 Texas Street, Suite 5500
Fairfield, California 94533
www.solanocounty.com

**NOTICE OF PREPARATION
TO PREPARE AN ENVIRONMENTAL IMPACT REPORT
AND
NOTICE OF SCOPING MEETING**

Date: June 4, 2009

To: Responsible Agencies, Agencies with Jurisdiction by Law, Trustee Agencies, Involved Federal Agencies, and Agencies/People Requesting Notice

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Proposed Middle Green Valley Specific Plan¹

From: Solano County Department of Resource Management

Street Address: 675 Texas Street, Suite 5500

City/State/Zip: Fairfield, California 94533

Contact: Michael Yankovich, Planning Manager
Telephone: (707) 784-6765

The County of Solano will be the Lead Agency and will prepare a Draft Environmental Impact Report (DEIR) for the proposed project identified below. We are interested in the views of your agency as to the appropriate scope and content of the DEIR's environmental information pertaining to your agency's statutory responsibilities in connection with the proposed project.

The proposed project, its location, and its potential environmental effects are described below.

Due to the time limits mandated by state law, your response must be sent at the earliest possible date but **not later than 30 days** after receipt of this notice.

Please send your response to the Solano County Department of Resource Management, Attention: Michael Yankovich, Planning Manager, 675 Texas Street, Suite 5500, Fairfield, CA 94533. Please provide a contact name for your agency with your comments.

Project Title: Middle Green Valley Specific Plan

Project Proponent: County of Solano

Project Location: See Figures 1 and 2. The proposed Middle Green Valley Specific Plan area is located on Green Valley Road, in unincorporated Green Valley, near the western boundary of Solano County; north of I-80, Jameson Canyon, and the Hidden Meadows subdivision (City of Fairfield); south of existing unincorporated subdivisions and the Green Valley Country Club in upper Green Valley; west of Suisun Valley and the Rockville Hills; and northwest of the East Ridge subdivision (City of Fairfield).

¹References: California Code of Regulations, Title 14 (CEQA Guidelines), Sections 15103 and 15375.

Project Description: The County of Solano is proposing to prepare and adopt a Middle Green Valley Specific Plan for the approximately 1,911-acre Middle Green Valley planning area shown on Figure 2.

Solano County General Plan Goals and Objectives for Middle Green Valley

The Middle Green Valley planning area is identified in the 2008 Solano County General Plan as a Special Study Area. As part of the General Plan update process, a community participation program was conducted for this Special Study Area. The ultimate goal established for the area through this process was to maintain the rural character of Middle Green Valley while allowing some opportunities for compatible residential development. Land use tools such as clustering and transfer of development rights were proposed to limit the effects of residential development on the rural character of the valley, including the valley's viewsheds, wildlife habitat, wildlife movement corridors, and agricultural activities. General Plan-identified Implementation Program SS.I-1 calls for adoption of a plan (either a specific plan or master plan) for Middle Green Valley that would implement these goals and suggestions and specify, among other things:

- techniques, including design guidelines and development standards, to ensure that future development is compatible with the rural character of Middle Green Valley and surrounding areas;
- guidelines for residential development, including minimum and maximum lot sizes, development standards, and density bonus credits for clustered residential development;
- the details of a transfer of development rights program (and implementing ordinance), including the designation of areas where development is preferred and credits to property owners who voluntarily forgo development;
- the number of units and/or credits, with or without clustering, "that will provide incentives for all landowners in the area to participate in a market driven transfer of development rights program, based on 400 units, subject to further study;"
- the location and dimensions of a wildlife corridor ("green corridor");
- the maximum number of units any property owner can develop, with or without clustering;
- the techniques to be applied voluntarily by property owners to ensure permanent protection and maintenance of resources on lands to remain undeveloped; and
- the details of how the development would be served with water and wastewater service.

Proposed Middle Green Valley Specific Plan

Pursuant to these adopted 2008 Solano County General Plan objectives, the County proposes to complete and adopt a Middle Green Valley Specific Plan. The proposed Specific Plan would establish a land use and circulation layout, associated land use tools such as development clustering, a Transfer of Development Rights (TDR)/conservation easement program, and a land conservation trust, which are intended to limit the effects of development on the rural/agricultural character of the valley.

Proposed Land Use Layout and Development Capacity. Table 1 summarizes the proposed Specific Plan land use breakdown. Figure 3 illustrates the proposed Specific Plan land use layout.

As shown on Figure 3, the Specific Plan proposes three development areas or "neighborhoods" west of Green Valley Road. It is intended that the three development areas would be visually screened from Green Valley Road by natural topography and natural vegetation (existing riparian vegetation and oak woodland). Each neighborhood would contain a range of housing types, along with a neighborhood green and potential neighborhood-serving commercial uses. As summarized in Table 1, development within the three neighborhoods would be maintained within the following limits:

- up to 400 new residential lots totaling approximately 83 acres, including up to 390 cluster lots (zero lot line, quarter acre, half acre, and meadow lots) and 10 larger "compound lots" where up to 15,000 square feet of building space would be permissible on each lot to allow for one primary residential structure and associated agricultural or other secondary and ancillary structures;
- up to approximately 60,000 square feet of "agricultural tourism" related commercial floor space, including up to approximately 50,000 square feet of "agricultural commodity processing and commercial nurseries" (e.g., wineries, olive oil production, etc., using locally-produced commodities), and up to approximately 10,000 square feet of "agricultural tourism retail" (for retail sale of locally produced agricultural products such as wine, olive oil, flowers, produce, etc., and complementary food, books, craft/artisan wares, and other items) plus an inn (commercial lodging) of up to 25 rooms;
- a limited group (up to 6 acres) of complementary "public/community" uses, possibly including a chapel (up to 60 seats), meeting hall/farm stand (up to 3,000 square feet), community recreation center (up to 8,000 square feet), and small land conservancy/post office (up to 2,500 square feet); and
- potential neighborhood commercial areas, where a total of up to 10,000 square feet of retail floor space would be permitted to serve the convenience needs of the community.

The remaining area of approximately 1,606 acres (approximately 84 percent of the Specific Plan area) would be designated in perpetuity as "open lands" including approximately 1,156 acres of "natural and passive" land and approximately 450 acres of "active" land. The "natural and passive" open land designation would include riparian corridors, steep slopes, oak woodland, grazing lands, flood zones, trails and fire roads. The "active" open land designation would include cultivated row crops, vineyards, orchards, kitchen/community gardens and park/playground/ ballfield uses.

Proposed Circulation System. Figure 4 shows the proposed Specific Plan circulation system. The proposed Specific Plan designates three "Rural Collector" roads (Green Valley Road, Mason Road, and a third proposed road extending from Green Valley Road to the southerly neighborhood. Additional "Neighborhood Roads," "Alleys/Driveways," and "Secondary Access/Emergency Vehicle Access" roads would extend from the rural collectors. In addition, pedestrian trails would connect the three neighborhoods and extend along Mason Road and Green Valley Road.

Table 1
CONCEPTUAL SPECIFIC PLAN LAND USE BREAKDOWN

<u>Land Use Type</u>	<u>Units</u>	<u>Acres</u>
<i>Existing Residential</i>		
Existing Parcels	55	145
<i>Acreage Subtotal</i>	55	145
<i>New Residential</i>		
Zero Lot Line	40	
1/4 Acre Lot	200	
1/2 Acre Lot	85	
Meadow Lot	65	
Compound Lot	10	
<i>Acreage Subtotal</i>	400	83
<i>Agriculture Tourism</i>		
Locally Produced Commodity Processing, Commercial Nurseries	50,000 sf	
Ag. Tourism Retail	10,000 sf	
Inn	25 rooms	
<i>Acreage Subtotal</i>		10
<i>Public/Community Use</i>		
Chapel	60 seats	
Meeting Hall/Farm Stand	3,000 sf	
Community Recreation Center	8,000 sf	
Conservancy/Post Office	2,500 sf	
<i>Acreage Subtotal</i>		6
<i>Neighborhood Commercial</i>		
Neighborhood Commercial	10,000 sf	
<i>Acreage Subtotal</i>		1
<i>Roads</i>		
Existing Green Valley and Mason Road		13
Proposed Roads		47
<i>Acreage Subtotal</i>		60
<i>Open Lands</i>		
Natural and Passive		1,156
Active		450
<i>Acreage Subtotal</i>		1,606
TOTAL ACREAGE		1,911

SOURCE: Hart Howerton

Legend: sf = square feet of floor area

Proposed Water and Wastewater Provisions. Two water and wastewater system alternatives are proposed for the Specific Plan area: *Alternative A* which would involve connection of the Specific Plan development areas ("neighborhoods") to City of Fairfield municipal water and sewer systems; and *Alternative B* which would involve use of a common "onsite" water and sewer system to serve the Specific Plan development areas ("neighborhoods"). The two alternative proposals are summarized below:

Alternative A:

Water supply system *Alternative A* would involve Specific Plan development area connection to the City of Fairfield municipal water system. The City's municipal water supply is contracted through the Solano County Water Agency (SCWA). The City operates two water treatment plants, the Waterman Plant and the North Bay Regional Plant. City water distribution infrastructure includes a 24-inch main in Green Valley Road where the Specific Plan development areas would connect. Agricultural irrigation water would continue to be supplied by the Solano Irrigation District (SID). SID water will also be available for domestic irrigation. The proposed water supply infrastructure system under *Alternative A* would include approximately 9 miles of onsite pipeline and 500,000 gallons of onsite storage.

Wastewater treatment system *Alternative A* would involve Specific Plan development area connection to the Fairfield-Suisun Sewer District (FSSD). The FSSD operates a wastewater treatment plant approximately four miles southeast of the Specific Planning area. The FSSD does not typically provide sewer service outside of the Fairfield and Suisun City city limits. The closest existing FSSD wastewater infrastructure to the Specific Plan area is a 12-inch main in Green Valley Road approximately one quarter mile south of the Specific Plan area boundary. Due to the capacity limitations of this existing sewer main, installation of a new parallel sewer main from the Specific Plan area to the Cordelia Pump Station, approximately 2 miles to the south, may be required. The Cordelia Pump Station and FSSD wastewater treatment plant may also require capacity upgrades to accommodate the Specific Plan. The proposed wastewater system infrastructure under *Alternative B* would include approximately 9 miles of onsite pipeline.

Water and wastewater treatment *Alternative A* would require potential voter approval, City of Fairfield, Solano County, and Solano County Local Agency Formation Commission (LAFCO) approvals.

Alternative B:

Water supply system *Alternative B* would utilize local groundwater for domestic supply in the Specific Plan development area. The Specific Plan area lies above the Suisun-Fairfield Valley Groundwater Basin. The Suisun-Fairfield Valley Groundwater Basin is one of the few groundwater basins in California not in overdraft, most likely due to the early development of the Solano Project for regional irrigation demands. A comprehensive hydrogeology study and test well program would be necessary to verify the potential adequacy of onsite wells. Groundwater use would be solely for domestic purposes. Solano County Irrigation District (SID) reclaimed water would continue to be used for agriculture and domestic irrigation purposes. Water treatment under *Alternative B* is predicted to consist of mixed media filtration and disinfection unless measured chemical constituents indicate otherwise. The proposed onsite groundwater system configuration (pending more study) consists of three groundwater wells at a sustained flow of 100 gpm each, approximately 4.5 miles of pipelines, and 500,000 gallons of storage in two tanks at elevation.

A Community Services District (CSD) would be necessary to maintain the system.

Solano County General Plan policy PF.I-15 states "Investigate the potential for innovative recycled water systems in Solano County, such as the use of graywater for domestic and agricultural purposes, and identify sources of funding for implementation of these systems."

Under wastewater treatment system *Alternative B*, wastewater from the Specific Plan development areas would be collected and treated "onsite" utilizing a local collection system similar to *Alternative A*, but utilizing an "onsite" Membrane Bioreactor (MBR) package wastewater treatment plant. The MBR tertiary treatment system would include an aeration tank, a membrane operating system and a disinfection unit. All tertiary treated water would be reused onsite for agricultural and domestic irrigation purposes in conjunction with Solano Irrigation District water. System sludge yields under *Alternative B*, which would be less than from more conventional system designs, would be available for compost and fertilizer use in Solano County and elsewhere. Associated onsite infrastructure would include approximately 5.7 miles of pipeline, two pump stations and the MBR tertiary treatment unit. A Community Services District would be necessary to maintain the system.

Proposed Agricultural/Open Space Protection. The Specific Plan proposes to retain approximately 1,606 acres (approximately 84 percent of the planning area) in perpetuity in agriculture and open space preserves. The proposed TDR/conservation easement program would give property owners the opportunity to place agricultural lands under a conservation easement in exchange for development rights, providing the main tool for preserving agricultural lands in the planning area.

The Specific Plan proposes the creation of the Green Valley Conservancy, a non-profit, tax-exempt, legally independent conservation trust that would oversee: (1) the preservation, monitoring, and management of natural resources; (2) the ongoing viability and sustainability of agricultural and grazing operations; (3) the promotion of educational, interpretive, and research opportunities; and (4) the establishment of a comprehensive community design review process. The TDR program conservation easements described above would be granted to the Green Valley Conservancy.

The Specific Plan would also include a Strategic Action Plan for Agriculture in Middle Green Valley that outlines an agricultural business strategy, suggested mix of farming types, sustainable agricultural practices, and marketing, management, and educational opportunities. The Green Valley Conservancy would use the Strategic Action Plan to guide agricultural operations and management of lands placed in conservation easements.

Required County Approvals

Implementation of the Specific Plan would require County approval of the proposed Specific Plan and an associated Zoning Map Amendment to incorporate the Specific Plan. Implementation of the Specific Plan would also ultimately require County approval of the proposed TDR/conservation easement program and implementing development agreement, and associated tentative and final subdivision maps. In addition, implementation of Specific Plan water and wastewater *Alternative A* would require potential voter approval, City of Fairfield, Solano County and Solano County Local Agency Formation Commission (LAFCO) approvals of water and sewer service area annexations. For water and wastewater

under *Alternative B*, formation of a Community Services District would require approval.

DEIR Scope:

The County has determined that the proposed Specific Plan will require preparation of a programmatic Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA). The following 17 environmental topics (listed alphabetically) will be evaluated in the program EIR:


- Aesthetics;
- Agricultural and Mineral Resources;
- Air Quality;
- Biological Resources;
- Climate Change;
- Cultural, Historic and Paleontological Resources;
- Energy;
- Geology and Soils;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Population and Housing;
- Public Health and Safety (including hazards and hazardous materials);
- Public Services and Utilities;
- Transportation and Circulation;
- Project Consistency with Adopted Local and Regional Plans; and
- Alternatives to the Proposed Project.

Notice of Scoping Meeting:

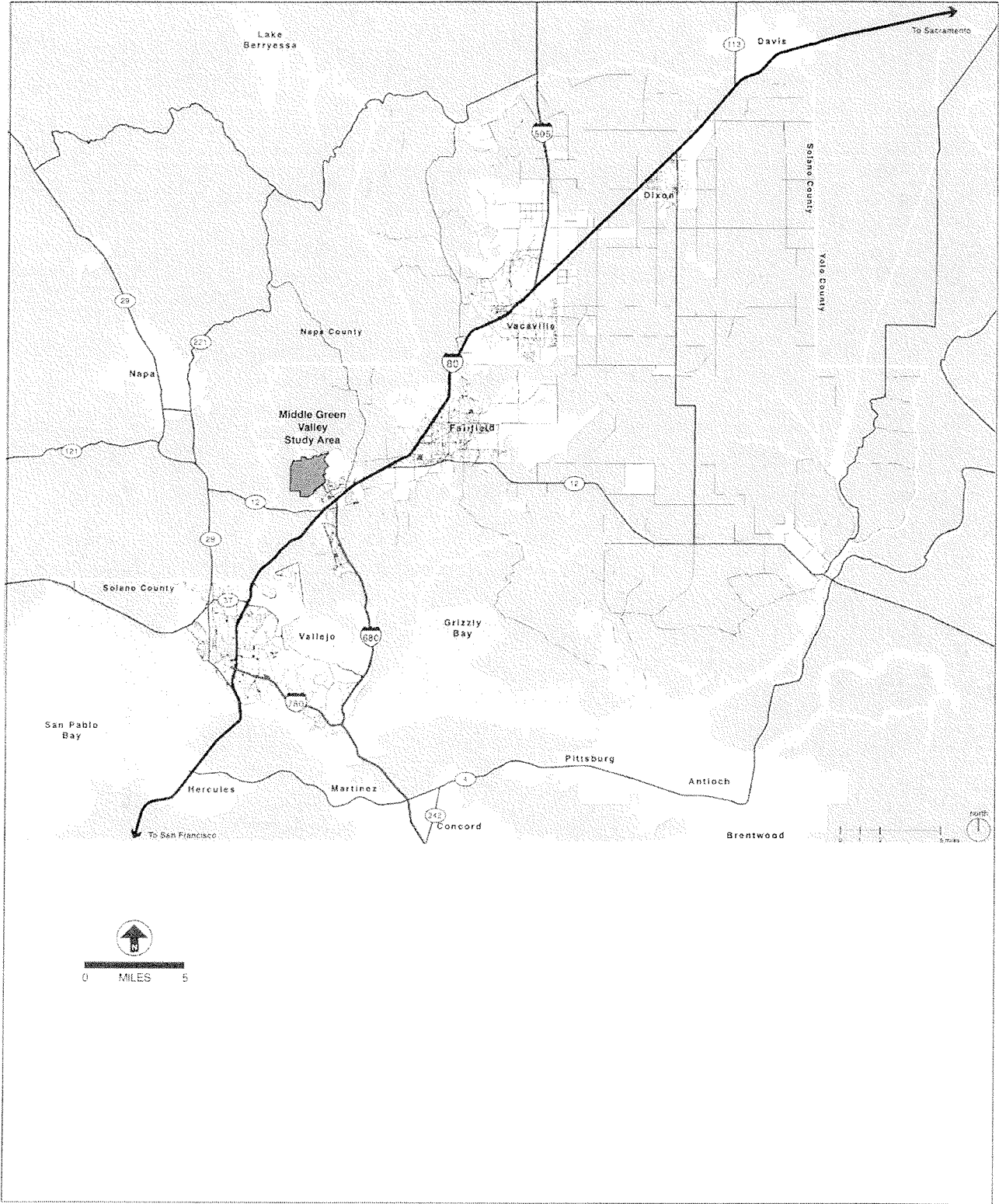
Pursuant to California Public Resources Code sections 21083.9 and 21092.2, the County will conduct a scoping meeting for the same purpose of soliciting oral and written comments from interested parties requesting notice, responsible agencies, agencies with jurisdiction by law, trustee agencies, involved federal agencies, and agencies and people who have requested notice, as to the appropriate scope and content of the EIR. The scoping meeting will be held on June 23, 2009 from **7:00 PM to 9:00 PM** at the following location:

Solano County Administrative Building
Multi Purpose Meeting Room, #
675 Texas Street, First Floor
Fairfield, CA 94533

For additional information needs, please contact Michael Yankovich, Planning Manager; telephone: (707) 784-6765; FAX: (707) 784-4805.


Michael Yankovich, Planning Manager

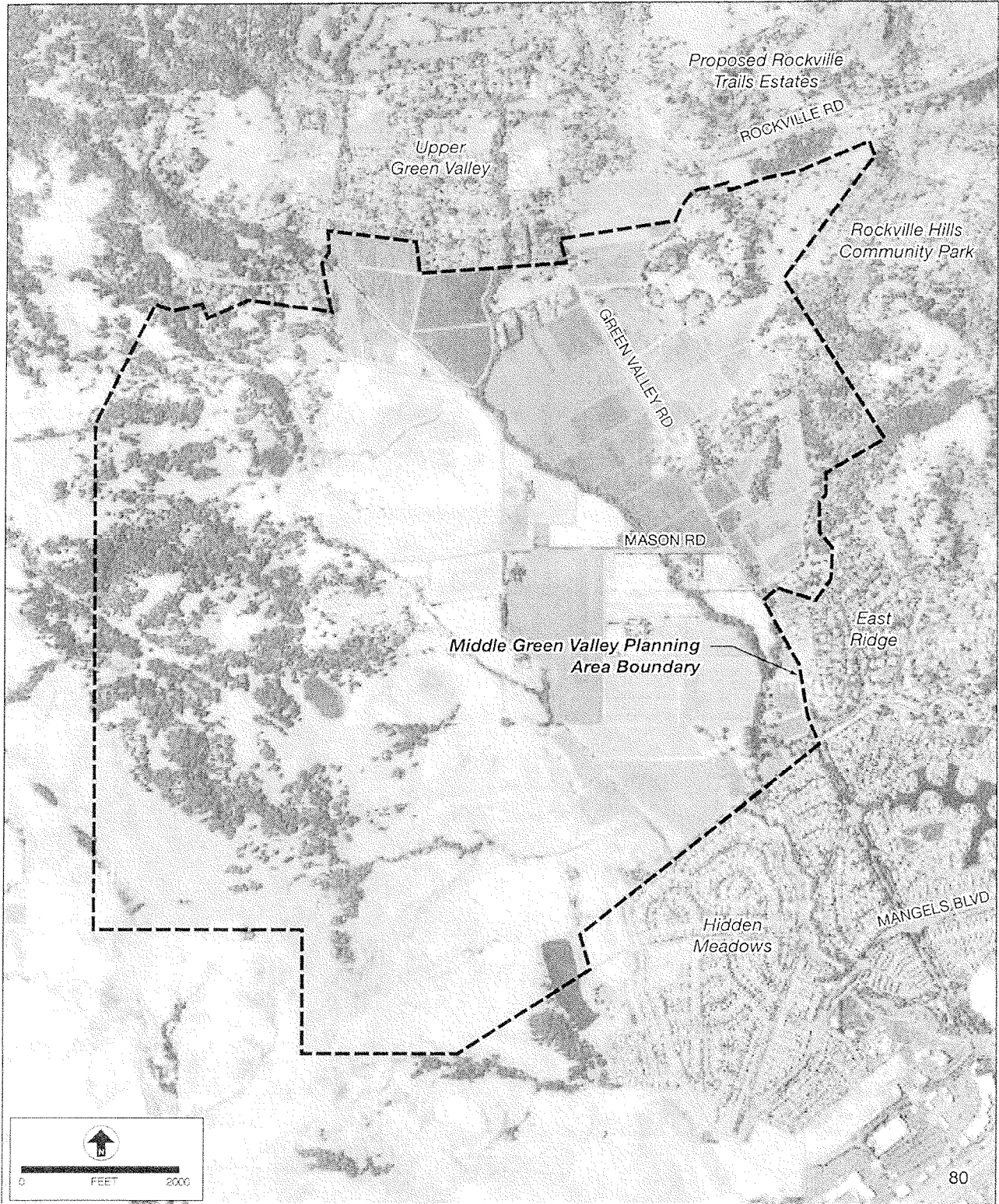
6.4.09
Date



SOURCE: Hart Howerton

Figure 1

PROJECT LOCATION



SOURCE: Hart Howerton

Figure 2

SPECIFIC PLAN AREA AERIAL PHOTOGRAPH

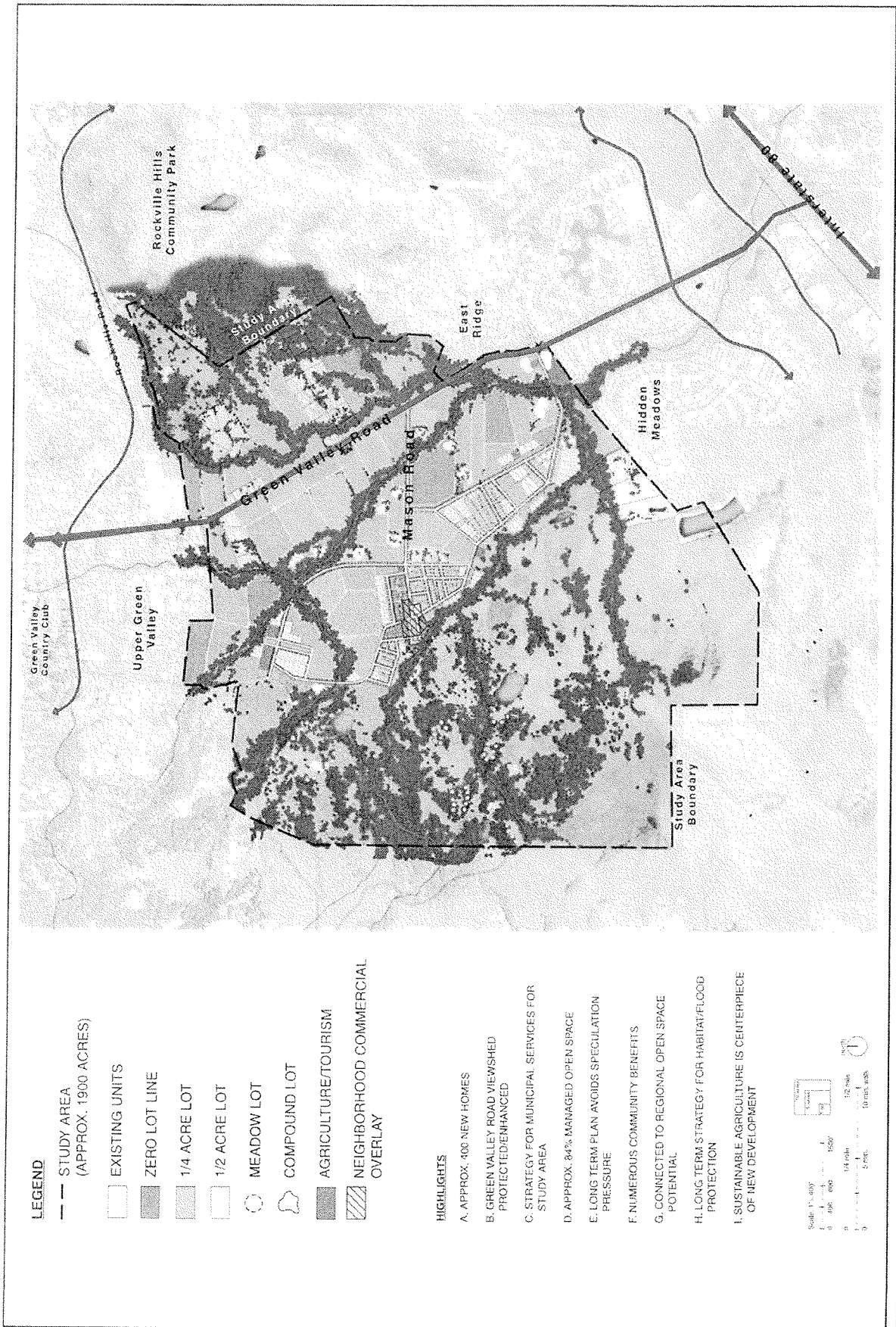


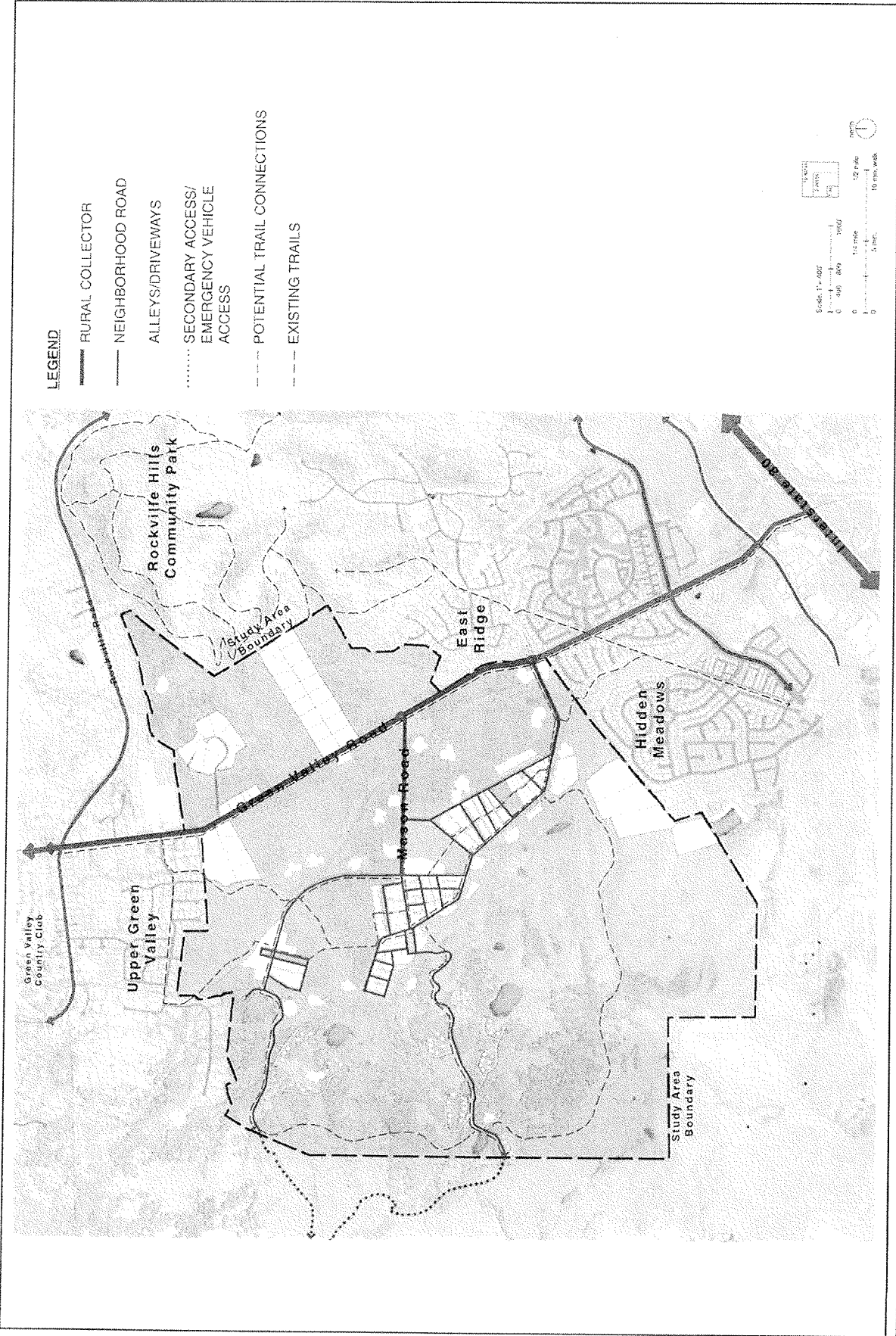
Figure 3

PROPOSED SPECIFIC PLAN LAND USE DIAGRAM

Middle Green Valley Specific Plan EIR

SOURCE: Hart Howerton

Wagstaff and Associates ■ Urban and Environmental Planners



SOURCE: Hart Howerton

Figure 4

PROPOSED SPECIFIC PLAN CIRCULATION DIAGRAM

APPENDIX 23.2: PROGRAM EIR AUTHORITY (CEQA SECTION 15168)

This EIR for the proposed Middle Green Valley Specific Plan has been prepared as a program EIR under authority of section 15168 (Program EIR) of the CEQA Guidelines. Section 15168 explains that a program EIR may be prepared on a series of actions that can be characterized as one large project and are related either: (1) geographically; (2) as logical parts in the chain of contemplated actions; (3) in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program; or (4) as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

The proposed Specific Plan, and the series of actions required for its implementation, are characterized by all four of these relationships. One, they are geographically related, because all of the project, including all of its implementing actions, would occur in the same Middle Green Valley Special Study Area (planning area) within western Solano County. Two, the various local, state, and federal governmental approvals, entitlements, and permits that may be required for implementation of the project are all logical parts in the chain of actions contemplated by the Specific Plan. Three, project development would be undertaken in connection with the issuance of rules, regulations, plans, and other general criteria set forth as part of the Specific Plan. Four, activities under the Specific Plan would be comprised of various individual actions carried out under the statutory authority of Solano County that would generally have similar environmental effects that could be mitigated in similar ways.

Use of a program EIR can provide the following advantages. The program EIR can: (1) provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action; (2) ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis; (3) avoid duplicative reconsideration of basic policy considerations; (4) allow the Lead Agency (the County) to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts; and (5) allow reduction in paperwork.

Subsequent development activities within the Middle Green Valley Specific Plan must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared. If the County determines that a later activity (e.g., individual development application, common improvement proposal, etc.) would have effects that were not examined in the program EIR, additional CEQA compliance documentation in the form of an EIR Addendum, Negative Declaration, Mitigated Negative Declaration, Supplemental EIR or Subsequent EIR would need to be prepared. If the County finds that pursuant to CEQA Guidelines section 15162 (Subsequent EIRs and Negative Declarations), no new effects could occur or no new mitigation measures would be required, the County can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required. Under CEQA Guidelines section 15168 (Program EIR), the County shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions under the program. Where the

subsequent activities involve site-specific development actions or operations, the County should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the activity were covered in the program EIR.

A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities can be found to be within the scope of the project described in the program EIR, and no further environmental document would be required.

A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program. The program EIR can: (1) provide the basis for determining whether the later activity may have any significant effects; (2) be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole; and (3) focus an EIR on a subsequent project to permit discussion solely of new effects which had not been considered before.

APPENDIX 23.3: SUPPLEMENTAL BIOLOGICAL RESOURCES INFORMATION

Scientific Name	Common Name
<i>Achillea millefolium</i>	Yarrow
<i>Achyraea mollis</i>	blow wives
<i>Aesculus californica</i>	Buckeye
<i>Acer macrophyllum</i>	big leaf maple
<i>Ailanthus altissima</i>	tree of heaven
<i>Alium amplexans</i>	narrowleaf onion
<i>Aloe saponaria</i>	Aloe
<i>Amsinckia menziesii</i>	common fiddleneck
<i>Anagallis arvensis</i>	scarlet pimpernel
<i>Avena fatua</i>	wild oats
<i>Arctostaphylos manzanita</i>	common manzanita
<i>Artemisia californica</i>	California sage
<i>Artemisia douglasiana</i>	California mugwort
<i>Baccharis pilularis</i>	coyote bush
<i>Baccharis salicifolia</i>	Mulefat
<i>Bellardia trixago</i>	Mediterranean linseed
<i>Brassica nigra</i>	black mustard
<i>Brassica rapa</i>	field mustard
<i>Briza minor</i>	little quaking grass
<i>Bromus diandrus</i>	ripgut brome
<i>Bromus hordeaceus</i>	soft chess
<i>Chamomilla suaveolens</i>	pineapple weed
<i>Castilleja densiflora</i>	dense flower owl's clover
<i>Castilleja exserta</i>	purple owl's clover
<i>Carduus pycnocephalus</i>	Italian thistle
<i>Centaurea solstitialis</i>	yellow star thistle
<i>Chlorogalum pomeridianum</i>	soap plant
<i>Cirsium vulgare</i>	bull thistle
<i>Claytonia perfoliata</i>	miner's lettuce
<i>Collinsia heterophylla</i>	Chinese houses
<i>Convolvulus arvensis</i>	Bindweed
<i>Conyza canadensis</i>	Horseweed
<i>Cortaderia selloana</i>	pampas grass
<i>Crypsis schoenoides</i>	swamp grass
<i>Cynara cardunculus</i>	artichoke thistle
<i>Cynosurus echinatus</i>	Dogtail
<i>Cyperus eragrostis</i>	tall flatsedge
<i>Dichelostemma capitatum</i>	blue dicks
<i>Eleocharis macrostachya</i>	common spikerush
<i>Elymus glaucus</i>	blue wildrye
<i>Erodium botrys</i>	broad leaf filaree

<i>Erodium cicutarium</i>	redstem filaree
<i>Eschscholzia californica</i>	California poppy
<i>Eucalyptus globulus</i>	blue gum eucalyptus
<i>Festuca idahoensis</i>	Idaho fescue
<i>Foeniculum vulgare</i>	Fennel
<i>Galium aparine</i>	Bedstraw
<i>Geranium dissectum</i>	cutleaf geranium
<i>Geranium molle</i>	dove foot geranium
<i>Gnaphalium luteoalbum</i>	everlasting cudweed
<i>Hedera helix</i>	English ivy
<i>Heteromeles arbutifolia</i>	Toyon
<i>Hordeum brachyantherum</i>	meadow barley
<i>Hordeum marinum</i>	Mediterranean barley
<i>Hordeum murinum</i>	foxtail barley
<i>Hordeum vulgare</i>	common barley
<i>Hypochaeris radicata</i>	rough cat's ear
<i>Iris douglasiana</i>	Douglas iris
<i>Iris sp.</i>	Iris
<i>Juglans hindsii</i>	black walnut
<i>Juncus effusus</i>	spreading rush
<i>Juncus patens</i>	grey rush
<i>Juncus xiphioides</i>	iris rush
<i>Lactuca serriola</i>	prickly wild lettuce
<i>Lathyrus sp.</i>	tule pea
<i>Layia crisanthemoides</i>	smooth tidy tips
<i>Leymus triticooides</i>	wild rye
<i>Limnanthes douglasii ssp.rosea</i>	Douglas' meadowfoam
<i>Lolium multiflorum</i>	Italian ryegrass
<i>Lotus corniculatus</i>	bird's foot trefoil
<i>Lupinus bicolor</i>	bicolored lupine
<i>Lupinus succulentus</i>	succulent lupine
<i>Mara fabaceus</i>	wild cucumber
<i>Marrubium vulgare</i>	Horehound
<i>Medicago polymorpha</i>	bur clover
<i>Mellilotus indica</i>	annual yellow sweet clover
<i>Mellilotus officinalis</i>	yellow sweet clover
<i>Mentha pulegium</i>	Pennyroyal
<i>Mimulus aurantiacus</i>	sticky monkeyflower
<i>Mimulus guttatus</i>	yellow monkeyflower
<i>Monardella sp.</i>	monardella (not blooming)
<i>Muilla maritima</i>	common muilla
<i>Nassella pulchra</i>	purple needlegrass
<i>Paspalum dilatatum</i>	dallis grass
<i>Phalaris aquatica</i>	barnyard grass
<i>Picris echioides</i>	bristly oxtongue
<i>Plagiobothrys bracteatus</i>	bracted popcorn flower
<i>Plantago erecta</i>	dwarf plantain
<i>Plantago lanceolata</i>	English plantain
<i>Poa annua</i>	annual bluegrass
<i>Poa secunda</i>	one-sided bluegrass
<i>Polygonum amphibium</i>	water knotweed
<i>Polygonum arenastrum</i>	common knotweed
<i>Polypogon monspeliensis</i>	rabbit foots grass

<i>Populus fremontii</i>	Cottonwood
<i>Potentilla anserina</i>	Silverweed
<i>Prunus dulcis</i>	sweet almond
<i>Prunus sp.</i>	horticultural plum
<i>Pteridium aquilinum var. pubescens</i>	bracken fern
<i>Pyrus comminis</i>	Bartlett pear
<i>Quercus agrifolia</i>	coast live oak
<i>Quercus douglasii</i>	blue oak
<i>Quercus kelloggii</i>	black oak
<i>Quercus lobata</i>	valley oak
<i>Ranunculus californicus</i>	Buttercup
<i>Ranunculus muricatus</i>	spiny buttercup
<i>Raphanus sativus</i>	wild radish
<i>Rosa californica</i>	California rose
<i>Rubus discolor</i>	Himalayan blackberry
<i>Rubus ursinus</i>	California blackberry
<i>Rumex acetosella</i>	sheep sorrel
<i>Rumex crispus</i>	curly dock
<i>Salix babylonica</i>	weeping willow
<i>Salix exigua</i>	sandbar willow
<i>Salix laevigata</i>	red willow
<i>Salix lasiolepis</i>	arroyo willow
<i>Sanicula bipinnata</i>	poison sanicle
<i>Scirpus californicus</i>	California bulrush
<i>Scrophularia californica</i>	bee plant
<i>Sequoia sempervirens</i>	coast redwood
<i>Sidalcea malvoflora</i>	check bloom
<i>Silybum marianum</i>	milk thistle
<i>Sisyrinchium bellum</i>	blue eyed grass
<i>Sonchus asper</i>	prickly sow thistle
<i>Stachys ajugoides</i>	hedge nettle
<i>Symphoricarpos albus</i>	Snowberry
<i>Taeniatherum caput-medusae</i>	Medusahead
<i>Toxicodendron diversilobum</i>	poison oak
<i>Tragopogon porrifolius</i>	purple salsify
<i>Trifolium dubium</i>	shamrock clover
<i>Trifolium fragiferum</i>	strawberry clover
<i>Trifolium hirtum</i>	rose clover
<i>Trifolium repens</i>	white clover
<i>Trifolium subterraneum</i>	subterranean clover
<i>Typha latifolia</i>	Cattail
<i>Umbellularia californica</i>	California bay
<i>Vicia sativa</i>	spring vetch
<i>Vinca major</i>	Periwinkle
<i>Viola pedunculata</i>	johnny jump up
<i>Vulpia microstachys</i>	small fescue
<i>Vulpia myuros</i>	foxtail fescue
<i>Vitis californica</i>	Grape
<i>Wyethia sp.</i>	mule ears
<i>Xanthium strumarium</i>	rough cocklebur

Table 23.3.2. Wildlife species observed within the Middle Green Valley Specific Plan Area, April 22 – 23, 2009.

Scientific name	Common name
MAMMALS	
<i>Odocoileus hemionus</i>	Mule (Black-tailed) Deer
<i>Spermophilus beecheyi</i>	California Ground Squirrel
<i>Sciurus griseus</i>	Western Gray Squirrel
<i>Peromyscus maniculatus</i>	Deer Mouse
<i>Lepus californicus</i>	Black-tailed Jackrabbit
BIRDS	
<i>Anas strepera</i>	Gadwall
<i>Anas americana</i>	American Wigeon
<i>Anas platyrhynchos</i>	Mallard
<i>Meleagris gallopavo</i>	Wild Turkey
<i>Callipepla californica</i>	California Quail
<i>Phalacrocorax auritus</i>	Double-crested Cormorant
<i>Ardea herodias</i>	Great Blue Heron
<i>Cathartes aura</i>	Turkey Vulture
<i>Buteo lineatus</i>	Red-shouldered Hawk
<i>Buteo jamaicensis</i>	Red-tailed Hawk
<i>Falco sparverius</i>	American Kestrel
<i>Gallinula chloropus</i>	Common Moorhen
<i>Fulica americana</i>	American Coot
<i>Columba livia</i>	Rock Pigeon
<i>Streptopelia decaocto</i>	Eurasian Collared-Dove
<i>Zenaida macroura</i>	Mourning Dove
<i>Calypte anna</i>	Anna's Hummingbird
<i>Ceryle alcyon</i>	Belted Kingfisher
<i>Melanerpes lewis</i>	Lewis's Woodpecker
<i>Melanerpes formicivorus</i>	Acorn Woodpecker
<i>Picoides nuttallii</i>	Nuttall's Woodpecker
<i>Picoides villosus</i>	Hairy Woodpecker
<i>Colaptes auratus</i>	Northern Flicker
<i>Empidonax oberholseri</i>	Dusky Flycatcher
<i>Myiarchus cinerascens</i>	Ash-throated Flycatcher
<i>Lanius ludovicianus</i>	Loggerhead Shrike
<i>Vireo huttoni</i>	Hutton's Vireo
<i>Cyanocitta stelleri</i>	Steller's Jay
<i>Aphelocoma californica</i>	Western Scrub-Jay
<i>Corvus corax</i>	Common Raven
<i>Eremophila alpestris</i>	Horned Lark
<i>Tachycineta bicolor</i>	Tree Swallow
<i>Tachycineta thalassina</i>	Violet-green Swallow
<i>Petrochelidon pyrrhonota</i>	Cliff Swallow
<i>Hirundo rustica</i>	Barn Swallow
<i>Baeolophus inornatus</i>	Oak Titmouse
<i>Psaltriparus minimus</i>	Bushtit
<i>Sitta carolinensis</i>	White-breasted Nuthatch
<i>Thryomanes bewickii</i>	Bewick's Wren
<i>Troglodytes aedon</i>	House Wren
<i>Sialia mexicana</i>	Western Bluebird

<i>Turdus migratorius</i>	American Robin
<i>Chamaea fasciata</i>	Wrentit
<i>Mimus polyglottos</i>	Northern Mockingbird
<i>Sturnus vulgaris</i>	European Starling
<i>Anthus rubescens</i>	American Pipit
<i>Vermivora celata</i>	Orange-crowned Warbler
<i>Piranga ludoviciana</i>	Western Tanager
<i>Pipilo maculatus</i>	Spotted Towhee
<i>Pipilo crissalis</i>	California Towhee
<i>Chondestes grammacus</i>	Lark Sparrow
<i>Ammodramus savannarum</i>	Grasshopper Sparrow
<i>Pheucticus melanocephalus</i>	Black-headed Grosbeak
<i>Agelaius phoeniceus</i>	Red-winged Blackbird
<i>Sturnella neglecta</i>	Western Meadowlark
<i>Euphagus cyanocephalus</i>	Brewer's Blackbird
<i>Molothrus ater</i>	Brown-headed Cowbird
<i>Icterus cucullatus</i>	Hooded Oriole
<i>Carpodacus mexicanus</i>	House Finch
<i>Carduelis psaltria</i>	Lesser Goldfinch
REPTILES AND AMPHIBIANS	
<i>Hyla regalis</i>	Pacific Treefrog
<i>Bufo borealis</i>	Western Toad
<i>Actinemys marmorata</i>	Western Pond Turtle
<i>Eumeces skiltonianus</i>	Western Skink
<i>Sceloporus occidentalis</i>	Western Fence Lizard
<i>Thamnophis sirtalis fitchi</i>	Common garter snake

Table 23.3.3
 SPECIAL-STATUS PLANT SPECIES WITH THE POTENTIAL TO OCCUR IN THE PLAN AREA

<u>Plant Species</u>	<u>Regulatory Status</u>	<u>Blooming Period</u>	<u>Potential Habitat in Plan Area</u>
Alkali milk-vetch (<i>Astragalus tener</i> var. <i>tener</i>)	CNPS List 1B	March - June	Low-lying areas surrounding wetlands, streams, and other aquatic features.
Big-scale balsamroot (<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>)	CNPS List 1B	March - June	Grazed grassland, woodland, shrub/scrub communities and uncultivated areas with shallow soils.
Big tarplant (<i>Blepharizonia plumosa</i>)	CNPS List 1B	July - October	Grassland communities in the plan area.
Narrow-anthered California brodiaea (<i>Brodiaea californica</i> var. <i>leptandra</i>)	CNPS List 1B	May to July	Thin soiled areas, in grassland, shrub/scrub, and oak woodland communities.
Mt. Diablo fairy lantern (<i>Calochortus pulchellus</i>)	CNPS List 1B	April to June	Oak woodlands, riparian forest, scrub, and grassland areas immediately surrounding these communities.
Tiburon Indian paintbrush (<i>Castilleja affinis</i> ssp. <i>neglecta</i>)	ST, FE, CNPS List 1B	April through June	Grassland communities (particularly areas with thin soils).
Holly-leaved ceanothus (<i>Ceanothus purpureus</i>)	CNPS List 1B	February to June	Oak woodland and shrub/scrub communities.
Pappose tarplant (<i>Centromadia parryi</i> ssp. <i>parryi</i>)	CNPS List 1B	May to November	Low-lying grasslands and ruderal areas, particularly those surrounding wetlands.
Western leatherwood (<i>Dirca occidentalis</i>)	CNPS List 1B	January to March ¹	Oak woodland and riparian communities.
Dwarf downingia (<i>Downingia pusilla</i>)	CNPS List 2	March and May	Edges of marsh and other aquatic habitats with a long duration of ponding.
Adobe lily (<i>Fritillaria pluriflora</i>)	CNPS List 1B	February to April	Grassland communities.
Diablo helianthella (<i>Helianthella castanea</i>)	CNPS List 1B	March to June	Grasslands, oak woodlands, and shrub/scrub containing suitable shallow soils and rock outcrops.
Brewer's western flax (<i>Hesperolinon breweri</i>)	CNPS List 1B	May to June	Oak woodlands and grassland communities.
Northern California black walnut (<i>Juglans hindsii</i>)	CNPS List 1B	April to May ¹	Species was observed along Hennessey Creek. Oak woodland and riparian communities.
Robust monardella (<i>Monardella villosa</i> ssp. <i>globosa</i>).	CNPS List 1B.2	June to July	Oak woodland and scrub communities.
Baker's navarretia (<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>).	CNPS List 1B.1	April to July	Oak woodland and wetland communities.
Rayless ragwort (<i>Senecio aphanactis</i>).	CNPS List 2	January through April	Oak woodland and scrub communities.
Showy Indian clover (<i>Trifolium amoenum</i>)	FE, CNPS List 1B	April to June	Grassland communities (particularly areas of heavy clay soils).
Saline clover (<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>)	CNPS List 1B	April to June	Margins of wetlands and stock ponds.

<u>Plant Species</u>	<u>Regulatory Status</u>	<u>Blooming Period</u>	<u>Potential Habitat in Plan Area</u>
Oval-leaved viburnum (<i>Viburnum ellipticum</i>)	CNPS List 2.3	May to June	Oak woodland and shrub/scrub communities.

SOURCE: WRA, Inc., 2009

¹Plant species is identifiable outside of blooming period.

- List 1B California Native Plant Society (CNPS) List 1B: Plants rare, threatened or endangered in California and elsewhere
- List 2 CNPS List 2: Plants rare, threatened, or endangered in California, but more common elsewhere
- FE Federal Endangered
- ST State Threatened

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APPENDIX 23.4
WATER SUPPLY ASSESSMENT

MEMORANDUM

September 18, 2009

TO: Community Development Department

FROM: Richard L. Wood, Assistant Public Works Director

SUBJ: Hypothetical SB 610 Water Supply Assessment and SB 221 Verification of Sufficient Water Supply – Middle Green Valley Development

The following is a hypothetical "SB 610/SB 211 analysis" should the City of Fairfield be the selected water supplier for a proposed Middle Green Valley development that uses 140 acre-feet of City water per year. This memorandum is not intended to express any opinion regarding the advisability of the development or the legal or policy decisions that would be necessary for the City to become the development's water supplier.

This memorandum documents the City of Fairfield's compliance with SB 610 (Chapter 643, Statutes of 2001, codified primarily in §10631 and §10910, et seq. of the California Water Code, relating to water supply planning) and SB 221 (Chapter 642, Statutes of 2001, codified in §11010 of the California Business and Professions Code and §§65867.5, 66455.3, and 66473.7 of the California Government Code, relating to land use) for the Middle Green Valley Development (proposed development).

Both SB 610 and SB 221 became effective January 1, 2002. The two statutes were written to ensure water demand in an area does not outstrip water supplies. Specifically, growth should not proceed without adequate water supplies available under some defined, reasonable "worst case" scenario. This position is also the long-standing policy of the City of Fairfield.

The City has historically taken a conservative view of its water supplies and demands, consistent with the letter and intent of SB 610 and SB 221. In fact, the City is perhaps even more conservative than SB 610 or SB 221 require, as discussed further below.

General Information

The City meets its water supply planning requirements by normalizing all water supplies to a common "90% reliable" figure—i.e., the supply that can be depended upon in at least 9 years out of 10, on average, sometimes also referred to as the "90% exceedence" standard—for meeting expected demands. For the 1 year out of 10 in which supplies may be inadequate to meet demand, the City has both demand reduction and temporary supply options.

SB 610 requires a 20-year water supply assessment for “normal,” “single dry year,” and “multiple dry year” scenarios, and this analysis is also included in the City’s Urban Water Management Plan (UWMP). Although there is some debate about the intent of specifying two different “worse than normal” scenarios, we believe the intent was for the multiple dry year scenario to be the worst case for planning purposes, and demand must not exceed that supply. The City’s 90% reliable scenario, used for this analysis, is slightly more conservative than the UWMP’s multiple dry year scenario.

SB 610 Analysis for Proposed Development

The City’s General Plan land use development projections serve as the basis for water demand projections in the City’s 2005 Urban Water Management Plan (UWMP), last revised and adopted in December 2006, hereby incorporated by reference, which contains information required by Water Code Section 10910. This memorandum provides all of the required supplemental information to include the proposed development in the water demands of the General Plan and the UWMP, including updated water supply and demand figures up to and including the proposed development.

The proposed development will create a 136 acre-foot per year demand on the City water supply that is not presently in the City’s General Plan or present water supply planning. This memorandum assesses and verifies the sufficiency of City water supplies to serve this change.

The City of Fairfield’s water supplies are the Solano Project, the State Water Project, Settlement Water, and recycled water, described in greater detail in the City’s UWMP and General Plan. Solano Project supplies come to the City through several different agreements. The City utilizes no groundwater supply. As required by SB 610, attached hereto as Table 1 is a summary of water supply reliability over the past 21 years, 1989 through 2009, for the Solano Project and State Water Project.

The attached Table 2 and 3 show the presently forecasted water supplies and demands for the City of Fairfield without the proposed development (Table 2) and with the proposed development (Table 3). (To ensure consideration of cumulative impacts, these tables include other forecasted developments that have gone through a water supply assessment such as this one prior to this analysis.)

Table 3 shows the City can serve all projected growth, through ultimate development (not just 20 years), including the proposed development. Consequently we conclude that the City has a sufficient water supply for the proposed development, and the requirements of SB 610 are met.¹

¹ SB 610 and SB 221 apply only to certain classes of large projects. The most applicable to the City of Fairfield are residential developments of more than 500 dwelling units. However, City policy is to provide water supply assurance for all developments served regardless of size.

SB 221 Analysis for Proposed Development

SB 221 requires, at the tentative map stage, a written verification of sufficient water supply. This memorandum provides substantial evidence that that requirement is or will be met for all projects to be served by the City through ultimate development, including the proposed development. This memorandum, as a supplement to the City's current UWMP, which includes development projections consistent with the General Plan absent the increased water supply required by subsequent proposed development included in this analysis, therefore provides the written verification of sufficient water supply for the proposed development.

SB 221 also requires imposition of a condition of approval on the tentative subdivision map for this project that sufficient water supply shall be available, and such a condition should be incorporated into any approval of this project. (Govt. Code Sec. 66473.7(b)(1)).

Changing Assumptions

The California Courts have decided an important case that we believe will have a major positive effect on City water supply projections. The case (consolidated State Water Resources Control Board Cases, C044714), commonly referred to now as "the Robie Decision" (after the 3rd District California Court of Appeal Judge Ronald B. Robie, who authored the decision) held that the state's watershed protection statutes apply to water supply contracts, not just to water supplies obtained directly by permit or license. In May 2006, the California Supreme Court refused to hear petitions for review, so the Robie Decision is final.

We believe the Robie Decision provides strong support for the contention that the state Department of Water Resources must recognize the City's watershed priority (per Water Code Section 11460 et seq.) to State Water Project water (for which the City holds a contract via Solano County Water Agency). If we are correct, this means the City's State Water Project water supply shown in the Urban Water Management Plan should not be discounted due to unreliability in dry years, but rather should be "counted" at the maximum contract amount of 14,678 acre-feet per year. This represents a dry-year (90% exceedence) gain of nearly 9,000 acre-feet per year from what is shown now in the Urban Water Management Plan. The Solano County Water Agency and other State Water Project contractors within areas covered by the watershed protection statutes, at our urging, have filed a lawsuit against the state Department of Water Resources asserting these rights. The trial is pending.

cc: Gene S. Cortright, Public Works Director

RLW:hs

Table 1

**City of Fairfield
Historical Imported Project Water Deficiencies/Supplies, 1989-2009**

Year*	State Water Project		Solano Project	
	Deficiency	Table A	Deficiency	Entitlement
1989	-	100%	-	100%
1990 **	-	100%	-	100%
1991	-70%	30%	-16.9%	83.1%
1992	-55%	45%	-21.5%	78.5%
1993	-	100%	-	100%
1994	-50%	50%	-13.0%	87.0%
1995	-	100%	-	100%
1996	-	100%	-	100%
1997	-	100%	-	100%
1998	-	100%	-	100%
1999	-	100%	-	100%
2000	-10%	90%	-	100%
2001	-61%	39%	-	100%
2002	-30%	70%	-	100%
2003	-10%	90%	-	100%
2004	-35%	65%	-	100%
2005	-10%	90%	-	100%
2006	-	100%	-	100%
2007	-40%	60%	-	100%
2008	-65%	35%	-	100%
2009	-60%	40%	-	100%

* Calendar year for State Water Project. Water Year, beginning March of year shown, for Solano Project.

** First year of State Water Project deliveries to City.

**TABLE 2 - FAIRFIELD WATER SUPPLY AND DEMAND FORECAST - 90% EXCEEDENCE DRY YEAR
WITHOUT PROPOSED GREEN VALLEY DEVELOPMENT**
(excludes Travis AFB, which has separate water system)

SECTION 1: FAIRFIELD AVAILABLE WATER SUPPLIES, Acre-Feet (AF)

	Actual			Forecast (90% Reliable Supplies: i.e., available 9 years out of 10; except "Now," which is estimated actual)									Median Year (50% Reliable) Supply Ultimate
	2005	2008	New (2009)	2010	2015	2020	2025	2030	2035	Ultimate			
Potable Supplies													
Solano Project Entitlement	9,200	9,200	9,200	9,200	8,700	8,700	8,700	8,700	8,700	19,300	20,300		
State Water Project Entitlement	13,200	5,100	4,800	4,800	4,600	4,600	4,600	4,600	4,600	10,700	10,700		
DWR Settlement (1)	11,800	11,800	11,800	11,800	11,800	11,800	11,800	11,800	11,800	11,800	11,800		
Solano Irrigation District Contracts													
Second Amended Agreement Exchange	7,000	7,000	7,000	7,000	6,700	6,700	6,700	6,700	6,700	4,700	4,900		
Second Amended Agreement Purchase Option	9,000	9,000	9,000	9,000	8,600	8,600	8,600	8,600	8,600	0	0		
2009 Supplemental Purchase	0	0	0	0	2,000	2,000	2,000	2,000	2,000	2,000	2,000		
1987 JPA (est)	500	500	500	500	600	700	800	800	900	1,000	1,000		
Rancho Solano Irrigation (from Solano Project entitlement)	(1,000)	(700)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)		
Total Potable Supplies	49,700	41,900	44,400	43,400	42,200	42,100	42,200	42,200	42,300	42,400	49,700		
Nonpotable Supplies													
Solano Irrigation District (87 JPA & Other)	700	700	700	700	700	700	700	700	700	700	700		
Paradise Valley Golf Course	800	800	800	800	1,400	1,800	2,200	2,400	2,400	2,400	2,400		
Other	1,500	1,500	1,500	1,700	2,100	2,500	2,900	3,100	3,100	3,100	3,100		
Solano Irrigation District Subtotal													
Recycled	100	0	100	100	100	600	600	600	600	600	600		
Central Fairfield Phase I	0	0	0	0	0	600	1,200	1,200	1,200	1,200	1,200		
Central Fairfield Phase II	0	0	0	0	0	0	600	1,200	1,200	1,200			
Central Fairfield Phase III	100	0	100	100	100	1,200	2,400	3,000	3,000	3,000			
Recycled Subtotal	1,000	700	1,000	1,000	1,000	1,800	1,800	1,800	1,800	1,800			
Rancho Solano Irrigation	2,800	2,200	2,800	2,800	3,200	4,700	6,300	7,100	7,100	7,100			
Total Nonpotable Supplies													
Total Supplies	52,300	44,100	47,000	46,200	45,400	46,800	48,500	49,300	49,400	49,500	56,800		

(1) Accounts for both Settlement Water and Article 21 water.

SECTION 2: FAIRFIELD WATER DEMANDS FORECASTED ASSUMING WATER SUPPLY IS NOT A CONSTRAINT ON GROWTH

	New (2009)			Forecast (90% Reliable Supplies: i.e., available 9 years out of 10; except "Now," which is estimated actual)									Median Year (50% Reliable) Supply Ultimate
	2005	2008	2010	2010	2015	2020	2025	2030	2035	Ultimate			
Assume:													
AF/yr per housing unit =	0.37	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36		
(good "now") =	320	320	320	320	320	320	320	320	320	320	320		
AF/yr per job =	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		
Water-intensive industries (additional water) =	2,200	1,700	1,700	2,500	4,000	5,000	6,500	8,000	9,000	10,000	10,000		
AF/yr non-golf irrigation associated with housing (80% est) =	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11		
AF/yr non-golf irrigation associated with jobs (20% est) =	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03		
AF/yr golf course irrigation	1,700	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400		
Unaccounted =	8%	4%	8%	8%	8%	8%	8%	8%	8%	8%	8%		
Housing units =	36,246	36,317	36,399	42,947	46,169	48,620	51,731	53,841	55,941	58,041	60,141		
w/ Travis AFB (1) =	33,868	35,937	36,010	40,567	43,800	47,240	49,351	50,651	51,461	51,461	51,461		
increase =	2,378	2,069	2,378	2,378	2,378	2,378	2,378	2,378	2,378	2,378	2,378		
Residential Demand, w/ Travis AFB	15,990	16,360	16,360	19,190	20,600	22,200	23,200	23,800	24,200	24,200	24,200		
Jobs =	49,940	52,462	53,302	54,143	59,045	63,353	67,174	70,314	72,612	75,012	77,312		
w/ Travis AFB (2) =	35,040	37,562	38,402	39,243	44,145	48,453	52,274	55,414	57,712	60,012	62,312		
increase =	6,100	2,522	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100		
Nonresidential Demand, w/ Travis AFB	6,100	6,200	6,700	7,600	9,700	11,300	13,300	15,200	16,500	17,500	18,500		
Golf Course Irrigation	1,700	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400		
Unaccounted	2,100	1,100	2,200	2,400	2,800	3,000	3,300	3,500	3,700	3,700	3,700		
Total Demands, AF =	25,800	25,600	27,200	30,500	34,500	37,900	41,200	43,900	45,800	46,800	46,800		
(w/ Travis AFB)													
Reserve/(Deficiency), AF	26,500	18,500	19,800	15,700	10,900	8,900	7,300	5,400	3,600	2,700	10,000		

(1) Travis AFB = 2,380 housing units

(2) Travis AFB = 14,900 jobs

TABLE 3 - FAIRFIELD WATER SUPPLY AND DEMAND FORECAST - 90% EXCEEDENCE DRY YEAR WITH PROPOSED GREEN VALLEY DEVELOPMENT, 140 ACRE-FEET PER YEAR BEGINNING IN 2015
(excludes Travis AFB, which has separate water system)

SECTION 1: FAIRFIELD AVAILABLE WATER SUPPLIES, Acre-Feet (AF)

	Forecast (90% Reliable Supplies: i.e., available 9 years out of 10; except "Now," which is estimated actual)						Ultimate	Median Year (50% Reliable) Supply Ultimate					
	2005	Actual	2008	Now (2009)	2010	2015			2020	2025	2030	2035	
Potable Supplies													
Solano Project Entitlement	9,200		9,200	9,200	9,200	8,700	8,700	8,700	8,700	8,700	19,300	20,300	
State Water Project Entitlement	13,200		5,100	5,900	4,800	4,800	4,600	4,600	4,600	4,600	10,700	10,700	
DWR Settlement (1)	11,800		11,800	11,800	11,800	11,800	11,800	11,800	11,800	11,800	11,800	11,800	
Solano Irrigation District Contracts			7,000	7,000	7,000	6,700	6,700	6,700	6,700	6,700	4,700	4,900	
Second Amended Agreement Exchange	9,000		9,000	9,000	9,000	8,600	8,600	8,600	8,600	8,600	0	0	
2009 Amended Agreement Purchase Option	0		0	0	0	2,000	2,000	2,000	2,000	2,000	2,000	2,000	
1987 JPA (est)	500		500	500	500	700	800	800	800	800	1,000	1,000	
Rancho Solano Irrigation (from Solano Project entitlement)	(1,000)		(700)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	
Total Potable Supplies	49,700		41,900	44,400	43,400	42,200	42,200	42,200	42,200	42,300	42,400	49,700	
Nonpotable Supplies													
Solano Irrigation District (87 JPA & Other)	700		700	700	700	700	700	700	700	700	700	700	
Paradise Valley Golf Course	800		800	800	800	1,400	1,800	2,400	2,400	2,400	2,400	2,400	
Other	1,500		1,500	1,300	1,000	2,100	2,500	2,900	3,100	3,100	3,100	3,100	
Solano Irrigation District Subtotal													
Recycled	100		0	100	100	100	600	600	600	600	600	600	
Central Fairfield Phase I	0		0	0	0	0	1,200	1,200	1,200	1,200	1,200	1,200	
Central Fairfield Phase II	0		0	0	0	0	0	0	0	0	0	0	
Central Fairfield Phase III	100		0	100	100	100	1,200	1,200	1,200	1,200	3,000	3,000	
Recycled Subtotal													
Rancho Solano Irrigation	1,000		700	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
Total Nonpotable Supplies	2,600		2,200	2,600	2,800	3,200	4,700	6,300	7,100	7,100	7,100	7,100	
Total Supplies	52,300		44,100	47,000	46,200	45,400	46,800	48,500	49,300	49,400	49,500	56,800	

(1) Accounts for both Settlement Water and Article 21 water.

SECTION 2: FAIRFIELD WATER DEMANDS FORECASTED ASSUMING WATER SUPPLY IS NOT A CONSTRAINT ON GROWTH

	Forecast (90% Reliable Supplies: i.e., available 9 years out of 10; except "Now," which is estimated actual)						Ultimate	Median Year (50% Reliable) Supply Ultimate					
	2005	Actual	2008	Now (2009)	2010	2015			2020	2025	2030	2035	
Assume:													
AF/yr per housing unit =	0.37		0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	
(gpd) * housing unit =	330		320	320	320	320	320	320	320	320	320	320	
AF/yr per job =	0.09		0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
Water-intensive industries (additional water) =	2,200		1,700	1,700	2,500	4,000	5,000	6,500	8,000	9,000	10,000	10,000	
AF/yr non-golf irrigation associated with housing (80% est) =	0.16		0.16	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	
AF/yr non-golf irrigation associated with jobs (20% est) =	0.02		0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
AF/yr golf course irrigation	1,700		1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	
Unaccounted =	8%		4%	8%	8%	8%	8%	8%	8%	8%	8%	8%	
Housing Units =	36,248		36,317	36,390	42,947	46,169	48,626	51,731	53,031	53,841	55,841	55,841	
Travis AFB (1) =	33,868		35,937	36,010	40,567	43,800	47,240	49,351	50,651	51,461	51,461	51,461	
Residential Demand, w/o Travis AFB	15,300		2,069	73	4,557	3,233	3,440	2,111	1,300	810	0	0	
Jobs =	49,940		52,462	53,302	54,143	59,045	63,953	67,174	70,314	72,612	72,612	72,612	
w/o Travis AFB (2) =	35,040		37,562	38,402	39,243	44,145	48,453	50,274	52,274	57,712	57,712	57,712	
increase =	6,100		6,200	6,700	7,600	9,700	11,300	13,300	15,200	16,500	17,500	17,500	
Nonresidential Demand, w/o Travis AFB	1,700		1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	
Golf Course Irrigation	0		0	0	0	140	140	140	140	140	140	140	
PROPOSED GREEN VALLEY DEVELOPMENT													
Unaccounted	2,100		1,100	2,200	2,400	2,900	3,200	3,400	3,700	3,800	3,900	4,000	
Total Demands, AF =	25,800		25,600	27,200	30,500	34,600	38,100	41,300	44,100	45,900	47,000	47,000	
(w/o Travis AFB)													
Reserve/(Deficiency), AF	26,500		18,500	19,800	15,700	10,800	8,700	7,200	5,200	3,500	2,500	9,800	

(1) Travis AFB = 2,380 housing units

(2) Travis AFB = 14,900 jobs

APPENDIX 23.5:

CEQA STANDARDS FOR EIR ADEQUACY

According to section 15151 of the CEQA Guidelines, the "Standards for Adequacy" of an EIR are as follows:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

APPENDIX 23.6:

CEQA DEFINITION OF "MITIGATION"

According to section 15370 of the CEQA EIR Guidelines, the term "mitigation" includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree of magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impacts by replacing or providing substitute resources or environments.

APPENDIX 23.7 EIR CONSULTANT TEAM

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