

Capay Valley

AREA PLAN 2010

A Component of the 2030 Yolo Countywide General Plan
Yolo County, California

ADOPTED
DECEMBER 2010

Yolo County Board of Supervisors

District 1	Mike McGowan
District 2	Helen Thomson
District 3	Matt Rexroad
District 4	Jim Provenza
District 5	Duane Chamberlain

Yolo County Planning Commission

District 1	Jeb Burton
District 2	Don Winters
District 3	Mary Kimball
District 4	Richard Reed
District 5	Keith Williams
At-Large	Leroy Bertolero
At-Large	Jeff Merwin

Yolo County Planning Division

Assistant Director of Planning	David Morrison
Principal Planner	Eric Parfrey
Associate Planner	Stephanie Cormier
Assistant Planner	Jeff Anderson

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Capay Valley General Plan Advisory Committee (current and former members):

Ellen Knolle, Trini Campbell, John Devlin, May Gilham, Andrew Brait, Don Tompkins, Anne Rawlins, Maurice Wood, Paul Turnbull, Todd Gettleman, Nina Andres, Cathy Suematsu, Sam Bledsoe, Rudy Lucero, Helen McCloskey, Sumner Stone, Frank Rose, Kathryn Reynolds, Sherry McVicker, E. Lea Piantino, and Vicki Murphy.

In memoriam, a special acknowledgement for Will Baker for his committed participation as a Capay Valley Advisory Committee member for over 2 decades and commitment to land use policy that has protected the agricultural resources of the Capay Valley.

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INTRODUCTION

Capay Valley Area Plan

The 2030 Yolo Countywide General Plan includes several planning areas, each with an “Area Plan” “Area Community Plan,” or “Specific Plan” that is included as part of the larger Yolo County General Plan. Each Area, Community, or Specific Plan must be consistent with the Yolo County General Plan.

The Capay Valley Area Plan encompasses a rural area that runs approximately 20 miles from the north County line, south to the Capay Dam. The Planning Area or Study Area covers 106,000 acres and is divided into two major sub-areas, the communities of Brooks, Capay, Guinda, and Rumsey and the outlying rural areas which include the Blue Ridge, Vaca Range and Capay foothills, and the valley floor of the Capay Valley. A common comment “overlap” area is designated between the communities of Capay and Esparto, extending to County road 85B. Development projects within this “overlap” area are reviewed and commented upon both the Capay Valley and Esparto citizens advisory committees. See Figure GP-1 on the following page for the location of the Study Area, the existing communities, and the comment “overlap” area-

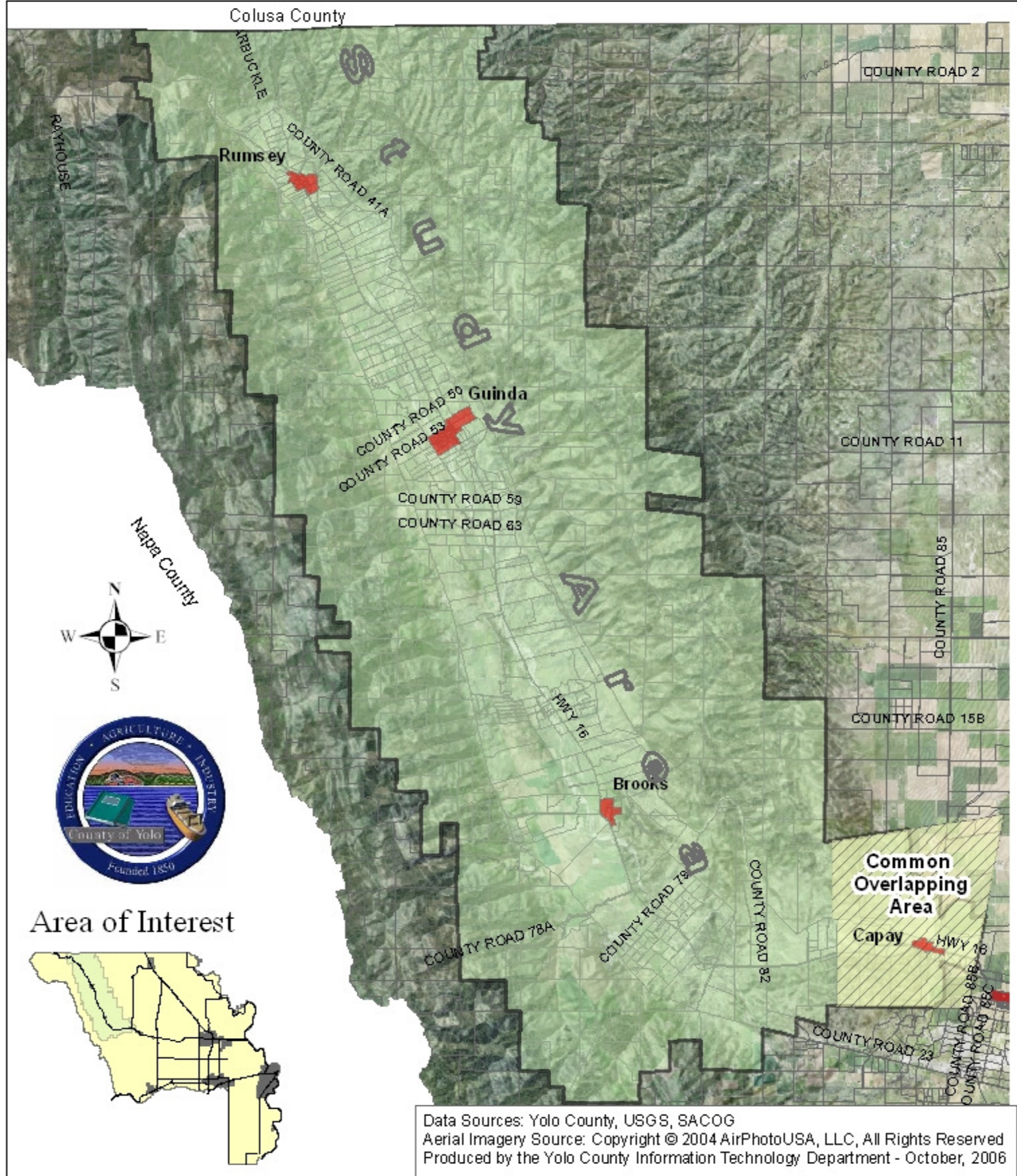
The major focus of this plan is upon the future distribution and timing of developments within the communities as recognized in this plan, and the retention and preservation of agricultural lands in the hills, foothills, and the valley floor.

Since the last 1983 General Plan Update for Capay Valley was adopted, several major developments have occurred with regard to the County’s updated General Plan, State law, and the demand for housing in rural areas throughout the County. As has been noted in several studies, the desire for residential land uses in the foothill areas throughout California has been expanding. The increased desire for development within the study area is also partly due to the construction, and recent expansion, of the Cache Creek Casino Resort, which requires a substantial workforce to operate, and has thereby increased housing demand and traffic volumes in the Capay Valley. The intent of this Plan is to limit and regulate new development in the communities of Capay, Brooks, Guinda, and Rumsey and protects and preserves those areas outside these recognized communities. With the impact of Proposition 13 limiting the revenues for both the County and special, fire and school districts, and other districts which provide services to the Capay Valley Study Area, it was deemed necessary to review the land use scheme for the western portion of Yolo County. In addition, with recent requests for land divisions of agricultural properties, both the Planning Commission and the Board of Supervisors, in an effort to preserve farmlands are actively pursuing strategies to limit rural residential development.

Finally, Yolo County updated the Countywide General Plan in 2009, and all of the accompanying area, community, and specific plans for communities within the unincorporated areas must also be updated to be consistent with the new Countywide General Plan policies.

The following plan, drafted in concert with the Capay Valley Area General Plan Advisory Committee, is in answer to these needs. Once approved by the Board of Supervisors, based on recommendations of the Capay Valley General Plan Advisory Committee and the Yolo County Planning Commission, it will become an amendment to the 2030 Yolo Countywide General Plan.

2006 Capay Valley General Plan Study Area



The purpose of the Capay Area Plan is four-fold:

1. To guide the land use, as well as the land use decisions made by planners, the Planning Commission, and the Board of Supervisors, for the next 20 years.
1. To identify the area's natural resource, social, physical, and economic goals.
2. To provide citizens with information about their area and with opportunities to understand and participate in the planning and decision-making process at the local level.
3. To state the County's desires for the maintenance and improvement of existing development and the location and characteristics of future development needed to achieve community goals, with due consideration to regional needs.

It should be noted that an area plan, in order to adequately reflect the community, must be dynamic rather than static. With time, the Capay Valley area will change and the goals of the area may need to be redefined. Therefore, in order for the area plan to be a useful document, it must be periodically reviewed to respond to, and reflect, changing conditions.

Issues Identified in the Preparation of the Plan

The following chapter summarizes issues brought out in the discussions held by the General Plan Citizens Advisory Committee during the preparation of the plan to provide background and context for the development of the Plan.

AGRICULTURAL ISSUES

- Agricultural lands, including lands possessing resources conducive to agriculture, must be preserved, and protected from encroachment of non-agricultural uses.
- Soil and water resources must be conserved and reserved for agricultural uses.
- Farm worker housing

LAND USE ISSUES

- Non-agricultural land uses, including residential and commercial development must be limited to the existing communities of Brooks, Capay, Guinda, and Rumsey. Such growth must be managed at a pace consistent with the expansion of infrastructure.
- Land uses must be consistent with agricultural uses.

CIRCULATION ISSUES

- Farm equipment movement on State Route 16 is essential to crop production; due to bulk and slow movement it needs to be afforded equal status with other road users.
- Bicycle use of State Route 16 will increase in the future which may lead to further incompatibilities, if policies that encourage provisions for bike lanes are not enforced.

HOUSING ISSUE

- That a Land Use policy should be established with provisions for farm worker housing on existing farms.

CONSERVATION AND NATURAL RESOURCES ISSUES

- Aesthetics Issues
- New commercial structures should be consistent with the appearance of the community (Historic Design Guidelines).
- Preservation of the agricultural character of the view sheds visible from State Route 16.
- Night lighting
- Soil and Water Conservation Issue
- Commercial rock mining in Cache Creek.
- The long-term effects of potentially harmful chemicals on surface and underground water supplies should be monitored by the appropriate agencies on a regular basis and the findings should be made available to area residents.
- Protection and preservation of Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places essential to tribal cultural traditions, heritage, and identity.

ENERGY CONSERVATION ISSUES

- The nationwide energy problem resulting in the rapid rise in cost of oil, natural gas, and electricity will continue to have drastic economic effects on the residents of Capay Valley. Energy conservation and the use of alternate fuels will be of increasing importance in the years ahead.
- Wind power, solar power, bio mass power, and waterpower are alternative energy sources. Landowners individually or in co-operation with the county should be encouraged to develop and use alternate forms of energy.
- Sustainable energy sources in agricultural regions require a re-definition of the County Code to allow Biomass energy conversion facilities.

RECREATION AND OPEN SPACE ISSUE

- Cache Creek Regional Park and Camp Haswell impact the north end of Capay Valley and require local community participation in their planning.
- Limitations on building are essential because of limited water, drainage problems, difficult access, distance from health and safety services, and the need to preserve the visual beauty and agricultural base of the area.
- Maintain and promote the cultural, historic, and archaeological heritage of the Capay Valley through the establishment of open space to protect such resources.

NOISE ISSUES

- Highway 16 traffic noise issues for residences along the highway.
- The location and operation of land uses should be located and regulated to avoid or mitigate harmful or nuisance levels of noise.
- Best management practices should be followed to prevent, avoid and suppress noises at the source and to provide barriers or buffers.

HEALTH AND PUBLIC SAFETY ISSUES

Health Care Issues

- Health care facilities are limited to local fire departments in the Capay Valley region, including the Yocha Dehe Fire Department, a primary first-responder in the Capay Valley and the first Native American fire department to earn accreditation by the Commission on Fire Accreditation International (CFAI) which is the highest standard set. The presence of a large Casino/Resort, and additional recreation areas increases the need for additional medical and fire response. The County should work with the State to further determine the need for health care services that are more easily accessible to residents of the Valley.

Law Enforcement Issues

- Vandalism and Trespassing continues to be a problem to a large number of Capay Valley residents.
- Littering of non-supervised designated public recreational areas creates an eyesore and, in some instances, health and safety hazards, particularly along the creek recreational areas.
- Acts of arson are a real concern.

Emergency Preparedness Issues

- The Capay Valley is located in an active seismic zone. In the event of the failure of Indian Valley Dam, Capay Valley is in the direct path of floodwaters. An emergency evacuation plan should be created for the Capay Valley.

Earthquake and Landslide Issue

- Earthquake faults run the length of Capay Valley. The Salt Canyon Fault System was active within the last 100 years. More information is needed regarding earthquake faults and landslide prone areas for use in developing land use policy.

Pollution Issues

- The farming community of the Capay Valley needs to be made aware of the community education programs provided by the various county agencies that provide the short and long-term effect of toxic chemical use by industrial, residential and agricultural users and possible alternative solutions. Boron, mercury, and pesticide drift are issues of concern.

Definition of Goals, Policies and Implementation Measures

A general plan or area community plan is made up of goals, policies, and implementation measures, among other features such as maps and diagrams. Together, these constituent parts paint a picture of the community's future development.

GOAL

A goal is an ideal future end related to the public health, safety, or general welfare. A goal is a general expression of community values and as such, may be abstract in nature. Consequently, a goal is generally not quantifiable or time-dependent.

POLICY

A policy is a specific statement that guides decision-making. It indicates a commitment of the local legislative body to a particular course of action. A policy is based on and helps implement a general plan's objectives. A policy is carried out by implementation measures. For a policy to be useful as a guide to action, it must be clear and unambiguous. Clear policies are particularly important when it

comes to judging whether or not zoning decisions, subdivisions, public works project, etc., are consistent with the general plan.

IMPLEMENTATION MEASURE

An implementation measure is an action, procedure, program, or technique that carries out general plan policy.

**GOALS, POLICIES, AND
IMPLEMENTATION MEASURES**

GOALS, POLICIES, AND IMPLEMENTATION MEASURES

Agriculture

Goal 1: Viable agriculture in the Capay Valley General Plan planning area.

Policy 1: The County shall maintain, encourage, and actively support agricultural use within the Capay Valley Area Plan planning area.

Implementation Measure 1: Consult with farmers and landowners to create and implement an Agricultural District program for the Capay Valley, to enhance and aggressively promote the distinctive agricultural and recreational character of this unique region. The district may include tailored zoning requirements, permit streamlining, development standards, financial incentives, marketing, and/or other benefits as appropriate to expand the local agricultural and recreational economy. Areas of focus within the District may include the wine appellation, the Capay Valley brand, historic downtowns, Cache Creek Casino, organic farming, outdoor recreation, agricultural and ecotourism, and providing visitor services in Esparto and Madison.

Policy 2: The County shall protect agricultural land as a resource rather than a commodity.

Policy 3: The County shall continue to support the principles of the Williamson Act. (The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments, which are lower than normal, because they are based upon farming and open space uses as opposed to full market value.)

Implementation Measure 1: Yolo County shall lobby on a continuing basis for maintenance and enhancement of the Williamson Act and Super Williamson Act subvention programs in concert with other interested counties and organizations.

Implementation Measure 2: If financially feasible in the wake of State budget cutbacks of subvention payments, Yolo County shall encourage agricultural landowners to contract with the County on a voluntary basis through Williamson Act and farmland security zone procedures to restrict the use of their land in exchange for taxation of the land based on agricultural use.

Implementation Measure 3: Yolo County shall continue to enforce Williamson Act contract terms in accordance with the Government Code Section 51200 et. seq. Non-renewal of contracts shall only be considered in accordance with Government Code Section 51200 et seq.

Policy 4: The County shall promote and encourage establishment and preservation of agricultural easements in the Capay Valley.

Implementation Measure 1: Yolo County shall encourage the appropriate acquisition of agricultural conservation easements by local, State, and federal agencies and private non-profit organizations to protect agriculture.

Implementation Measure 2: Yolo County shall encourage the placement of agricultural conservation easements on land most threatened by development (i.e., those located in close proximity to the unincorporated communities of Brooks, Guinda, Capay, Guinda and Rumsey).

Implementation Measure 3: Yolo County shall maintain and modify necessary ordinances to implement the Agricultural Conservation Easement Program.

Policy 5: The County shall pursue all options, as allowed by law, to eliminate or deter the development of antiquated subdivisions.

Implementation Measure 1: Yolo County shall discourage, to the extent possible, development of antiquated subdivisions for non-agricultural uses outside of designated Urban Growth Boundaries within agriculturally zoned areas.

Implementation Measure 2: Yolo County shall pursue strategies to discourage development of antiquated subdivisions. Such strategies could include dedication of perpetual agricultural conservation easements, cluster developments and Transfer of Development Rights (TDRs). Other strategies include those that are voluntary for landowners, such as lot line mergers/ adjustments to restrict and/or eliminate antiquated subdivisions.

Policy 6: The County shall retain parcel sizes in agriculturally zoned areas that are large enough to support viable agricultural production.

Implementation Measure 1: Retain minimum parcel sizes in the agricultural zones large enough to sustain viable agriculture and discourage conversion to non-agricultural home sites.

Implementation Measure 2: Yolo County shall prohibit new residential or suburban subdivisions in areas designated for agricultural use, except for subdivisions allowed under an adopted “clustered ag housing” ordinance, and shall allow division of agricultural lands only upon demonstration that long-term agricultural production on a specific parcel will be enhanced in accordance with the Agricultural policies of the General Plan through the proposed division. Planning of the division shall include consideration of site characteristics such as slope, water limitations, and capacity to sustain viable agricultural

operations any of which may necessitate parcel sizes greater than specified by underlying zoning in accordance with the County Code.

Implementation Measure 3: Yolo County shall review future land use proposals in order to encourage the continuation of viable agricultural units.

Policy 7: The County shall require that land uses in areas designated for agricultural use shall be limited to those directly related to agricultural production or support of agriculture.

Implementation Measure 1: Yolo County shall support the expansion of agricultural-related activities to include onsite production of renewable fuels, e.g., methane, bio-diesel, and ethanol, consistent with the Yolo County Code, for fueling agriculture-related equipment or providing alternative sustainable energy sources for the Capay Valley.

Policy 8: The County shall encourage the establishment of small-scale agriculture uses, such as specialty crops, organic farming, cottage industries and specialized animal facilities where small parcels of land presently exist in agricultural areas with suitable soils.

Implementation Measure 1: Yolo County shall encourage specialty-farming areas that contain sufficient restrictions to assure that such areas do not become rural residential or ranchette developments.

Implementation Measure 2: Yolo County shall recognize the potential for commercial agriculture, such as direct sales, processing, agri-tourism, and other ancillary activities that are compatible with the rural quality of life and unique community character of the Capay Valley.

Policy 9: Yolo County, to the extent allowed under State law, shall prevent the subdivision of agricultural land except when the subdivision is beneficial to agriculture.

Goal 2: **Adequate soil and water resources to support agricultural lands in the Capay Valley.**

Policy 1: The County shall preserve agricultural lands outside existing communities when considering land use changes.

Implementation Measure 1: Yolo County shall continue to maintain Zoning Ordinance regulations and standards that are compatible with the practice of agriculture and are consistent with policies for preservation of agricultural lands and soil and water resources, including the Williamson Act and the Farmland Security Zone programs.

Policy 2: The County shall strongly discourage conversion of land zoned agricultural to any other zoning, except within the designated urban growth boundaries of Brooks, Capay, Guinda, and Rumsey, subject

to the policies of this General Plan. No lands shall be considered for resignation from Agricultural or Open Space to another land use designation unless all of the findings in Countywide General Plan Policy AG-1.5 can be made (public need, no feasible alternative, and no significant impact to agricultural activities).

Policy 3: The County shall encourage farmers to participate in Natural Resources and Conservation of Soils programs that reduce soil erosion and increase soil productivity.

Implementation Measure 1: Yolo County shall encourage the agricultural community to access the Ag Commissioner, Resource Conservation District, and the University of California, Davis Extension for programs associated with soil erosion and water resources.

Policy 4: The County shall ensure that public roadways and drainage facilities do not adversely impact agricultural lands and shall consult the agricultural community when proposing significant modifications to such facilities.

Implementation Measure 1: When undertaking improvement of public roadways and drainage facilities, the County shall consult with adjoining farmland owners and incorporate designs that minimize impact to agriculture.

Policy 5: The County shall work to ensure that water resources are enhanced and preserved for agriculture, both in quantity and quality, to avoid the loss of agriculture due to competition for water from non-agricultural uses.

Implementation Measure 1: Yolo County shall actively promote and participate in programs that retain local and regional water sources for agriculture and which actively seek to protect the local water supply, including conjunctive use, conservation, implementation of the County's Water Transfer Ordinance, and reservoir development.

Policy 6: Protect reliable and affordable ground water and aquifer supplies and recharge for agricultural uses.

Implementation Measure 1: The County shall ensure that water resources in the Capay Valley area are reserved primarily for agricultural uses.

Implementation Measure 2: The County shall continue to work with State Water Resources and other government water agencies to expand monitoring of groundwater quantity and quality to protect agricultural use of groundwater supplies.

Implementation Measure 3: The County shall enforce the existing ordinance that discourages water exports from the County.

- Policy 7:** The County shall support the development of water supplies for agricultural production provided it does not degrade aquatic resources.
- Policy 8:** The County shall preserve land with characteristics potentially useful for agricultural uses, such as soils, vegetation, water supply, and promote land uses that preserve soils, vegetation, wildlife, and water resources compatible with agricultural use.
- Policy 9:** The County shall discourage the conversion of rangeland to non-agricultural uses.

Goal 3: Land uses compatible with agriculture.

- Policy 1:** The County shall require the land uses in Capay Valley to be compatible with each other, particularly land uses that are adjacent to agricultural operations, so that agricultural operations and productivity are not adversely affected.
- Policy 2:** The County shall support the “Right to Farm” ordinance when making discretionary land use decisions, as a condition of approval.
- Policy 3:** Farm labor housing shall be located within existing farms or community areas. To minimize the conversion of agricultural lands to other uses, all farm labor dwellings in agricultural areas shall be encouraged to locate on lands unsuitable for agricultural uses and in “clustered” configurations or mobile or modular dwellings.
- Policy 4:** With the exception of individual residences appurtenant to active farming operations, where new urban (non-agricultural) development is approved adjacent to agricultural lands, the development shall include a 300-foot agricultural buffer zone between active farming operations and urban uses where possible, but special circumstances can be considered by the decision-making body. Except for planned urban growth within a growth boundary, in no case shall the buffer be reduced to less than 100 feet. The buffer area shall generally be designated Open Space (OS), but may also be designated Public and Quasi-Public (PQ) or Parks and Recreation (PR) based on applicable circumstances. A method and mechanism for guaranteeing the maintenance of setback or buffer areas in a safe and orderly manner shall also be established at the time of development approval. Options include creating a homeowners association or dedication of the buffer area to a non-profit organization or public entity.
- Policy 5:** When designated habitat areas are created adjacent to existing farming operations, buffers shall be established within the habitat area(s) that are sufficient in width to allow on-going farming practices to continue on adjacent agricultural lands, including the application of agricultural pesticides and herbicides consistent with the requirements of the Ag Commissioner.

Policy 6: New residential subdivisions shall be allowed within the Urban Growth Boundary (UGB) lines in the towns of Brooks, Capay, Guinda, and Rumsey.

Implementation Measure 1: Yolo County shall protect agricultural lands from urban encroachment by limiting the extension of urban service facilities and infrastructure, particularly sewers.

Implementation Measure 2: Yolo County shall limit the number of residential houses on agricultural parcels.

Policy 7: The County shall maintain agricultural zoning in Capay Valley to support agricultural production and discourage conversion to non-agricultural uses.

Policy 8: The County shall allow existing legal non-conforming uses and agricultural-related uses to continue or be replaced in case of catastrophic demise or disuse, in accordance with Yolo County Zoning Ordinance provisions.

Land Use

Goal 1: Preservation of the rural quality of life and community unique to the Capay Valley region.

Policy 1: The County shall ensure land uses are compatible with the rural agricultural quality of life.

Implementation Measure 1: Yolo County shall update its Zoning Code to ensure land use compatibility is addressed.

Goal 2: Managed growth of the valley so that adequate facilities and services can be provided in pace with in-fill development.

Policy 1: The County shall direct growth within existing residential and commercially zoned areas. No new communities shall be created outside of the existing communities of Brooks, Capay, Guinda, and Rumsey.

Implementation Measure 1: The County shall adopt designated Urban Growth Boundaries for Brooks, Capay, Guinda and Rumsey.

Goal 3: Enhancement of the valley's economic base to provide goods, services, and jobs that better meet the needs of the residents.

Policy 1: Goods and services supplied shall support the agricultural base of the community.

Implementation Measure 1: Yolo County shall support the expansion of agricultural related activities to include onsite production of renewable fuels, through bio-mass conversion to methane, bio-diesel, and, ethanol,

consistent with the Yolo County Code, for providing sustainable fuel and energy for the agricultural community.

Policy 2: The County shall encourage roadside stands that sell locally grown products.

Policy 3: The County shall encourage cottage industries (such as local artists).

Circulation

Goal 1: Safe roadway and highway network in the Capay Valley Planning Area

Policy 1: The County shall review projects to ensure that ITE Level of Service (LOS) is maintained on County roadways in the Capay Valley Planning Area, in accordance with the General Plan.

Implementation Measure 1: When considering improvements to County maintained roads, any new paving, either asphalt or concrete, should be encouraged to be done with pervious and sound reducing materials where economically feasible.

Implementation Measure 2: Residents of the Capay Valley Area may investigate the possibility of establishing a Capay Valley Area Assessment District in order to dedicate funding for road and drainage maintenance in the Capay Valley Area that is above and beyond the County Public Works' maintenance activities.

Policy 2: The County will continue to coordinate with CALTRANS on the design of bridges in the Capay Valley Planning Area to ensure compliance with State design standards.

Policy 3: The County shall encourage the naming of unnamed roads.

Implementation Measure 1: The County shall work with Capay Valley Fire District and Office of Emergency Services to ensure that public road names are posted and accessible. Any building permit issued shall be required to update address and signing requirements of the Capay Valley Fire District.

Policy 4: The County shall limit building activity on roads that are seasonally closed.

Implementation Measure 1: Prior to issuance of a building permit, the County will ensure that minimum County and Fire District standards i.e. road access, signing are satisfied.

Policy 5: When considering improvements to County Roads, the County must consider agricultural and other agricultural-related vehicles, and shall accommodate use by farm equipment on its local roadways in as safe and practical a manner as possible (provided these vehicles do not contribute to road damage).

Implementation Measure 1: The County will review the Caltrans safety improvement project (Yolo-16 SIP) and all future Caltrans safety programs.

Goal 2: Improve availability, safety, and facilities associated with users of alternate modes of transportation, including pedestrians, equestrians, and bicyclists.

Policy 1: Encourage bicycle traffic safety education programs.

Implementation Measure 1: The County shall encourage and support a regular free bicycle education program at a local facility, as well as at local schools.

Policy 2: Encourage whenever possible or practical the construction of bicycle lanes.

Implementation Measure 1: In accordance with the County of Yolo Bicycle Transportation Plan, as amended, the County shall support the addition of bicycle access and bicycle lanes in reviewing any proposal that would require improvement of roadways.

Implementation Measure 2: Any upgrades or improvements to State Route 16 within the Capay Valley Planning Area will be encouraged to be planned and designed to accommodate bicycle lanes and bike safety enhancements.

Policy 3: Encourage the restoration of a Public Transportation System in the Capay Valley.

Implementation Measure 1: The County shall support the provision of additional funding for Yolo County Transportation District to extend their service boundary to serve the communities of Brooks, Guinda, Rumsey and Capay.

Implementation Measure 2: The Yolo County Transportation District should be encouraged to implement a dial-a-ride service to be made available to the communities of Brooks, Guinda, Rumsey and Capay.

Implementation Measure 3: The County will coordinate with Cache Creek Casino and Resort to provide transportation options for casino patrons and employees as an alternative to automobile use.

Housing and Community Profile

Goal 1: Adequate housing for residents and the work force of the region consistent with the agricultural character of the communities and consistent with the goals and objectives of the 2003 Countywide Housing Element.

Policy 1: County to provide incentives for private individuals to upgrade substandard housing units.

Implementation Measure 1: The County shall support programs and efforts for the rehabilitation of existing dwelling units.

Implementation Measure 2: The County shall encourage property owners to improve dwellings to minimum uniform building code standards by reducing processing time and cost.

Implementation Measure 3: The County will seek, through Code enforcement, the private rehabilitation of substandard dwelling units and provide financial assistance, when available, to owners of dwelling units occupied by low-income households. In applying this policy, the County shall seek to avoid the displacement of low-income households.

Policy 2: New dwellings on agriculturally zoned lands shall be clustered taking into account soils, topography, and existing improvements so as to enhance and continue the viability of agriculture.

Policy 3: The County shall provide for the establishment and permitting of residential care facilities and farm worker labor housing, consistent with the Government Code and Health and Safety Codes.

Implementation Measure 1: Farm labor housing shall be located within existing farms or community designated boundaries. To minimize the conversion of agricultural lands to other uses, all farm labor dwellings in agricultural areas shall be encouraged to locate on lands unsuitable for agricultural uses and in “clustered” configurations, or in mobile or modular dwellings.

Conservation and Natural Resources

Aesthetics

Goal 1: Maintain the open, agrarian character of the landscape as seen from the highway and principal roadways in the area.

Policy 1: Support the effort to secure state Scenic Highway status for State Route 16.

Implementation Measure 1: The County has adopted official County scenic designation for State Route 16 within the Capay Valley Study Area.

Policy 2: Ensure architectural quality and design consistency within existing communities of the Capay Valley along SR 16.

Implementation Measure 1: In consultation with local businesses and residences, and citizen advisory committees the County has developed design guidelines for new commercial structures proposed to be constructed within the existing communities.

Implementation Measure 2: The County shall review building permits to ensure consistency with the Design Guidelines.

Implementation Measure 3: New structures or landscaping proposed within Rumsey, Guinda, Capay or Brooks must be consistent with certain historical or unique design features specific to those communities, in particular those features which influence access, parking, signage, view, drainage, privacy, safety, lighting and security.

Historical And Archeological Resources

Goal 2: Preserve historic buildings and sites.

Policy 1: The County shall continue to identify historic buildings and sites and mitigate adverse impacts thereon.

Policy 2: The County shall protect for future generations the information contained in historic and prehistoric sites and preserve representative historical structures as identified in the Historical Resource Survey.

Implementation Measure 1: In accordance with CEQA, and utilizing the resources available at the Northwest Information Center (NWIC) at the Sonoma State University campus, the County shall identify archaeological sites and mitigate adverse impacts thereon.

Implementation Measure 2: The County shall encourage property owners as well as support efforts of the Yolo County Museum and Historical Landmarks Advisory Committee to designate buildings, sites, or areas for inclusion in the National Register or State Register of historic points of interest, places, or structures.

Goal 3: Protection and Preservation of Tribal Archaeological Resources and Native American Cultural Places as Open Space.

Policy 1: Consult with the culturally affiliated Native American tribes prior to amending the General Plan and adopting or amending specific plans, and when a sacred site is to be placed in permanent open space, consistent with state law.

Policy 2: Work with culturally affiliated tribes to identify and appropriately address cultural resources, including tribal archaeological resources and tribal sacred sites, through the development review process.

Policy 3: Avoid or mitigate to the maximum feasible extent impacts of development on Native American archaeological and cultural resources, including impacts related to habitat projects and discretionary County projects such as roadways and drainage facilities.

Policy 4: Encourage voluntary landowner efforts to protect cultural resources and tribal sacred sites of culturally affiliated tribes consistent with state law.

Implementation Measure 1: The County shall maintain an agreement with the Northwest Information Center of the California Historical Resources Information System for the conduct of prehistoric and historic archaeological assessments and determinations of the prehistoric sensitivity of areas for which project applications have been submitted to the County.

Implementation Measure 2: The County shall refer proposals for projects that are not categorically exempted from the California Environmental Quality Act for evaluation and a recommendation as to whether further study is required to determine the presence or absence of archaeological resources. If the Northwest Information Center recommends further study, the project applicant shall contract with a qualified professional to conduct the study and make recommendations designed to avoid or minimize adverse impacts on cultural or historic resources and indicate whether further investigation is needed. All studies shall be completed and submitted to the County prior to the completion of any environmental document for the project.

Implementation Measure 3: The County will refer draft environmental documents, including any studies and recommended mitigation measures, to the appropriate Native American tribes for review and comment as part of the public review process for such documents. Mitigation measures to avoid or minimize impacts on Native American cultural resources may include the execution of a Cultural Resources Treatment Agreement between the developer and the appropriate tribe(s) that address the treatment and disposition of cultural resources and human remains, and tribal monitoring during earth-disturbing activities.

Implementation Measure 4: The County will consult with culturally affiliated tribes prior to designating open space in order to protect the identity of any cultural places that exist on the proposed open space and develop a treatment plan and management plan for any such cultural places.

Implementation Measure 5: The County will work with culturally affiliated tribes to acquire and hold conservation easements on terms mutually satisfactory to the tribe and landowner for purposes of protecting the tribe's cultural places.

Soil and Water Resources and Conservation

Goal 4: Enhance the quality and conserve the quantity of groundwater, creek water, and run-off waters in the Cache Creek watershed.

Policy 1: Conservation measures in water usage for agricultural and residential areas shall be encouraged.

Implementation Measure 1: Informational programs teaching methods of low water usage irrigation practices in agricultural and residential areas are encouraged.

Policy 2: A “green belt” consisting of vegetative buffer strips along Cache Creek shall be encouraged when possible to provide shade, wildlife habitat, or maintain stability of stream banks.

Implementation Measure 1: The County will work with property owners along Cache Creek in order to stabilize and protect adjoining farmlands now subject to washout.

Implementation Measure 2: Tree and brush planting, as well as invasive plant species removal, shall be developed as a tool for accomplishing the creek stabilization task.

Implementation Measure 3: The County shall encourage active revegetation and bank stabilization programs along roadways.

Policy 3: The County shall continue efforts to manage Cache Creek and water resources and to encourage the long-range stewardship of Cache Creek as a renewable resource.

Implementation Measure 1: The County shall ensure that projects involving drainage modifications shall be constructed so as to minimize soil erosion and silt transport.

Policy 4: Agricultural soils must be recognized as a waning resource; therefore, any change in land use from agriculture to any other purpose shall be discouraged.

Mineral Extraction

Goal 5: The County shall prohibit the commercial removal, extraction, or mining of the biological, mineral, or environmental resources within the Capay Valley General Plan Study Area, except as allowed below the Capay dam under the Cache Creek Area Plan.

Policy 1: Prohibit mineral resources extraction within the 100-year floodplain and within the Capay Valley Planning Area, except as allowed below the Capay dam under the Cache Creek Area Plan.

Biological Resources

Goal 6: Preserve special-status species habitat including oak woodland, seasonal wetlands, vernal pools, riparian corridors, and watersheds.

Policy 1: Practices that disturb natural habitat in wetlands, riparian corridors, and watersheds shall be prohibited so as to minimize erosion and maximize beneficial vegetative growth, unless it can be shown that public health and safety depend upon such disturbance. All

intermittent streams and Cache Creek shall have policies equal in effectiveness.

Implementation Measure 1: The County shall support the concept of re-establishing wildlife habitat areas that have, over the years, been destroyed.

Implementation Measure 2: The County shall support awareness of public agencies that have been established for the protection of biological resources.

Policy 2: The protection of wildlife areas is an important element of the plan, inasmuch as it contributes to three other open space objectives: (1) conservation of open space; (2) support for the Valley's scenic beauty; and (3) preservation of the natural watershed.

Goal 7: Maintain the natural diversity of the wildlife and vegetation within the Capay Valley Planning Area.

Policy 1: Diversion of natural water sources, which creates a negative impact on wildlife habitat, shall be discouraged and regulated.

Implementation Measure 1: Encourage studies to clearly define and delineate areas presently affecting wildlife habitat.

Air Quality

Goal 8: Ensure clean air by reducing air quality impacts from traffic and construction to the extent feasible.

Policy 1: The County shall adopt policies consistent with the requirements of the Yolo-Solano Air Quality Management District (YSAQMD).

Implementation Measure 1: All new construction shall incorporate standard mitigation measures recommended by the YSAQMD

Implementation Measure 2: Any new development project that is greater in size than the "trigger levels" set by the YSAQMD and which is anticipated to generate emissions over the YSAQMD thresholds shall be required to reduce their air quality impacts to a less than significant level to the extent feasible.

Energy Resources and Conservation

Goal 9: Ensure and secure constant, sufficient, safe, and clean sources of energy for the Valley.

Goal 10: Encourage the conservation and efficient management of energy resources.

Policy 1: The production and use of alternate fuels, especially those energy forms that are renewable, shall be encouraged.

Implementation Measure 1: Encourage the use of solar energy systems for hot water and/or space heating in all homes and businesses where practical.

Implementation Measure 2: Support the use of water, sun, wind and biomass as energy sources.

Implementation Measure 3: Encourage Yolo County School Districts, Fire departments and Transportation District to utilize cleaner fuel sources, such as bio-diesel and bio-natural gas.

Open Space and Recreation

Goal 1: Maintain and enhance the availability of open space lands compatible with the production of food and fiber by controlling the quantity and quality of development allowed.

Policy 1: The agrarian character of the Capay Valley Planning Area depends on the maintenance of large areas of “open space,” principally tracts of rangeland, ridge top areas, open space and creek environment reserved as natural habitat for wildlife, flora and fauna. The County shall coordinate with other agencies, tribes, and programs to create suitable recreation areas and ecological education sites. The policies are to be tailored to the specific geography of the study area based on the following definitions:

- Steep Mountain Slope and High Basins – Blue Ridge and the spur of the Vaca mountains running from Capay to approximately three miles north of Rumsey is largely land held in agricultural preserve or land owned and managed by B.L.M.
- Foothills, Lower Slopes – The Capay Hills on the eastern border of the Valley, and the lower slopes of the Vaca chain to the west, are a crucial buffer zone between the intensively farmed Valley floor and the rugged mountainous regions or upland grazing lands.
- Valley Floor – Most of the flatland along Cache Creek is devoted to agriculture, primarily orchards, hayfields, grain, row crops, and livestock. The following characteristics define the Valley Floor:
 - All town sites and most existing housing units are located on the Valley Floor.
 - The Valley Floor contains the largest amount of irrigated farmland in the study area.
 - The Valley possesses Cache Creek, the primary creek and drainage channel for the study area.
 - The Valley contains the only year-round access (State Route 16) and utility corridor to serve the study area.

Policy 2: The County of Yolo shall ensure that the Steep Mountain Slope and High Basins remain as stock grazing land or wildlife habitat.

- Policy 3:** Removal of land from agricultural preserve solely for residential development is prohibited.
- Policy 4:** Permits for logging, mining, or removal of other mineral and biological resources shall be generally prohibited, in order to preserve the Capay Valley Study Areas unique Scenic, Biological and Wildlife Resources. Whether detrimental or beneficial, all proposals shall first be reviewed by appropriate agencies and the local citizens advisory committee, prior to implementation.
- Policy 5:** The Foothills and Lower slopes and Cache Creek environments shall remain either agrarian with enforcement of Williamson Act contracts, General Plan Agricultural Element, or Wildlife Habitat with establishment of conservation easements.
- Policy 7:** The dominance of agricultural land uses shall be continued in the region as basic open space preservation tools.
- Policy 8:** The County shall encourage landowner awareness of options for Open Space and Conservation easements.
- Policy 9:** The County shall encourage landowners to consider options for open space and conservation easements for the purpose of protecting tribal cultural resources.

Goal 2: Recreational activities compatible with surrounding land uses.

- Policy 1:** County agencies shall be coordinated to manage recreational activities in the Capay Valley Planning Area so that such activities do not interfere with local agricultural enterprise, infringe on private property, or harm wildlife and vegetative habitat.
- Policy 2:** Recreational facilities shall be designed to minimize impacts to surrounding property owners.
- Policy 3:** The County shall maintain appropriate zoning categories and standards in order to ensure land use compatibility, protection of agricultural lands, and consistency with the General Plan when visitor and tourist-oriented activities are located in Capay Valley.
- Policy 4:** Only those uses that are creek-dependent, such as fishing, canoeing, boating, and nature observation, shall be directly located on Cache Creek. More active uses, including parking, restrooms, and picnic areas, shall be located away from sensitive habitat.
- Policy 5:** Recreational uses shall be clustered at locations along Cache Creek in order to minimize habitat disturbance and provide efficient and cost-effective management. All access, whether by road or by trail, shall be through an entry point, which can be controlled.

Implementation Measure 1: In conjunction with existing Cache Creek Regional Park, encourage the County to investigate routes providing

safe access to the south side of Cache Creek for non-motorized traffic only.

Goal 3: Provide safe parks and public open space for the residents and visitors of Capay Valley.

Policy 1: The County shall provide adequate supervisory personnel and facilities at Cache Creek Regional Park and Nichols Park.

Policy 2: Recreational programs shall be continued and extended only to the extent that adequate park supervision (law enforcement and fire protection) and facilities are provided. This limitation is essential both for the protection of the visitors in the parks and for the local residents.

Implementation Measure 1: To offset the impact of recreation in the area; i.e., law enforcement, signs, trash cans, toilets, and water quality monitoring, the County will employ user fees and/or business or concessionaire licenses where appropriate to generate income.

Implementation Measure 2: The County shall continue the policy of reservation and registration of organized groups for Cache Creek Canyon Regional Park and for Nichols Park in Guinda.

Goal 4: Appropriate sizing and location of parks and public open space in order to prevent overcrowding and deterioration in the quality of outdoor recreation.

Policy 1: The County shall evaluate present recreational use of Cache Creek Canyon Regional Park and Nichols Park in order to determine whether further expansion of a facility or portion of a facility would enhance or diminish recreational opportunities.

Policy 2: The County shall study development of additional recreational facilities along Cache Creek to enhance public access and provide environmental educational sites; first consideration will be given to the betterment of existing public facilities and public health and safety.

Implementation Measure 1: The County shall seek cooperative State and federal funding and grants for enhancing park and visitor facilities, and shall develop a use fee structure for users of recreation services and facilities.

Implementation Measure 2: The County shall study the requirements for additional infrastructure for park users (e.g. restrooms, pump out facilities, trash containers, etc.).

Implementation Measure 3: The County shall consult with the local advisory group and hold public hearings prior to the proposal of plans for expansion, alteration, and/or policy changes associated with any existing park facility in the Capay Valley Area Plan.

Implementation Measure 4: Park expansion or land acquisition must not interfere with local agricultural activities, physically impact adjoining property, or degrade natural habitat.

Implementation Measure 5: Ensure that the update of the Parks Master Plan includes provisions for expanding public access and low-impact recreational opportunities along Cache Creek between Rumsey and Capay.

Noise

Goal 1: Establish and maintain noise levels that are consistent with the rural, agricultural setting of the Capay Valley.

Policy 1: Excessive or harmful noise shall be prevented, avoided, and suppressed by controlling noises at the source, providing barriers or buffers, by the implementation of a noise ordinance and by means of wise land use planning and implementation.

Implementation Measure 1: Consistent with the Countywide General Plan Health and Safety Element the County shall adopt a comprehensive Noise Ordinance with specific noise standards that provides for the prohibition and/or reduction of excessive sound levels, including those associated with motors, generators, vehicles, aircraft, fireworks, firearms, explosives, amplifiers, horns, etc. whether employed for residential, commercial or recreational purposes.

Implementation Measure 2: The County shall require mitigation to reduce noise to acceptable levels throughout the Capay Valley Planning Area and particularly near or within home environments.

Public Health and Safety

Health Care

Goal 1: Provide persons in the Capay Valley with the best possible access to emergency medical care and establish family health care facilities.

Policy 1: The County shall promote and encourage plans for development of medical facilities proposed to be located in Capay Valley.

Policy 2: The County shall support the training of residents in CPR and other basic emergency care.

Implementation Measure 1: The County shall support services such as Red Cross, local schools, and fire departments that train citizens in the methods of emergency medical care.

Implementation Measure 2: Cooperate with local fire departments to centrally locate and staff an ambulance service.

Law Enforcement

Goal 2: Provide community law enforcement services to meet the needs of public safety.

Policy 1: The existing level of police service shall be improved for the protection of citizens and property. A resident Sheriff's deputy and/or Sheriff's substation shall be encouraged in a central location in the Valley.

Policy 2: Organizations sponsoring events in or through the Capay Valley shall be responsible for the proper supervision of recreational and other public events. The events shall comply with all applicable laws and regulations.

Policy 3: All parks and concessionaires shall be properly supervised.

Implementation Measure 1: The terms of the concessionaire contract are to be enforced by the County.

Implementation Measure 2: During the recreational period of April through September, the County shall encourage the Yolo County Sheriff's Department to assign at least one additional deputy to police the increased number of people, cars, et cetera, using Cache Creek Park facilities.

Goal 3: Encourage respect for property and discourage and/or prosecute acts of trespassing promptly.

Policy 1: Enact enforceable laws and maintain an adequate law enforcement body to protect property owner rights.

Implementation Measure 1: Enforce laws concerning trespassing.

Policy 2: Placement of signs indicating private lands and points of public egress.

Implementation Measure 1: The County shall post the lawful egress points for boaters and rafters at the Rumsey Bridge and Nichols Park, and shall post parking restrictions at the Rumsey Bridge. The County General Services Division assumes the lead role in constructing and placing the signs in the appropriate locations.

Goal 4: Protect citizens of the Capay Valley from acts of vandalism.

Policy 1: Provide enforceable laws and an adequate law enforcement body to enable proper performance of duties to protect residents of the Capay Valley from acts of vandalism.

Implementation Measure 1: The County shall support alternative funding schemes for increased law enforcement personnel to meet increased demands as they develop.

Implementation Measure 2: The County shall encourage public awareness regarding the importance and the method of crime reporting.

Goal 5: Provide sufficient law enforcement to enable proper actions in response to littering.

Policy 1: Provide adequate waste containers at recreational or public locations.

Implementation Measure 1: The County shall support efforts for highway cleanup by local service groups.

Implementation Measure 2: The County shall encourage Caltrans or the County to establish and maintain trash containers, and encourage private commercial enterprises to provide waste containers for customers.

Policy 2: Enforce the existing laws regarding littering.

Implementation Measure 1: The County shall support legislation concerning littering, both at the local and regional level. Notify the Public Health Department of hazardous unhealthful buildup of litter where vermin and pests occur. Enforce existing laws on dumpsites through reporting illegal dumpsites to the Health Department.

Policy 3: Educate the public toward responsible disposal of waste through road signs, schools, and other organizations.

Implementation Measure 1: The County shall support efforts by local groups and agencies to educate the public on recycling, the value of scarce resources, and legal consequences of littering.

Policy 4: Work with Caltrans to install signage prohibiting littering.

Pollution Control

Goal 6: Reduce or eliminate the presence of toxic materials in the environment.

Policy 1: Encourage agricultural research, which would, in the long term, reduce or eliminate the use of toxic chemicals.

Policy 2: Enforce existing laws, rules, and safety regulations regarding the application of toxic chemicals by individuals who acquired restricted material outside the Yolo County Agricultural commissioner permit system.

Implementation Measure 1: All applications of toxic chemicals (pesticides, herbicides, fungicides, et cetera) shall conform to the rules and regulations as set forth in the California Administrative Code and the Food and Agricultural Code.

Implementation Measure 2: Prior to use, restricted imported materials shall be reported to the County Agricultural Commissioner.

Implementation Measure 3: Monitor rinse water from agricultural pesticide use in the Study Area to ensure conformity with the State guidelines found in the State Regional Water Quality Control Board's Basin Plan for the Sacramento River Basin

Policy 3: Educate residents of the procedures to follow if they believe they have been sprayed by agricultural chemicals.

Implementation Measure 1: The County shall support a public informational program on agricultural chemical spraying. Violation of spraying permits shall be reported to the Agricultural Commissioner's Office.

Air, Groundwater, and Surface Water Pollution

Goal 7: Maintain or enhance air and water quality.

Policy 1: The County shall implement a plan to identify, monitor, and reduce the toxicity of each pollution factor.

Implementation Measure 1: The County shall support efforts by University, private research organizations, and Local Air Quality and Water Quality agencies to study pollutants and effects on the environment.

Policy 2: Pollution of groundwater through abandoned wells, backflow, reverse siphon, et cetera, shall be prevented.

Implementation Measure 1: Local farmers and ranchers shall be encouraged by the County to check and monitor closed water systems for backflow and install backflow check valves. If a problem occurs, the County Health Department shall be consulted.

Policy 3: Businesses and industries which produce toxic waste shall be located in close proximity to one another, i.e., in communities, to facilitate efficient, economical waste treatment or removal.

Implementation Measure 1: The land use plans shall indicate commercial areas located centrally within the residential communities, adjacent to State Route 16.

Policy 4: Capay Valley residents who have been able to determine that they share a common aquifer shall cooperate in maintaining the quality of the water in that aquifer.

Implementation Measure 1: The County shall encourage residents to share water table depth data with neighbors.

Implementation Measure 2: The County shall encourage residents sharing a common aquifer to cooperate in the prevention of pollutants or toxic materials from entering the ground water.

Implementation Measure 3: The County shall conduct periodic water quality tests to establish annual fluctuations in chemical analysis.

Policy 5: Recommend continued analysis of Cache Creek water quality by the appropriate agencies.

Implementation Measure 1: The Yolo County Flood Control and Water Conservation District shall be encouraged to expand its program for monitoring Cache Creek water to include toxic agents such as boron, mercury, cyanide, lead, nickel, et cetera. Because the levels of boron in Cache Creek are toxic to most crops grown in Yolo County, more effort should be made to obtain rapid analysis especially in the Fall of the year (October and November) when Indian Valley flow has been shut off. The flood control district should supply farmers who use Cache Creek water for irrigation with information on boron levels for the current period as well as levels reported at equivalent times in the preceding years. If boron levels were high during a period when farmers are irrigating, a timely release of water from Indian Valley would reduce the boron levels. Every attempt should be made to coordinate the release of low boron water with the agricultural needs of the water uses.

Implementation Measure 2: The Yolo County Flood Control and Water Conservation District (YFCWCD) should continue studies to determine the feasibility of changing the boron level in Cache Creek.

Implementation Measure 3: The County shall pay strict attention to mercury levels, especially when water flow has been altered or its nature has been changed chemically prior to release into Cache Creek.

Implementation Measure 4: Home and orchard wells may have high boron levels due to their location near Cache Creek or because they drain aquifers with high boron levels. Property owners shall be encouraged to have their well water tested so that they will be aware of any potential toxicity problem.

Emergency Preparedness

Goal 8: Avoid loss of life and minimize loss of property due to flood.

Policy 1: Consolidate all available flood hazard information, and have available for public review.

Implementation Measure 1: The County shall maintain up to date and accurate floodplain information on Cache Creek. This information shall be made available to all County agencies and interested public as needed to make developmental decisions.

Policy 2: The County shall ensure that residents of Capay Valley are prepared in case of dam failure.

Implementation Measure 1: The County shall request the Office of Emergency Services to develop a dam failure emergency preparedness plan, which will include community input.

Policy 3: Encourage residents to develop personal emergency preparedness plans, including food and water for several days and emergency supplies.

Implementation Measure 1: The County should prepare a community information referral service whereby fire, health, emergency, and police programs are outlined. This service could be implemented through existing organizations in the valley.

Goal 9: Avoid loss of life and property by earthquake or landslide.

Policy 1: All new structures shall conform to the Uniform Building Code as it relates to earthquake resistant construction.

Implementation Measure 1: Buildings and roadways shall be properly engineered after appropriate identification of ground and soils conditions to control potential landslides in areas of unstable soils. No development will be allowed in identified and potential landslide or erosion prone areas unless certified by a registered California Geologist or Geological Engineer as safe.

Policy 2: Conduct a survey to include a specific delineation of active earthquake faults and identification of landslide areas where development would be hazardous.

Implementation Measure 1: The County shall request the State Geologist Office to conduct a detailed survey charting all fault areas, unstable or potentially unstable slopes, and other geologically sensitive areas.

Implementation Measure 2: The County shall require Preliminary Geotechnical Surveys to be submitted for any new development proposals where appropriate.

Policy 3: Structures shall be prevented in areas where natural conditions are likely to pose threats to public safety or produce excessive, emergency, or long-term maintenance costs.

Goal 10: Maintain or improve the levels of fire protection that exist at this time.

Policy 1: Maintain or improve the insurance rating of the Capay Valley.

Implementation Measure 1: The County shall protect the present insurance rating and service in this district by discouraging private development in areas difficult or time consuming to reach.

Policy 2: Find creative ways to improve fire protection facilities or to make the existing facilities more effective.

Implementation Measure 1: The County shall encourage cooperation between the district, the Yocha Dehe Fire Department, and the Department of Forestry and other neighboring fire departments.

Implementation Measure 2: Establish guidelines for site plan review that reduces the potential risks of fire. The County shall strive to educate new residents of their responsibilities, and the fire services available.

AGRICULTURE

Introduction

This Agriculture chapter provides supportive and descriptive data on the agricultural resources of the Capay Valley Study Area and contains the supportive materials behind the goals and policies that have been developed relating to the conservation and management of the agricultural resources. Capay Valley possesses prime agricultural soils and important farmlands. These natural elements are recognized as valuable resources to be protected and enhanced.

Soil Resources

According to the Natural Resources Conservation Service, the soils of the valley floor range from excellent to poor. The best soils, such as the Yolo, Brentwood, and Zamora series, are formed from recent creek deposits and usually lie in varying widths along the stream margins. These soils are suitable for all crops, including orchards, and provide the fewest challenges to farm management. Soils of intermediate quality, such as the Marvin and Capay series, are suitable for the cultivation of annual crops but require close management because of their inherent limitations. Poorer soils, such as the Hilgate and Corning series, occupy the low terraces. Because of heavy clay subsoil, their use is severely restricted, and these soils are generally not suitable for cultivation. Mountainside soils can be characterized as shallow, fragile, and subject to erosion. Use is limited to habitat and grazing.

Throughout Yolo County extensive agricultural production is possible primarily because of its generally rich soils and moderate climate. The rich alluvium deposits on about 63 percent of the County's total land area provide large areas of the finest quality of soils (Class I) in the world. Another large percentage of the County is in Class II soils with only minor limitations for agriculture. Much of the land in the Capay Valley floor falls into Classes I through III, classified as prime agricultural lands based on the high annual gross value of agricultural products in the Valley. Please refer to Figure AG-1 for a Map indicating the location of the soil classes throughout the Capay Valley.

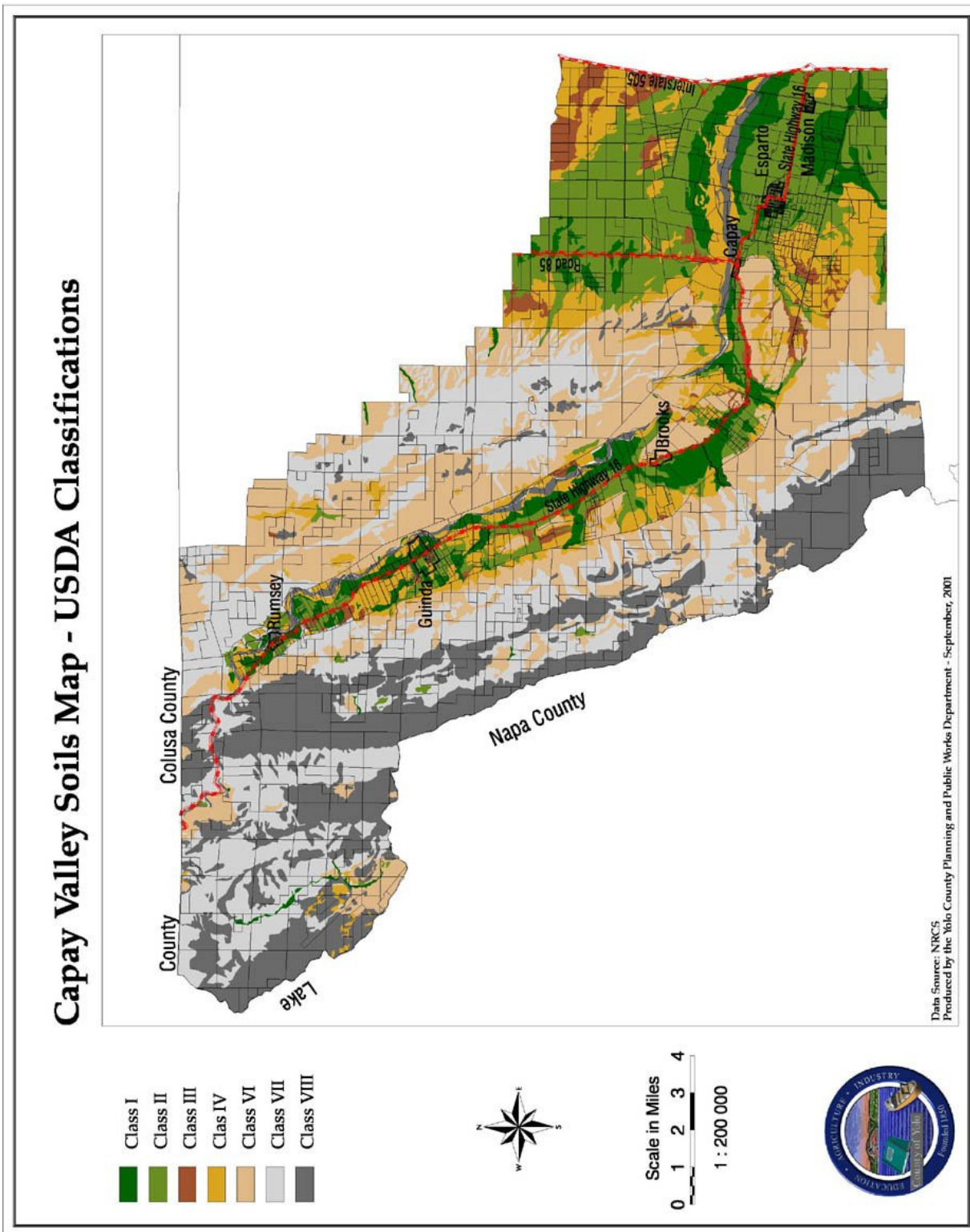
In the preparation of the land use plan and in establishing criteria for the evaluation of a site for agricultural or non-agricultural land use activity, soils were determined to be a criterion for an evaluation of any site in the Capay Valley Study Area. Yolo County, in enforcing the Williamson Act, uses two soils classification systems, the Storie Index Rating (SIR) system and the U.S.D.A. Land Capability Classification (LCC) system. Prime soils are versatile, with few limitations, and are usually defined as Class I and II or soils with a Storie Index greater than 80.

The LCC is an interpretive classification for agricultural purposes and uses soil and climatic data to place delineated soil areas into groups with similar management options or problems. Thirteen criteria are considered: effective soil depth, surface layer texture, permeability, drainage class, available water-holding capacity, slope, erosion hazard, flooding hazard, salinity, alkali, toxic substances, frost-free season, and climatic indices.

Soils are placed in Classes I through VIII depending on limitations and risks of soil damage. Class I has virtually no limitations for cultivation, Class II some limitations, and Class III more limitations than Class II. In general, Classes I, II, and III are considered suitable for regular cultivation and Class IV for limited cultivation.

Soils in Classes V, VI, and VII are generally not suited for cultivation but are more appropriately used for pasture, range, woodland, wildlife, and recreation. Soils in Class VIII are restricted to recreation, wildlife, watershed, or aesthetic uses. The following area specific descriptions of the soils in the Capay Valley Study Area are based on the LCC system.

Figure AG-1
 Capay Valley Soils Map – USDA Classifications



Class I Soils

Class I soils in the Capay Valley are comprised mostly of the Yolo-Brentwood Association. Slopes range from zero to two percent; and elevation ranges from 250 to 400 feet above sea level. This association is characterized by deep silt loam or silty loam, formed from sedimentary rock, with good natural drainage, moderate to moderately slow permeability, and no hazards of erosion. Average water holding capacities are high. These highly fertile soils are used primarily for irrigated orchards, as well as row and field crops.

Class II Soils

Class II soils are comprised of three major associations. All are silty clay loam to sandy loam, which are highly fertile soils characterized by deep, nearly level, moderately to well-drained soils, with good natural drainage and slow subsoil permeability. Soils of the Rincon-Marvin-Tehama association are suitable for irrigated orchards, as well as field and row crops.

Class III Soils

Class III soils occur at the foot of gently sloping hills, with slopes of 2 to 15 percent. These soils are characterized by shallow to moderately deep, well-drained clay and siltstone soils with dense claypan sub soils. Erosion hazards are moderate. Fertility levels are low to moderate. These lands are used mostly for dry land crops.

Class IV Soils

Class IV soils also occur on slopes of 2 to 15 percent. The loams and gravelly loams are shallow to dense claypan or bedrock, have good natural drainage, and very slow subsoil permeability. They are low in fertility and are used from cropland. The clay and clay loams are moderately deep to softly consolidated materials or bedrock. They have good natural drainage and moderately slow to slow subsoil permeability. Runoff is medium to rapid and erosion hazards are high. Fertility is moderate to high. These areas are used for range and dry land crops.

Class V Soils

Class V soils do not occur within the Capay Valley Study Area.

Class VI and VII Soils

Class VI and Class VII soils are found on the moderately steep to very steep slopes of the foothills and hills. The clay and silty clay loams such as the Dibble-Balcom Association are found on slopes of 30 to 50 percent. They are moderately shallow soils, characterized by slow soil permeability, rapid surface runoff and very high erosion rates. Fertility levels are moderate with the land being used for range land. Soils such as the Millsholm with the land being used for range land. Soils such as the Millsholm Association are found on slopes of 30 to 75 percent. Class VI and VII soils are shallow, rocky loam to bedrock, and have rapid surface runoff and very high erosion rates. The soils are of moderate to low fertility and are also used for range land.

Class VIII Soils

Class VIII soils are found on steep upland, rough mountainous brush covered and rocky area. The soils are usually very shallow (less than ten inches) loams and rocky loams overlying bedrock. Slopes are 50 to 70 percent and erosion is severe. Fertility is low; these soils are suitable for wildlife, cattle grazing, and watershed.

Soil Productivity

The Natural Resources Conservation Service Division of the U.S. Department of Agriculture has classified Important Farmland in Yolo County by the following categories:

- Prime Farmland - Farmland with the best combination of physical and chemical features able to sustain long-term production of agricultural crops.
- Farmland of Statewide Importance - Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture.
- Unique Farmland - Farmland of lesser quality soils used for the production of the state's leading agricultural crops.
- Farmland of Local Importance - Land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee.
- Grazing Land - Land on which the existing vegetation is suited to the grazing of livestock.
- Urban and Built-up Land - Land occupied by structures with a building density of at least one unit to one and one-half acres, or approximately six structures to a ten-acre parcel.

Table AG-1

**Farmland Classifications
for the Capay Valley (2008)**

Soil Classification	Acres	Percent of total in region	Percent of total in Yolo County
Prime Farmland	11,512	37.4	4.5
Farmland of Statewide Importance	304	1.0	1.8
Unique Farmland	2,578	8.4	5.1
Farmland of Local Importance	5,148	16.7	11.9
Farmland of Local Potential	2,503	8.1	11.4
Grazing Land	7,054	22.9	4.7
Urban and Built-Up Land	662	2.2	2.3
Other Land	998	3.2	1.3
Total	30,760		

The Farmland Mapping and Monitoring Program, a part of the California Department of Conservation, tracks the acreage of these land use categories in Yolo County and releases the *California Farmland Conversion Report* every two years to document any changes. Figure AG-2 identifies the areas within Capay Valley that are designated as farmland of importance.

Agricultural Land Use Patterns and Trends

Agriculture in the Capay Valley has passed through several distinct phases, but remains the primary land use. The fruit colonies established around the turn of the century gradually declined because local climate and soils do not favor commercially dependable fruit production. Around 1920 some farmers began to plant almond orchards, a number of which have been converted over the years to other crops. Other farmers continue to grow field crops, while ranchers continue to graze livestock in the hills. Many organic fruit and vegetable growers are currently expanding and diversifying their operations.

In the Capay Valley the physical scale of farming tends to be generally smaller than in the Sacramento Valley at large, and local agriculture is differentiated within a relatively compact area. One of the distinctive features of the valley's farming activity is its heterogeneity and mix of types within short distances. While conventional growers from other parts of Yolo County continue to lease land in the Capay Valley, many relatively small-scale farming operations are centered here. The following commodities are commercially produced in the area:

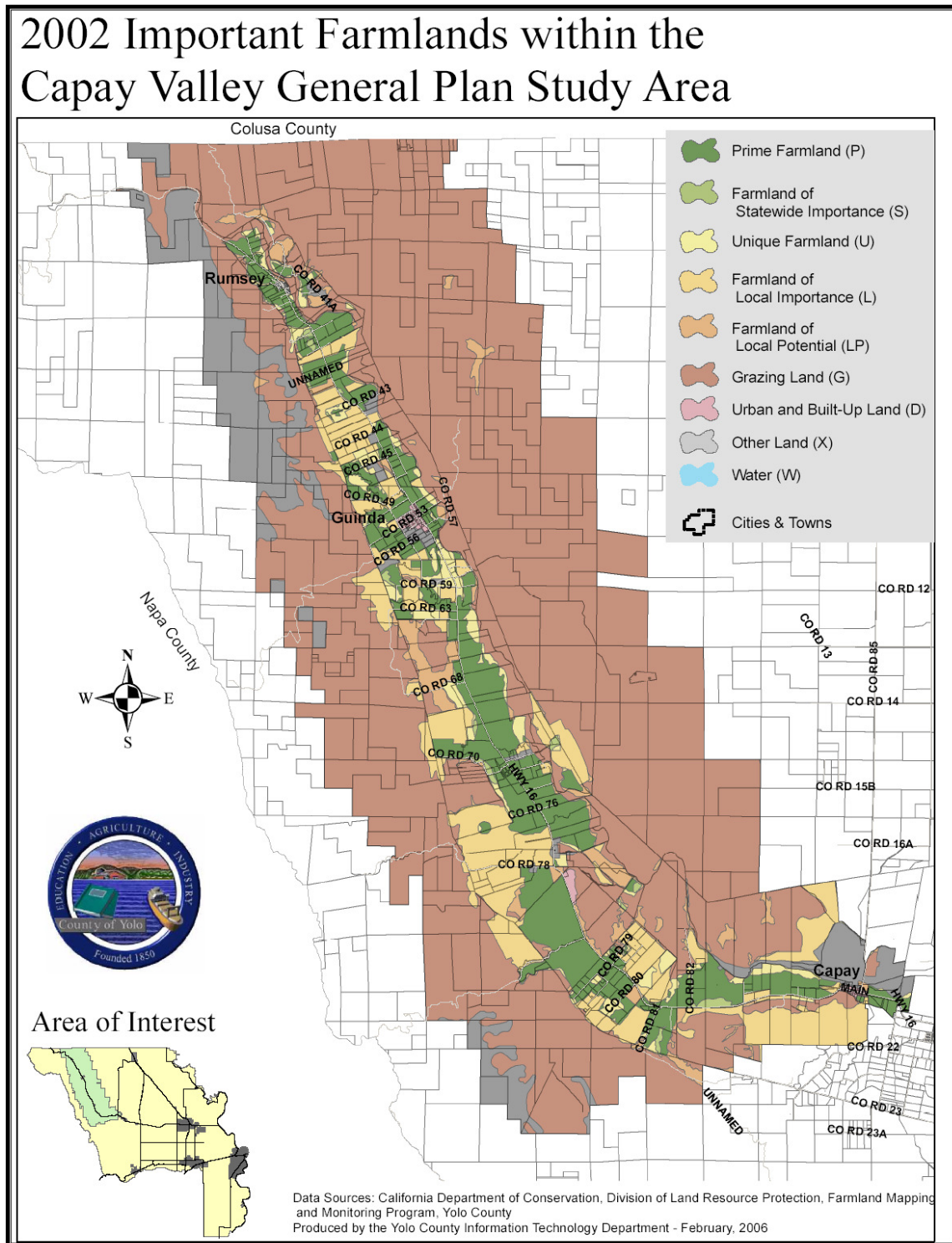
- Livestock: Cattle and calves, goats, sheep and lambs.
- Field and row crops: Alfalfa, hay, organic vegetables, processing tomatoes, sunflowers, safflower, wheat.
- Orchards and vineyard: Almonds, citrus, grapes, walnuts.
- Other: Flowers, nursery products, game birds.

The following description and mapping of agriculture in the Capay Valley is excerpted from a background report prepared for the 2030 Yolo Countywide General Plan, *Yolo County: Sharpening the Focus of Yolo County Land Use Policy*, Kurt Richter, University of California Agricultural Issues Center, draft November, 2009.

The Capay Valley has a thin strip of prime soil that runs along Cache Creek in the Valley floor. The quality of soil quickly declines as you move away from the river and into the foothills. It is a combination of poor quality soils and the steep hills of the Blue Ridges that form beside of the Capay Valley that makes grazing land to be 20 percent of the Capay Valley.

Water access is inconsistent in the Capay Valley. Lands which have access to water and prime soils are capable of producing high-quality agricultural products. The low quality soils and poor access to water combine to limit the agricultural capacity of the other areas in the Capay Valley.

Figure AG-2



The following Table AG-2 identifies the top five agricultural products in the Capay Valley region, in terms of acreage and gross receipts.

**Table AG-2
Top Agricultural Products
in Capay Valley (2008)**

Crop	Acres	Value (\$ million)
Pasture	14,084	0.9
Walnuts	2,492	4.5
Other	1,961	-
Almonds	1,635	3.4
Alfalfa Hay	1,436	1.9
Others	5,847	12.6

Source: Agricultural Issues Center, 2009 and
2008 Yolo Agricultural Commissioner Report, 2009

Figure AG-3 on the next page maps the areas within the Capay Valley that grow specific crops.

Organic Agricultural Production

The Capay Valley has developed into a center of organic agricultural production, not just in Yolo County, but in California. Even with the notoriety, the majority of land in the Capay Valley is not used in organic production. Capay Valley is home to small-scale row crop and orchard crop production. Two factors limiting the row crop and orchard crop production in the Capay Valley are access to water and small parcel size.

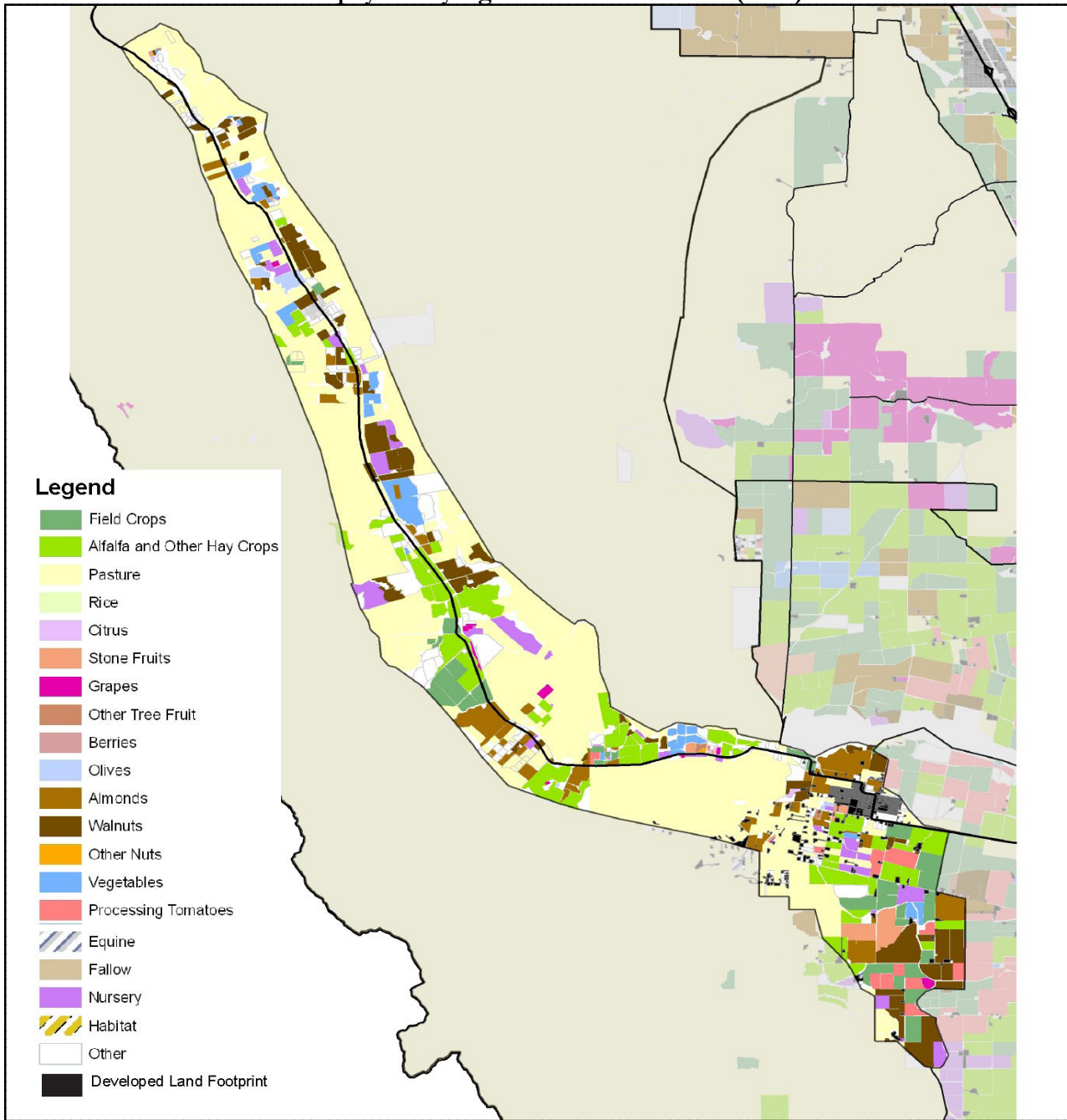
The value of organic production in the Capay Valley is not well documented. Traditional agricultural commodity production numbers are estimated based on reported market prices and yield estimates. Mixed vegetable organic production, a leading land use in the Capay Valley, cannot be estimated because neither market price nor yields are reported. Organic registration requires voluntary revenue reporting, which is not as accurate as clearly reported market prices.

In recent years, organic agricultural production in and around the Capay Valley has made great strides. Twenty-four local organic growers are currently registered with the Yolo County Agricultural Commissioner's office. Reported revenues from the approximately 700 intensively farmed acres of organic production in the Capay Valley alone have soared from approximately \$976,228 in 1995 to approximately \$3,179,232 in 2001.

Reasons for this trend include a growing public interest in organic foods of all kinds; relative lack of common agricultural pests associated with the monoculture of very large fields; favorable opportunities to purchase and lease land for small-scale producers; and convenience to markets in and around Sacramento and the Bay Area. Several successful local organic producers have ongoing relationships with upscale restaurants and large Farmers' Markets in the Bay Area, and operate custom weekly produce delivery services for individual and group subscribers.

Figure AG-3

Capay Valley Agricultural Production (2008)



Viticulture Production

California's expanding wine industry has also reached into the Capay Valley. Several small vineyards are planted, and expanding production. Local wineries have been established.

Threats to Agriculture

Increasing traffic along State Highway 16, the only arterial into the Capay Valley, poses some threat to current agricultural activities, such as the movement of farm machinery, yet significant opportunities exist for expanding and diversifying ag-related economic activities. Some land in the region is currently under-utilized, and the available labor pool could serve new ventures. Efforts are underway to assess the potential for value-added farm products utilizing year-round area production. Growers are also seeking to attain the designation of the Capay Valley as an appellation area for both wine grapes and produce, to recognize the area's uniqueness as an agricultural ecosystem and production source.

Williamson Act Contracts

The California Legislature passed the California Land Conservation Act, better known as the Williamson Act, in 1965 to preserve agricultural and open space lands. The Act creates an arrangement whereby private landowners contract with counties and cities to voluntarily restrict land to agricultural and open-space uses. These contracts endure for an annually renewing ten-year period, during which time the property cannot be re-zoned or developed for uses other than agriculture or open space and recreation area. In turn, the land is taxed at a rate consistent with its actual use rather than being taxed at market value. For agricultural properties, the basis is the agricultural income potential of the land. The annually renewing ten-year period clause in the contract automatically renews the contract each year. Either party to the contract may file a "notice of non-renewal," which ends the automatic renewal; however, the property will remain subject to the contract for the remaining nine-year term of the contract. Outright cancellations and rescissions of the contracts, which can be initiated only by the landowner, are subject to specific legal findings supported by substantial evidence by the county or city involved. Cancellation has occurred only a few times in Yolo County throughout the 45-year history of the Williamson Act.

By state law, only land located in an agricultural preserve is eligible for a Williamson Act Contract. The California Department of Conservation estimates that Williamson Act Contracts save agricultural landowners from 20 percent to 75 percent in property tax liability each year.

However, the future of the Williamson Act in Yolo County and elsewhere in the State is very much in doubt at the time of this writing (mid-2010). The Governor has defunded the program at the State level and slashed all the subvention payments that had previously been sent to the counties to help offset the loss of property tax revenues.

Agricultural Mitigation Requirements

The Yolo County Zoning Ordinance was amended in 2007 to incorporate mitigation requirements for agricultural land conversion, that is, a change of use whether fallow or in production from an agricultural use to a non-agricultural use by County approval. Every acre of agricultural land changed to a nonagricultural use shall be mitigated on a 1:1 ratio. Permitted mitigation includes:

- Granting in perpetuity a farmland conservation easement or similar instrument to the County or another qualifying agency; or

- Payment of an in-lieu fee sufficient to purchase a farmland conservation easement or similar instrument (if the project is less than 5 acres in size).

Eligible lands for this mitigation must meet the following criteria:

- They must have comparable or better soil than the land being converted to non-agricultural use, based on Storie Index;
- They shall have a comparable or better water supply and any associated water rights must remain within the mitigation land;
- They must be located in Yolo County within a two-mile radius of the land being converted to non-agricultural use, or if such is unavailable mitigation land outside the two mile radius must be of equal or better conservation easement market value to the lands inside the two mile radius area; and,
- Land previously encumbered by any other agricultural conservation easement shall not qualify, but overlapping habitat easements may qualify.

LAND USE AND HOUSING

Introduction

Through the work of the Capay Valley Area General Plan Advisory Committee, the major focus of this plan is upon the retention and preservation of agricultural lands in the hills, foothills, and the valley floor and the future management of growth, within the existing infrastructure and environmental constraints. Table 1 and the following definitions present the General Plan land use designations. Figures LU 1 through LU-5 portray the land use designations for the Capay Valley and for the communities of Capay, Guinda, Rumsey, and Brooks. The designations are to guide prospective farmers, landowners, and builders to those areas where general uses are allowed.

General Plan Land Use Designations

The land use designations in the Capay Valley Area Plan give a general view of distribution, location and extent of the uses of the land for housing, business, open space, agriculture, natural resources, recreation, and public buildings. Table 1 depicts the previous and proposed land use designations by acreage in the 2010 Capay Valley Area Plan. Figures LU-1, LU-2, LU-3, LU-4, and LU-5 map the proposed General Plan land use designations for the Capay Valley as a whole, and for the communities of Capay, Guinda, Rumsey, and the Tribal Lands in Brooks.

Table 1 Land Use Designations for Capay Valley Area Plan		
Land Use	Acres	
	2010	Previous 1983
Commercial	16.5	131.6
Residential Low Density	70.5	133.7
Agricultural	73,687	73,348
Total acres (including streets)	approx. 73,600	

There are a total of six General Plan land use designations that are applied in the Capay Valley: Commercial Local (CL); Commercial General (CG); Residential Low (RL); Agriculture (AG); Open Space (OS); Public and Quasi-Public (PQ); and Parks and Recreation (PR). In addition, there is one “overlay” designation to indicate tribal lands (Tribal Trust Overlay).

The following describes each of the designations and where they have been applied within the planning area.

COMMERCIAL LOCAL (CL)

The Commercial Local land use designation applies to local-serving uses to meet the everyday needs of residents, such as smaller restaurants and stores for local residents.

The Commercial Local designation is applied in the area of Rumsey, at the intersection of Manzanita Street and State Route 16; in Guinda, between Cleveland and Harrison Streets, on State Route 16; and in Capay between 3rd Street and 4th Street on State Route 16. The only change between the 2010 Capay Valley Area Plan and the 2030 Yolo Countywide General Plan is the redesignation of the commercial area in Rumsey from Commercial General (in the 2030 Countywide Plan) to the Commercial Local designation (in this Capay Valley Area Plan).

COMMERCIAL GENERAL (CG)

The Commercial General land use designation applies to regional and highway serving retail, office, and services uses. The one location where the Commercial General land use designation is applied in the Capay Valley planning area is at the Cache Creek casino complex in Brooks.

RESIDENTIAL LOW (RL)

The 2010 Capay Valley Area Plan retains the Residential Low General Plan designation, as did the 1983 Capay Valley General Plan (and does the 2030 Yolo Countywide General Plan). The Residential Low Density designation is applied to traditional neighborhoods with primarily detached single family homes, although detached second units or duplexes are allowed. In the Capay Valley, this designation includes all low density housing that is served by private septic and water systems.

The only significant change in the 2010 Capay Valley Area Plan from the previous 1983 plan is the proposed rezoning of all Residential Low Density lots, to reflect a minimum lot size of one acre (43,560 square foot). The change has been recommended by the Yolo County Environmental Health Division, which issues permits for individual septic systems and leachfields. The Environmental Health Division normally requires at least one acre for a septic permit.

PUBLIC AND QUASI-PUBLIC (PQ)

The Public and Quasi-Public (PQ) land use designation is applied to public/governmental offices; churches; schools, libraries, public airports, and public infrastructure systems such as wastewater treatment plants. In the Capay Valley, the PQ designation is applied to individual public properties in the towns of Guinda, Rumsey, and Capay.

AGRICULTURE (AG)

Six different agricultural or open space designations were adopted for the Capay Valley in either the 1958 General Plan, the 1975 Rumsey Area Plan, or the 1982 General Plan. The 2010 Capay Valley Area Plan combines the six designations into one "Agriculture" (AG) designation, to be consistent with the adopted 2030 Countywide General Plan. The "Recreation" designation has been retained as a "Parks and Recreation" designation which is further described below, along with an "Open Space" designation, consistent with the adopted 2030 Countywide General Plan, which contains these designations.

OPEN SPACE (OS)

The Open Space designation is applied to parcels that are publicly owned, but are not developed or accessible as parklands for the public. Large areas in the Blue Ridge that are owned by the federal government (the U.S. Bureau of Land Management), the State of California (Department of Fish and Game), or the University of California, are designated as Open Space, as are the undeveloped park lands along Cache Creek owned by Yolo County, including Cache Creek Regional Park (Upper, Middle, and Lower sites), Camp Haswell, and Otis Ranch.

PARKS AND RECREATION (PR)

The Parks and Recreation (PR) land use designation describes those areas of the planning area that function as public parklands or other developed recreation lands, with public access and improvements. The Parks and Recreation designation is applied to Nichols Park in Guinda and to the Yocha Dehe Golf Course in Brooks. These sites are further described in the Conservation and Open Space chapter of this plan.

TRIBAL TRUST OVERLAY

This is one of two “overlay” designations in the planning area, which is applied to indicate tribal trust lands held by the federal government. The overlay is placed on top of (in addition to) the underlying primary land use designation. The Tribal Trust Overlay (TTO) is applied on three properties of the Yocha Dehe Wintun Nation: the housing, school, and administrative complex for the tribe located on County Road 75A in Tancred; and the Cache Creek Casino and a portion of the Yocha Dehe Golf Course, both in Brooks.

MINERAL RESOURCE OVERLAY

The other “overlay” designation in the planning area is applied to the lands along Cache Creek which are designated by the State as containing important mineral resources (MRZ-2) and existing mining operations.

Housing

PROJECTED GROWTH IN CAPAY VALLEY

The Capay Valley area includes the towns of Capay (26.8 acres), Guinda (61.3 acres), Rumsey (1.2 acres), and the tribal trust lands of the Yocha Dehe Wintun Nation (482.8 acres). These four areas have a combined population of 1,613 persons and 576 residential units. The 2030 Yolo Countywide General Plan, adopted in November, 2009, includes growth projections for the Capay Valley, which are included in Table LU-2, below.

**Table LU-2
Growth Projections for
the Capay Valley Planning Area**

	Existing ¹	Buildout Under 1983 Plan ²	Projected new growth ³	Total Buildout
Housing	576 units	53	0	629
Population ⁴	1,440	133	0	1,573

Notes:

1. Estimate by Yolo County of existing units based on County address data for 2007.
2. Remaining growth that could occur under the previous 1983 County and Capay Valley Area General Plan.
3. Amount of new growth allowed under the 2009 Countywide General Plan and this Capay Valley Area Plan.
4. Assumes 2.5 persons per household.

Due to the remote location, limited access and lack of services such as schools, library, and other social services in the Capay Valley, significant residential development is not envisioned. However, a sufficient supply of housing should be provided for those that reside and work in the Capay Valley, particularly farm workers.

Generally, the Capay Valley is comprised of larger agricultural parcels with the exception of the Towns of Brooks, Capay, Guinda, and Rumsey. These towns have historically consisted of limited Highway Service Commercial and Residential land uses along State Route 16.

GENERAL PLAN MAPS

Figures LU-1, LU-2, LU-3, LU-4, and LU-5 on the following pages include the General Plan land use designations for the Capay Valley as a whole (Figure LU-1) and for the individual communities of Capay, Guinda, Rumsey, and for the Tribal Lands in Brooks (Figures LU-2, LU-3, LU-4, and LU-5).

Figure LU-1

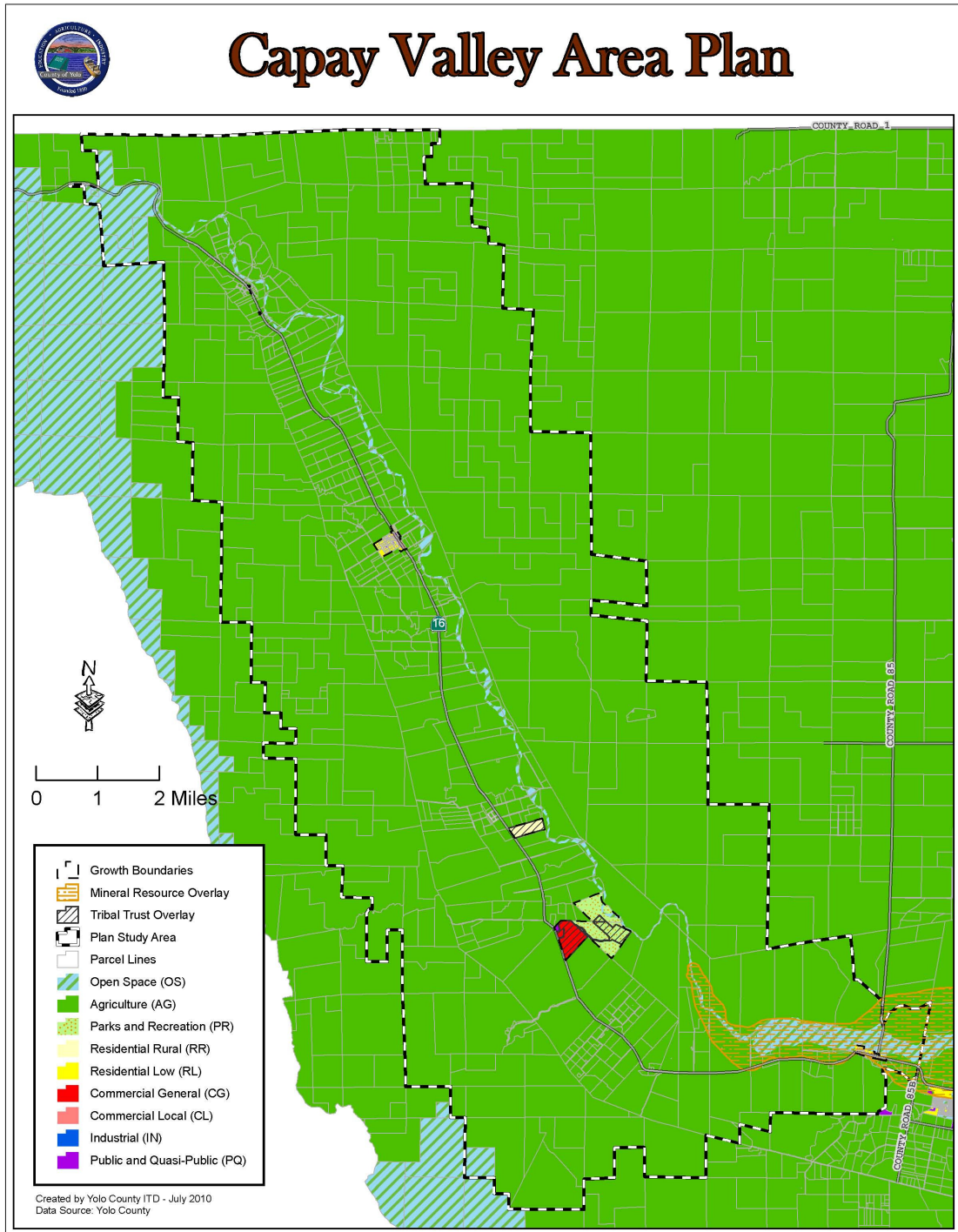


Figure LU-2

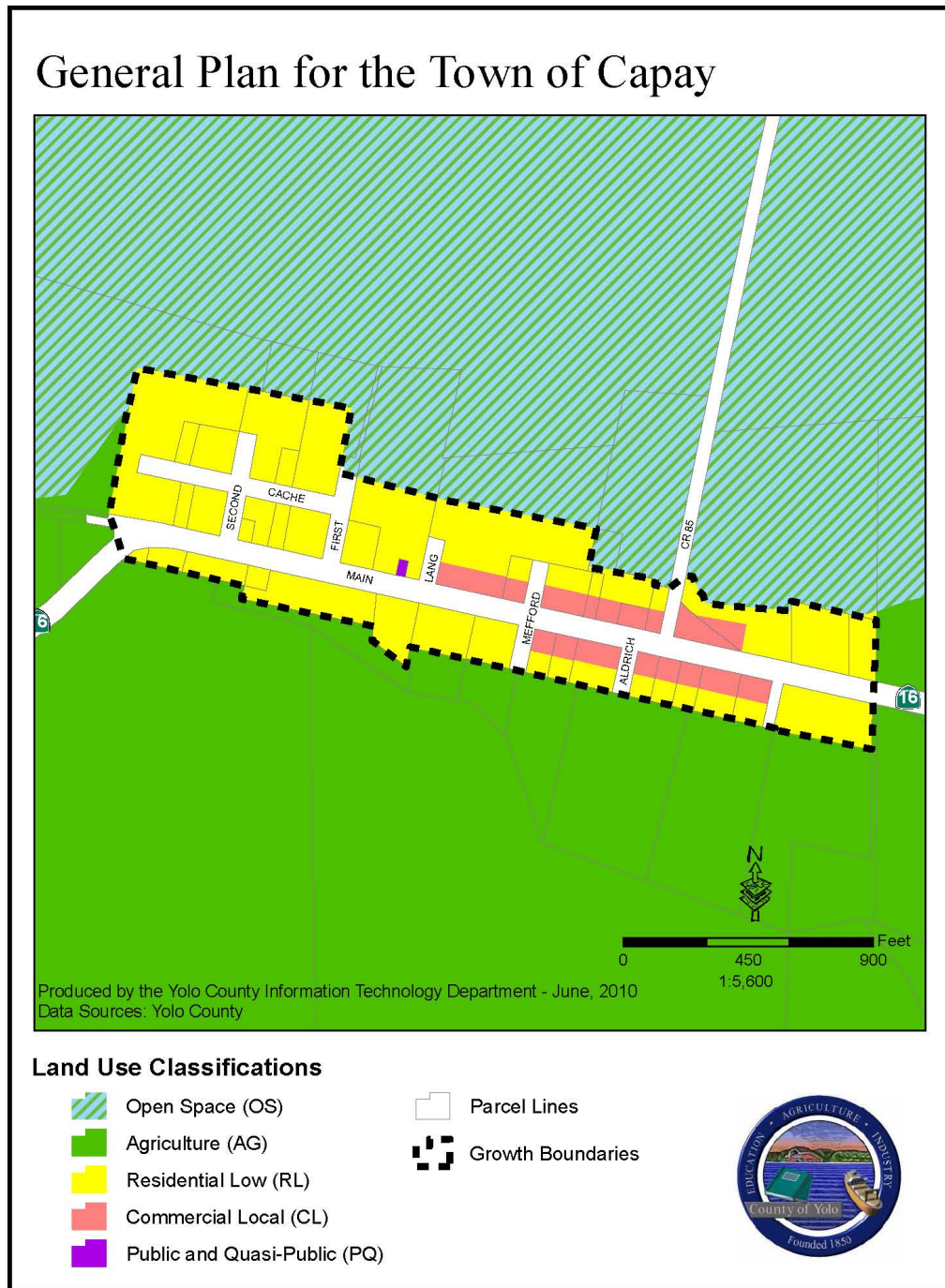


Figure LU-3

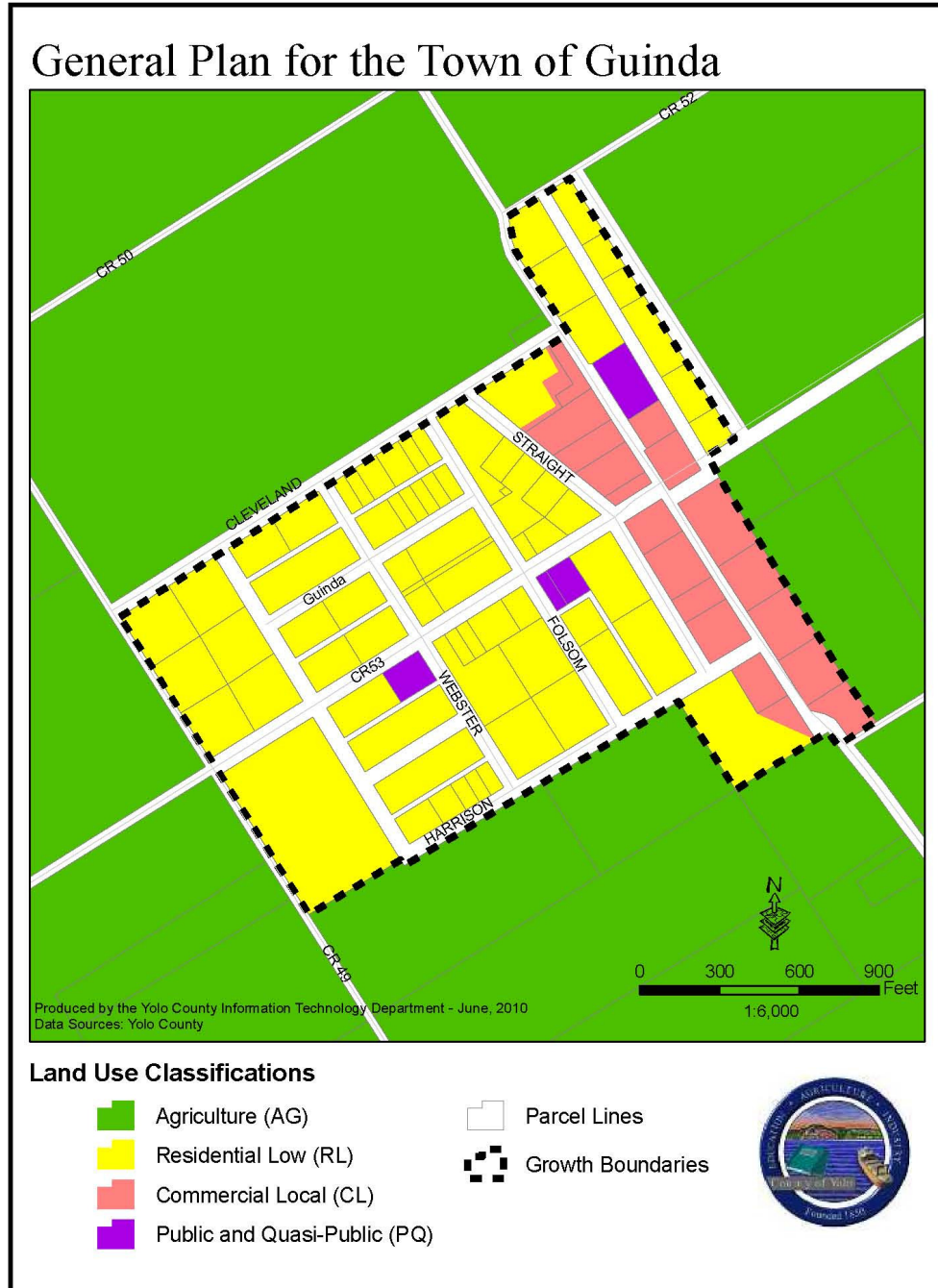
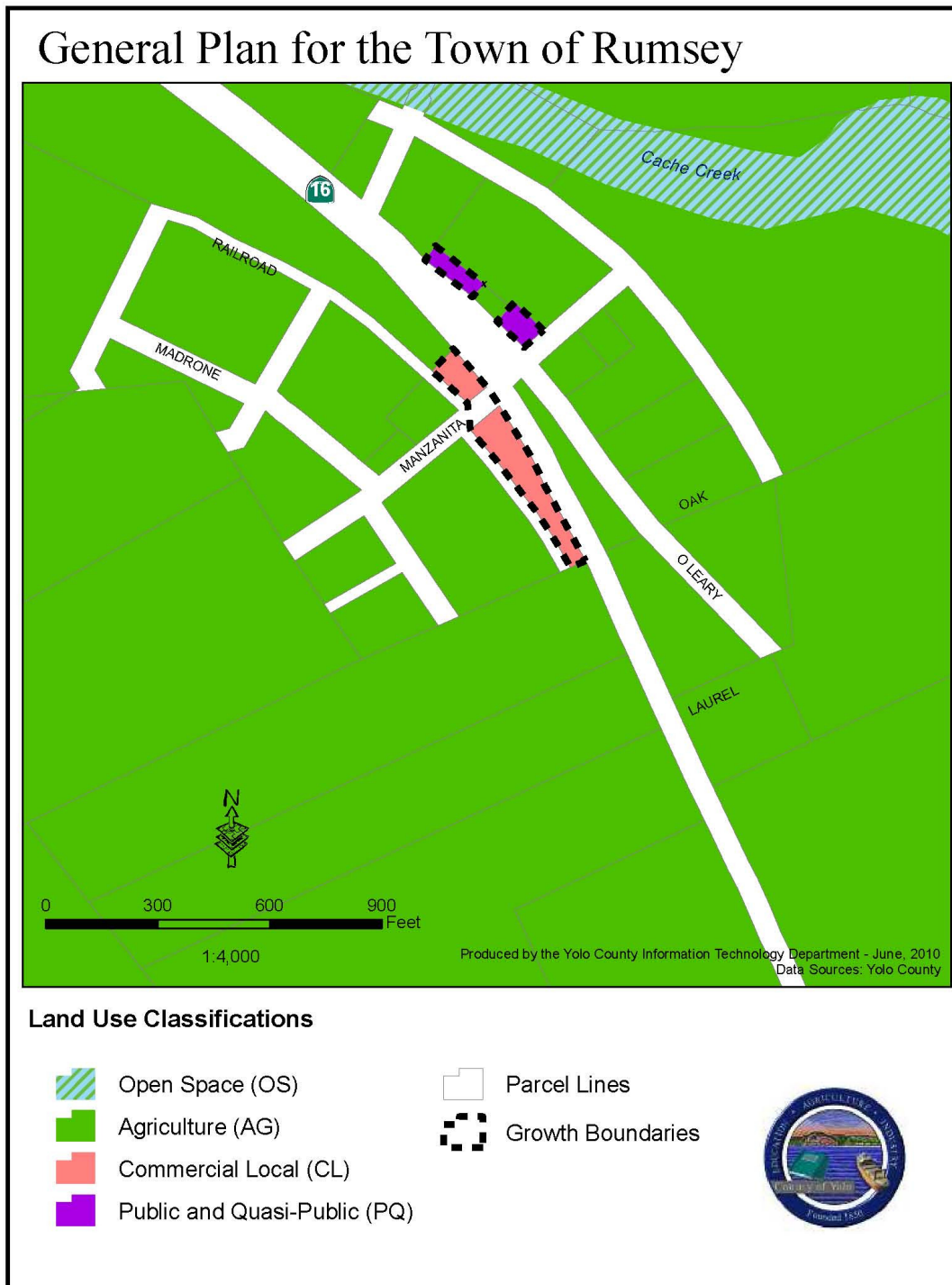


Figure LU-4












**Figure LU-5
General Plan for Tribal Lands**

Tribal Lands



Land Use Classifications

- | | | | |
|---|------------------------------|---|----------------------|
|  | Open Space (OS) |  | Growth Boundaries |
|  | Agriculture (AG) |  | Parcel Lines |
|  | Parks and Recreation (PR) |  | Tribal Trust Overlay |
|  | Residential Rural (RR) | | |
|  | Commercial General (CG) | | |
|  | Public and Quasi-Public (PQ) | | |



CIRCULATION AND TRANSPORTATION

Introduction

Residents of the Capay Valley area generally depend on the automobile as their primary mode of transportation, due to the limited availability of public transportation and the distance (30 to 45 minutes) to Woodland, the closest urban shopping and commercial service area. However, as the concern for energy consumption and environmental conditions increase, planning for alternative modes of transportation will be increased. The circulation and transportation section of the Capay Valley Area Plan will address the existing transportation modes, routes, usage, and facilities, and make recommendations concerning the future issues and policies for circulation in the area.

Existing Circulation Modes

Automobile

Since the Capay Valley is removed from major shopping and commercial service areas, and because residents currently have limited access to public transit, the automobile will likely remain the mainstay of transportation throughout the Capay Valley area.

Public Transit

Yolo County Transportation District (Yolobus) currently operates a bus route providing multiple roundtrips per day starting from Woodland and connecting the communities of Madison, Esparto, Capay, Brooks and the Cache Creek Casino on State Route (SR) 16.

Trucks

Because SR 16 is a highway connecting Lake County with Yolo County and the Sacramento area, a large number of trucks choose to use the route as a shortcut from the Mendocino-Ukiah area to the Sacramento Central Valley area. The types of products that are hauled on the route consist primarily of wood products, either wood chips to the West Sacramento area or finished lumber products such as planking and plywood for the construction industry in the Sacramento area. Trucks have been noted to travel at quite high speeds and have been considered a safety concern by local residents that has resulted in establishment of stricter speed limits in community areas and increased enforcement programs in the area.

Other Vehicles

Agricultural vehicles and school buses also utilize SR 16. Capay, Brooks, Guinda, and Rumsey are located within the Esparto Unified School District, and the District provides transit for students throughout the Capay Valley.

Bicycle

The designation of SR 16 as a scenic route in the 2030 Countywide General Plan Land Use and Community Character Element has shown that there has been an interest in maintaining, where possible, bike lanes or a bikeway associated with SR 16. The Double Century Bike Race, which runs throughout Yolo, Napa, and Lake Counties and sponsored by residents of Davis, California, has amplified the need for improvements to SR 16 for bicyclists. Should these improvements occur, the availability of these bikeways for use by the residents of the Capay Valley area would increase.

Equestrian

The use of horses in the valley, whereby horses are kept and used for recreational riding, is quite common by individuals who live in rural Capay Valley. A possibility exists that increased equestrian activity in the area would, in the future, place demand for a system of trails or areas for equestrian activity. The activities associated with Cache Creek Regional Park and the 700 acres of land which local equestrian organizations have developed for trails, may be expanded at some future date should policies change with regard to access on Bureau of Land Management lands and access to lands within the Capay Valley.

Pedestrian

Walking is more common in the communities of Capay and Guinda than in the remainder of the Capay Valley. Very few improvements, such as sidewalks, curbs and gutters, exist for pedestrians along SR 16 or the County roads. Children and pedestrians in the area use the streets or cross over private property when traveling from their origin to destination. The trails in Cache Creek Regional Park and the hunting trails throughout the watershed and foothill areas, which are operated by the Bureau of Land Management provide extensive areas for hiking.

Air

Air transportation includes general aviation, commercial aircraft, and military aircraft. Crop dusting aircraft for agricultural needs are common in Yolo County. One private airstrip is located in Capay Valley along SR 16 between Brooks and Guinda.

Existing Conditions

All surface travel in the study area occurs either on State Route 16, County maintained roads, or private roads leading to and from individual parcels. Road maintenance and construction is the responsibility of the Yolo County Planning and Public Works Department for all county-maintained roads; SR 16 is the responsibility of Caltrans. Due to budget restraints at the current time, the County has suspended maintenance on a number of county roads in the Capay Valley. However, these roads are still open for public use during the summer months, as feasible.

State Route 16

State Route (SR) 16 is a two-lane undivided east-west rural highway providing direct local and regional access to the planning area. SR 16 is generally signed at 55 miles per hour (mph), with speed limits as low as 25 to 35 mph within urbanized areas. SR 16 travels through the northernmost six miles of Yolo County. SR 16 passes through the Cache Creek Regional Park area with Cache Creek on the west and canyon walls on the east. During heavy winter rains, these canyon walls are subject to rockslides and mudslides, which create traffic hazards by occasionally blocking the highway. A road closure gate prohibits traffic from entering this segment when major rock and mudslides occur.

Numerous areas along SR 16 and on the private and public roads within the County are subject to washout, ponding, or erosion activity that requires annual maintenance. As this ponding occurs, the need for improvements to certain areas for the enlargement of drainage channels or the annual cleaning of ditches is apparent. The culverts and ditches on private property are the responsibility of the private property owner to maintain so that water can be drained off the property and those properties upstream. Those areas subject to ponding, which are on the County or State right-of-way, are the responsibility of those respective agencies to maintain. Additionally, the number of trees growing over

the roads and the brush and grasses growing in the drainage canals and ditches require trimming by either the adjacent property owners or the State or County.

The Rumsey Ditch, which is an irrigation canal, has acted as a relief for extremely severe flood flow levels. Cache Creek is the major collector of storm water throughout the entire Plan Area. The smaller creeks of Davis Creek, Fiske Creek, and Willow Creek are all drain areas which, when subject to large volumes of rainwater, are subject to sheet flow and localized ponding and flooding. Instances of sheet flow, creating sizeable landslides and the removal of weak, unconsolidated gravels and siltstones into the Creek, have also occurred. During these periods of intense rainfall, several areas have been inundated by two to six feet of mud and gravel. Those areas subject to such washouts have been noted and are considered sensitive for any future forms of permanent development.

Table CIR-1 compares 2007 peak hour traffic volumes and projected volumes for future peak hour traffic on SR 16 through the Capay Valley, as identified in the 2030 Countywide General Plan Draft EIR. Relatively little change in traffic volumes have been observed in the area north of Rumsey. However, the increase along SR 16 from County 78 to County Road 85B has been appreciable. Projected traffic volumes from County Road 78 to 85B are indicative of LOS E condition after implementation of existing and planned road and safety improvements. LOS D is considered acceptable from County Road 78 to County Road 85B (Yolo County 2030 Countywide General Plan). LOS E is projected on this segment but LOS D could be met assuming that the Caltrans Yolo-16 Safety Improvement Project is implemented.

Table CIR-1 Current and Projected Peak Hour Traffic Volumes on SR 16 through Capay Valley				
Location	Peak Hour Traffic Volume		Level of Service	
	<u>2007</u>	<u>Year 2030 General Plan</u>	<u>2007</u>	<u>Year 2030 General Plan</u>
Arbuckle Road to County Road 78	120	220	B	B
County Road 78 to County Road 85B	670	2,000	C	E
Source: 2030 Countywide General Plan Draft Environmental Impact Report				

Traffic Generation on SR 16

The Cache Creek Casino Resort, which was previously called the Cache Creek Indian Bingo & Casino Project, has expanded the existing casino. The Cache Creek Casino, owned by the Yocha Dehe Wintun Nation of California (Tribe), has recently constructed access improvements that include new and reconfigured driveways, traffic signals, and acceleration and deceleration lanes. Turnouts located within SR 16 may be constructed in consultation with Caltrans, whose Yolo-16 Safety Improvement Project identifies the need for turnouts on SR 16 somewhere between Capay and CR 82. The Cache Creek Casino has been and will continue to be a major traffic generator in the Capay Valley.

Additional traffic in the Capay Valley area is generated by the recently completed Yocha Dehe Golf Club at Cache Creek Casino Resort, which was approved by the County in 2004. Another generator of traffic along SR 16 is the annual Almond Festival, held throughout the valley during a mid-March weekend, and summer rafting trips along Cache Creek.

Future Circulation and Road Improvements

State Route 16 is the major carrier of goods and people through the Capay Valley planning area. Caltrans acquired the maintenance of SR 16 in 1932 from the County of Yolo, and made gradual improvements and dedications of rights-of-way the last 40 years. Several of the hazardous turns have been straightened or softened, and the realignment of portions of the road onto the old railroad track right-of-way bed has occurred. In light of the budget restrictions on Caltrans and the fact that less money is anticipated for the improvement of State Routes, additional major reconstruction or realignment of the road is unlikely. However, an environmental review for the Safety Improvement Project for State Route 16 has recently been completed for Caltrans as of the date of this Capay Valley Area Plan revision. According to the Yolo-16 Safety Improvement Project (SIP), improvements to SR 16 from Brooks to I-505 are planned to increase roadway safety and bring the SR 16 roadway to current Caltrans standards. The SIP includes widening the SR 16 right-of-way to provide eight-foot shoulders and an additional 12-foot zone to create a 20-foot “clear recovery zone,” free of obstructions to traffic, along each side of SR 16 to provide additional room for errant vehicles to regain control. Additional improvements identified in the SIP, that may affect the Capay Valley planning area, include left-turn pockets and right-turn lanes at various intersections of SR 16 with county roads; horizontal and vertical curve improvements at several locations; and improved sight distances.

Future Traffic

The Capay Valley area is mostly agricultural in nature and has limited access, so there has been very little population growth. Land use and zoning designations will not significantly increase the traffic levels. However, traffic is likely to increase due to recreational activities in the planning area.

Intergovernmental Agreement between Yolo County and the Yocha Dehe Wintun Nation

An Intergovernmental Agreement (“the Agreement”) was entered into on October 22, 2002, and includes mitigation for off-reservation impacts resulting from the Tribe’s casino expansion, hotel project, and the Yocha Dehe Golf Club project. The Agreement sets forth the Tribe’s and Yolo County’s commitments, obligations, and responsibilities regarding the current and future expansion of the Cache Creek Casino and supporting facilities. The Agreement acknowledges that off-reservation traffic-related impacts will occur on SR 16 and certain County and City of Woodland roads. To address these impacts, once they are identified, the County and the Tribe agree to provide mitigations on SR 16 including safety-related improvements and capacity enhancements; mitigation for impacts to county roads; traffic-related mitigations in the City of Woodland; traffic-related mitigations related to the Yolo County Transportation District; and a mandatory shuttle service policy.

Scenic Highways

The Yolo County Scenic Highway Element, adopted in 1974, showed SR 16 as being recognized as a scenic route in the Capay Valley area. The 2030 Countywide General Plan continues to recognize SR 16 from the Colusa County Line to Capay as a scenic route.

Two levels of Scenic Highways designations exist: the statewide level, which imposes design, land use, and development controls upon areas within the scenic highways corridor; and the County level, which selects criteria and controls suitable to that County. Yolo County has recognized the above route as scenic and has adopted policies regarding signing on this route. For greater detail, please refer to the Yolo County Land Use and Community Character Element of the 2030 Countywide General Plan.

CONSERVATION AND OPEN SPACE

Introduction

The Conservation and Open Space chapter provides supportive and descriptive data on the natural and other open space resources of the Capay Valley Study Area and contains the supportive materials behind the goals and policies that have been developed relating to the conservation and management of the natural resources. The Capay Valley possesses prime agricultural soils, open space, and large diversity of plant and wildlife species, and tribal archeological and cultural resources. These natural and other open space elements are recognized as valuable resources to be protected and enhanced.

Geological Resources

The Capay Valley is situated in the southeastern portion of the North Coast Ranges geomorphic province. The Rocky Ridge and Blue Ridge, part of the Coast Range, were formed approximately two million years ago as a result of extensive folding and faulting activities. Subsequent erosion and sedimentation have brought about the present topography of the Valley; a long, synclinal, relatively flat valley, ranging in elevation from 210 to 480 feet above Mean Sea Level, bordered by relatively low, but steep mountains averaging 2,400 feet in height, and sharp, deep canyons. The valley floor consists of deep, alluvial soils deposited by Cache Creek and its tributaries. These deposits make up the deep, rich soils that host the productive agriculture of Capay Valley and the Great Central Valley. The western walls of the valley are Cretaceous rocks (formed 145 to 165 million years ago) of the Great Valley Group. As with the rest of the region, the area now known as Capay Valley was under water for millennia. The eastern wall of Capay Valley consists of two different ages and types of rocks. The lower slopes are younger, formed in the Pleistocene era 2 million to 10 thousand years ago. The upper quarter of the eastern wall of the Valley consists of older Cretaceous Great Valley Group rocks (the same as the rocks on the opposite side of the valley). At the interface on the slope, a change in pitch is caused by the thrust fault that has superimposed the older rocks over the much younger Pleistocene rocks exposed at river level.

Due to active tectonics, the floor of Capay Valley is increasingly tipping downward to the east. Unlike most meandering streams, which can meander across the entire valley floor, Cache Creek is confined mostly to the eastern side of the valley.

Because of the tectonically induced confinement of the stream, the effective “floodplain” is much narrower than the whole valley floor. This unique situation impacts Valley land uses. Whereas, on a level valley floor, the water table may be at a fairly uniform depth below the surface, the inclined valley floor affects the water table accordingly. The way in which the stream erodes land and deposits sediment is also affected by the tectonic situation. An ideal single-channel stream would be free to meander across the entire valley floor (where valley floor = floodplain). Because the Capay Valley floor is being tipped eastward, the stream’s ability to traverse the entire valley floor is severely limited (see Figure CNR-1).

Erosion-resistant Pleistocene (Ice Age) rock is exposed on the eastern side, forcing Cache Creek to focus its erosive activity on the western banks, which are composed of the much more easily eroded alluvium (older river deposits). The effects of the 1997 New Year’s Flood made this point clear: while the stream did not significantly erode the eastern bedrock banks, approximately 30 acres of alluvium on the western bank where eroded at Guinda Park.

The geologic formations in and adjacent to the Capay Valley include sedimentary rock types ranging in age from Cretaceous to Recent. Sandstone and shale of Cretaceous age extends beneath the entire area, and are overlain by semi-consolidated tertiary sediments, unconsolidated Pleistocene terrace gravels and recent alluvium. The Chico group underlies the entire area and consists of alternating beds of

sandstone and shale, occasionally interspersed with beds of conglomerate. Overlying the Chico Group and outcropping along the Western flank of the Capay Valley is the Capay formation. Rock units of this formation consist of a tough, brown marine clay shale, interbedded with a hard, well cemented, micaceous sandstone.

**Figure CN-1
Geology of Capay Valley Floor**

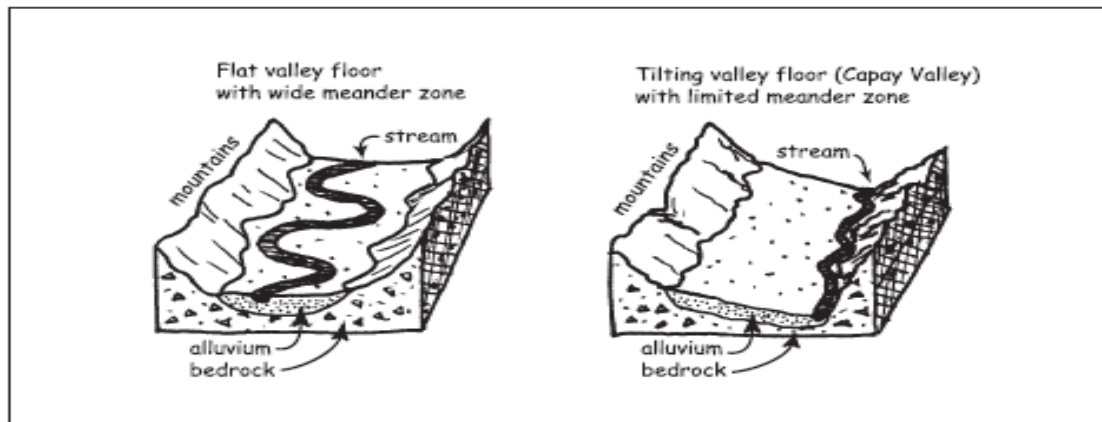


Figure 1: The unique geology of Capay Valley causes the valley floor to 'tilt' to the east.

In the Capay Valley, the Tehama Formation overlies the Capay Formation and the Chico group under all of the valley area and outcrops along the flanks of the Valley. The Tehama Formation consists of non-marine clay, clay and sandy silt, sand, gravel, weak conglomerate, marl, and limestone. At the eastern end of the Capay Valley and in Lamb Valley, continental sediments overlie the Chico group. The continental sediments include the Tehama and Red Bluff Formation and related non-marine sediments. These sediments consist of slightly consolidated clay gravels, moderately consolidate slay, silt, sand, gravel, and tuffaceous deposits.

Terrace and recent alluvial sediments cover the valley floors and overlie the Tehama and continental sediment formations. These alluvial sediments are stream terraces with particles sized up to boulders. At least four terrace levels have been formed by action of Cache Creek. Recent alluvium along the active stream channels occurs as sand and gravel deposits and missed flood plain deposits.

Mineral Resources

A variety of minerals, described below, were once mined in the Yolo County. The chief minerals presently mined are aggregate. The mineral resources found in a portion of the Capay Valley Planning Area are fully identified, described, and regulated through the Cache Creek Resource Management Plan, which is an adopted element of the 2030 Yolo Countywide General Plan.

Water Resources

Water is a valuable and vital resource of the Capay Valley. The presence and continuation of sufficient quality and quantities of water to meet agricultural and domestic needs is of the utmost importance to the economy and health of the Valley. The Capay Valley's water supplies come from rainfall, surface waters contained in its streams and waterways and water in the groundwater basins.

The Cache Creek Basin drains the eastern slopes of the Coast Range, approximately 1,150 square miles of watershed, including parts of Yolo and Colusa counties (see Figure CN-2, Sub-Watershed of Cache Creek). The major fork of Cache Creek, running through the Capay Valley, originates at Clear Lake. From there it flows southeasterly through the steep Capay Canyon to the head of the Valley. The Creek then widens and the flow becomes slower as it continues along the eastern side of the Valley to Capay, entering the lower Sacramento Valley. Eventually, it enters the Yolo By-Pass Flood Basin that is dry most of the year and provides relief of flood pressures on the Sacramento River. The By-Pass is a system of drains and sloughs that collect the water from Cache Creek and other creeks and directs them to the Sacramento River via the Cache Slough.

SURFACE WATER

Cache Creek is the largest and the only perennial water source of the Capay Valley. Cache Creek's north fork and Bear Creek are its major tributaries, plus numerous small creeks and unimproved canals that cut across the Valley carrying the winter runoff. Releases of winter rainfall stored in the Clear Lake and Indian Valley Reservoirs are vital to the creek flows throughout the year, especially during the dry summer months. Summer flows range from less than one foot per second to 1,500 feet per second, with an average of 600 feet per second. Winter flows average 6,000 to 8,000 feet per second.

CAPAY VALLEY WATERSHEDS

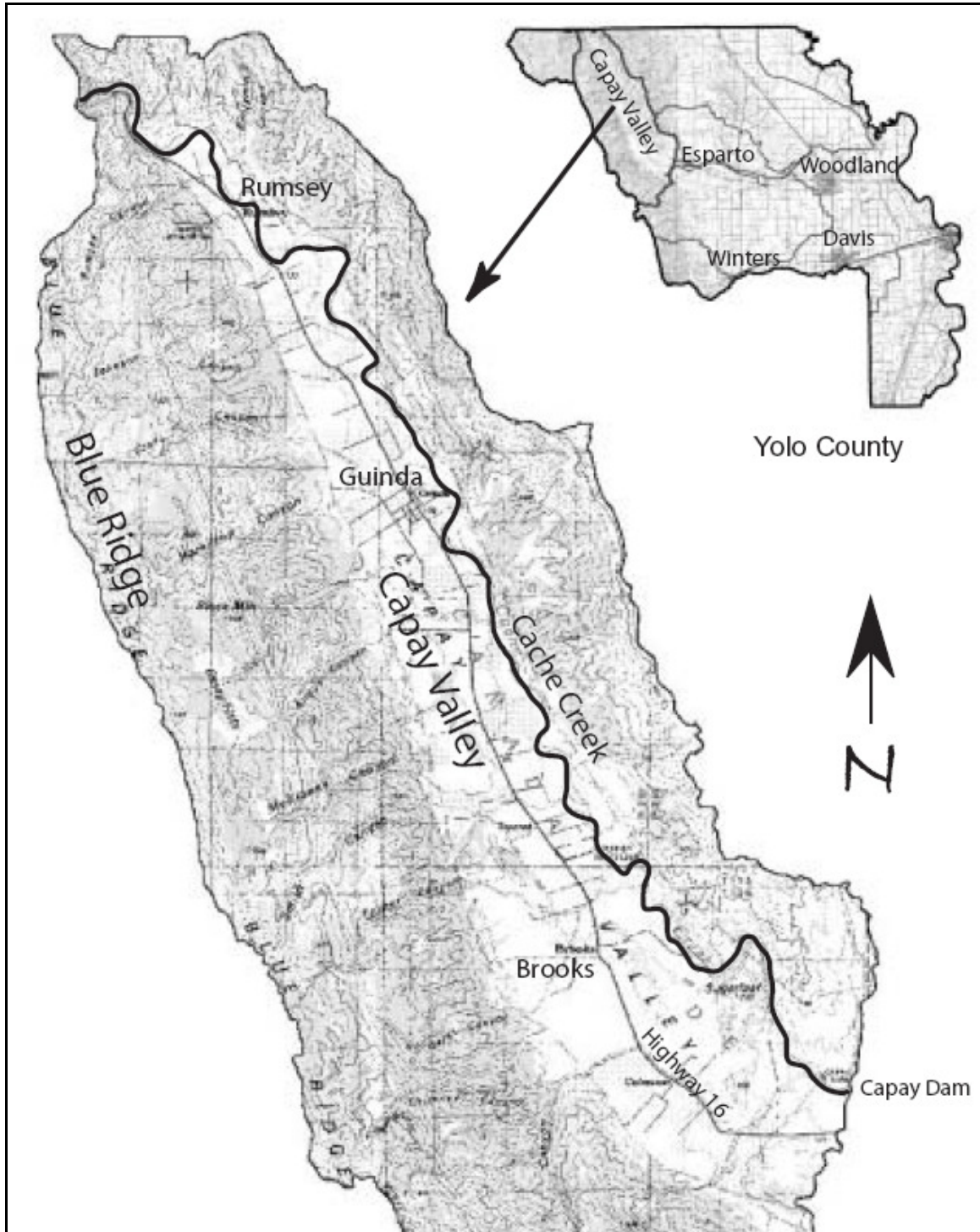
In the Capay Valley, over 145 square miles of watershed exist, containing approximately 100 lineal miles of intermittent creeks and perhaps as many miles of small feeder creeks. The Valley also enjoys numerous springs, some active year round, others only seasonal. Watersheds are geographical areas representing the approximate divides for each drainage system of the major creeks. The Capay Valley General Plan Study Area contains 16 such watersheds.

Two major watersheds are the Fiske Creek and the Davis Creek Watershed, located at the northwest end of the Valley, near the Colusa-Napa-Yolo County borders. The Davis Creek Watershed is the largest watershed in the Valley, draining approximately 23 square miles. A little over seven miles in length, the Davis Creek is fed by numerous smaller creeks as it meanders along its "U" shaped course.

The Fiske Creek Watershed located just east of Davis Creek drains approximately 12 square miles of hilly terrain. Numerous small feeder creeks, running down through canyons and gullies, empty into approximately 5.3 miles of Fiske Creek. The two larger feeder creeks are Bear Canyon Creek and Still Gulch Creek, 1.7 and 1.4 miles long, respectively.

Watersheds are a key factor in the quality and quantity of surface and ground water within the drainage area. Because soils here are protected from wind and water erosion by abundant vegetative cover, they retain large amounts of rainwater, purifying the water as it filters down into the groundwater system, or flows into nearby creeks and streams. Watersheds fall into two general categories – those in the hills which have basically been unaltered by man's activities, and those in the Valley floor which have been subject to clearing, development, and use for crops, orchards, and grazing.

Figure CN-2
Sub-Watershed of Cache Creek



Fires, road cuts, and overgrazing in the hills can lead to the deterioration of water quality due to the removal of the vegetative cover and subsequent erosion and sedimentation. Major surface activities may have effects on both the surface and the groundwater in the area. The quality and quantity of water in Valley watersheds may also be affected by the alteration of stream courses and the removal of vegetation along channels, which leads to increased erosion and sedimentation. Chemicals can enter water systems through leaching or surface runoff. Groundwater overdrafts not only reduce the levels of groundwater, but can reduce the amounts of water in springs.

CACHE CREEK WATER QUALITY

The water quality of Cache Creek is considered to be good. Cache Creek is classified by the State as a Class II waterway for warm water fisheries, and is suitable for water related recreation and for use as agricultural irrigation water. Bear Creek, a tributary to lower Cache Creek, carries a high concentration of boron. Although boron is an essential element for plant growth, concentrations greater than 30 ppm may be toxic to certain plants.

Water is a universal solvent and consequently a wide variety of solubilized substances as well as suspended inorganic and organic substances are present in streams, lakes, and groundwater. The quantity of these materials present at any given time depends upon many factors, such as composition of the streambeds and watersheds, presence of pollutants from agricultural, industrial, and other activities in the adjoining land areas, pH of the water, and rate of flow. Some of these substances are toxic, producing adverse effects in both plants and animals when ingested. Boron, for example, is present in toxic quantities in Cache Creek. Although present throughout the year, the levels vary greatly depending upon whether the water is primary runoff or water released from Clear Lake or Indian Valley. Other substances such as nickel and lead have been occasionally detected in “grab” water samples. Mercury, a highly toxic material, is generally not detected in water samples when routine analytical tests are run. However, it can be detected in aquatic animals such as fish that have the capacity to accumulate and concentrate this particular toxicant. When in its metallic state, the solubility of mercury in water is generally very low. However, specific bacteria found in certain stagnant water areas can act upon mercury, thereby solubilizing the metal and greatly increasing its reactivity and toxicity.

The following section deals with two toxic agents present in the waters of Cache Creek that can potentially alter crops and/or produce adverse effects on animals and man.

Boron

Trace amounts of boron can stimulate growth in many plants. However, concentrations of boron such as those found in Cache Creek during the summer (one to two parts per million, ppm) can be toxic to most of the crops currently grown in the Capay Valley. Most plants are seriously injured when boron levels reach five ppm or more. This level is routinely present in Bear Creek and may, at times, be present in Cache Creek. Crops sensitive to boron include English walnuts, pecans, apples, pears, plums, apricots, and all citrus. Row crops such as tomatoes, beans, milo, and wheat are also affected. Evidence of boron injury in foliage is manifested by yellowing and by subsequent death of tissue along the margin and tips of leaves. Boron accumulates in these injured leaves and has been recorded at levels of over 1,000 ppm.

Boron in concentrations of 30 ppm and more can be toxic to animals and humans as well as plants. A single dose of five grams (0.2 oz.) of boron can be fatal. Unfortunately, meaningful tests for determining the toxicity of chronic low levels of boron are not available and it may be prudent to avoid prolonged ingestion of the material when possible. This would present a

problem for many people in the Capay Valley, where many house wells either adjoin Cache Creek or tap aquifers with high boron levels.

Boron levels in Cache Creek show wide seasonal fluctuation. During the summer when the main sources of water are Indian Valley and Clear Lake, levels average between one and two ppm. Most of the boron measured is known to originate in Clear Lake and small tributaries such as Bear Creek. Indian Valley water reportedly contains extremely low boron levels and it helps to dilute relatively high levels coming from the other sources. In the fall, when flow from Indian Valley is stopped, the boron levels increase to two or three ppm. During the winter months, the levels of boron in Cache Creek have reportedly been as high as 8.8 ppm. Bear Creek appears to be the principal source of these very high levels.

An additional factor which leads to increased plant toxicity is that the boron tends to accumulate in soils due to water evaporation. In one study, an average concentration of one ppm in the irrigation water resulted in 6 ppm concentration in the soil. Fortunately, in the Capay Valley this accumulation is offset by heavy winter rains, which tend to leach out to some degree the boron which accumulated in the soil during the irrigation season.

Mercury

As indicated earlier, mercury is a metal known to be toxic in extremely low concentrations. As little as 0.005 ppm is regarded as toxic to humans and has been shown to pass from mother to child via the mother's milk.

In 1976 to 1977, the State Water Resources Control Board authorized a study of toxic substances in various streams within California. The substances covered in this study included toxicants which had accumulated in the aquatic food chain. Elevated levels of mercury were present in both predator and foraging fish found in Cache Creek. These levels exceeded the FDA limits for human consumption for mercury. Elevated levels of nickel and DDT-related compounds were also reported.

The above study clearly establishes the presence of mercury in Cache Creek water. The source of at least some of the mercury is presumably from watershed areas around old mercury mines that furnished the mercury used for gold extraction during the last century and were also highly active during World Wars I and II. Operations have been suspended but the slag dumps are presumably still a source of mercury that washes into the tributaries of Cache Creek.

GROUNDWATER

Groundwater is vital to agricultural production and to domestic water supply. Groundwater basins capable of holding several millions of acre-feet underlie most of Yolo County at depths of 20 to 200 feet. Recharge of these basins comes from deep penetration of rainwater and excess surface irrigation water, seepage from canals and ditches, percolation from streams, and subsurface inflow. Cache Creek plays an important role in replenishing the groundwater supplies in the Capay Valley. At present, groundwater quantities are generally decreasing due to increasing water requirements as a result of expanding irrigation practices. The Capay Basin overdraft is estimated at 4,100 acre-feet per year.

Groundwater in the Yolo basin is characterized by presence of sodium magnesium, calcium magnesium, or magnesium bicarbonate. The groundwater quality is good for agricultural and municipal uses, though it is hard to very hard overall. Elevated concentrations of selenium, nitrate, and boron have been detected in groundwater along Cache Creek and the Cache Creek Settling Basin area. Brackish and saline waters are found in water bearing units underlying the Tehama Formation (DWR

2004). According to monitoring conducted in the East Yolo subbasin beneath the City of Davis and University of California, average concentrations of arsenic in the Tehama formation below 600 feet below ground surface (bgs) are 0.04 mg/L (Yolo County WRA 2004.) This value exceeds the USEPA maximum contaminant level (MCL) of 0.01 mg/L that will become effective as of January 23, 2006 (USEPA 2005). The existing California MCL for arsenic is 0.05 mg/L, as stated in the California Code of Regulations (§64431 - Maximum Contaminant Levels-Inorganic Chemicals).

Boron

High concentrations of boron are present in the groundwater supply, increasing from Rumsey toward Capay, and outward to the Sacramento River. Tests for boron concentrations in Capay Valley wells showed boron contents ranging from .1 mg/L to 3.33 mg/L. Active wells had concentrations ranging from .6 mg/L to 1.7 mg/L. Wells with boron concentrations over 2 mg/L have, for the most part, been abandoned.

Salinity

The intrusion of saline or brackish water into what was historically fresh water is generally thought to be associated with coastal areas (e.g., the Salinas Valley). However, the intrusion of saline or brackish water could occur in the Sacramento Valley, including eastern Yolo County. New deeper wells for agriculture and municipal supply are being explored. Increase of groundwater use from deeper wells threatens to lower the groundwater basin, thus allowing saline water to upwell and contaminate the water supply.

The salt concentration of groundwater increases with depth. Wells less than 100 feet deep have an average sodium content of 30 mg/l and thus generally do not have any salinity problems. Deeper wells, those over 200 feet deep, have sodium contents approaching 300 mg/L. The limiting damage threshold value for water sodium concentration is 75 mg/L.

EROSION

Erosion in the Cache Creek watershed is not extensive and is confined mostly to gully heads, roads, and clean cultivated cropland. The damaging effects of sheet, rill, and gully erosion have been minor because of the natural vegetation cover, cultivating practices, and because the heavier winter rains normally come after the grass cover is established. The larger sheet and rill erosion losses occur on the steep Class VI through Class VIII lands that have been overgrazed too heavily. Other losses are from well-used dirt roads along hillsides and from head cutting gullies in canyons.

In the cropland areas, numerous sharply defined channels cross from the uplands to Cache Creek. As cropping patterns shift to more intensive agricultural practices, erosion of channel banks may become more prevalent. Lands may be used closer to the creek banks, thereby removing some of the stabilizing vegetation.

Bank and invert erosion in Cache Creek provide a heavy sediment load. The creek is maintaining its flow conditions in a stream laid alluvial deposit and has many bends in the channel and eddies caused by obstructions. Cache Creek is also attempting to maintain a stable slope against the downstream gravel removal and the resultant bottom movement increases bank height, making the banks unstable. One large source of erosion material to Cache Creek is the slide near Guinda. This slide is undercut by Cache Creek and consists of weathered and fractured sedimentary materials resting on a rock layer that slopes toward the creek.

Cache Creek erosion removes about nine acres per year from possible agricultural production. Three of the nine acres can be considered agricultural Class I through Class IV soils, with the remainder being Class IV through Class VIII mostly in the slide area. About 23 miles of creek bank are affected.

Air Quality

Capay Valley has a southeast-northwest alignment into the east side of the coastal mountains that form the western edge of the Sacramento Valley. The Capay Valley is within northwestern Yolo County, which is part of the larger Sacramento Valley Air Basin. The basin is relatively flat and bordered by mountains on the east, west, and north.

WIND CHARACTERISTICS

The winds in the Capay Valley Study Area are greatly influenced by the north coastal mountain range on the west and the proximity to the Pacific Ocean. Westerly winds are modified into southerly directions by the mechanical barrier of these mountain ranges. Prevailing winds are predominately southerly. Three-fourths of the time, winds have velocities below four miles per hour and only exceed 16 miles per hour one-tenth of the time. Occasionally, strong winds blow from the north causing lower temperatures in winter and hot, dry conditions in the summer. North winds are more persistent and irritating in the summer than in the winter.

Southerly winds predominate the Valley during the summer, but an eddy-like air movement appears to occur in the morning hours, bringing changes in wind direction. This change in wind direction is especially important when considering aerial application of sprays or agricultural burning hours.

At present, air quality in the study area is considered good. The extent to which increased numbers of potential pollution sources will affect the air quality of the Capay Valley area will depend upon the effectiveness of different technical advancements and air quality monitoring systems.

CLIMATE CHARACTERISTICS

The climate of the Capay Valley is similar to the Sacramento Valley Interior Area climate with hot, dry summers and cool, damp winters. The rainfall varies from 17 to 24 inches, with an average rainfall of 22 inches.

Most precipitation occurs from November through March, though storms occasionally occur in late September or early May. Snowfall occurs infrequently at the higher elevations. The temperature extremes (at Brooks) are recorded as a maximum of 177 degrees F. and a low of five degrees F. Daytime highs average about 100 degrees F., dropping normally to the mid-50's at night. Low averages are around 20 degrees F.

The frost-free growing season is about 235 days, from April through October. The foothills adjacent to the Valley are considered to have a "citrus climate", and the Valley floors to have a "deciduous climate".

Annual evaporation rates in the Valley are high, due to summer high temperatures and low humidity. Average annual rates are between 70 and 75 inches per year, with about three-fourths of the evaporation occurring from May through October.

AIR POLLUTANTS

Yolo County is within the Yolo-Solano Air Quality Management District (YSAQMD). The district is currently a non-attainment area for ozone (State and Federal ambient standards) and Particulate Matter (PM₁₀) (State ambient standards). While air quality plans exist for ozone, none exists (or is currently required) for PM₁₀. The project site is in an attainment area for carbon monoxide (the State and Federal ambient standards are met), since Yolo County has relatively low background levels of carbon monoxide.

Plant and Animal Resources

The Capay Valley has a rich and diversified flora and fauna. The Valley is comprised of five major habitats (natural communities) – Riparian, Woodland, Openland, Chaparral, and Aquatic and Wetland – each having its set of species that is best adapted to its particular characteristics.

RIPARIAN

Riparian communities exist in and along Cache Creek and the ephemeral streams and sloughs in the Valley. The dominant tree species include Fremont cottonwood, valley oak, black walnut, California buckeye, salt cedar, and button willow. The understory is composed of Gooding's black willow, arroyo willow, Canada thistle, vetch, and rough cocklebur. Riparian scrub occurs along both sides of Cache Creek and is dominated by dense stands of introduced species, giant reed, and tamarisk. Western ground squirrel, raccoon, black-tailed deer, mice, muskrat, weasel, skunk, opossum, and an occasional beaver are among the animals sharing this habitat. Numerous bird species inhabit this community. Species include red-breasted sapsucker, golden-crowned sparrow, yellow-rumped warbler, hawks, owls, ducks, herons, grebes, towhees, blackbirds, crows, flicker, phoebes, jays and magpies. Reptiles such as lizards, snakes, Pacific chorus frogs, turtles, newts, and toads can be found here. Cache Creek supports a variety of warm water fish – crayfish, bass, blue gill, crappie, squawfish, carp, and hard head, plus a variety of benthic organisms.

OAK WOODLAND AND SAVANNAH

Woodland habitats are wooded areas with some grassy meadows, located in the foothills. Oak grass and various forbes grow underneath digger pine, toyon, buckeye, manzanita, and buckbrush, as well as blue oak and foothill pine. Purple needlegrass, a native bunchgrass, is scattered through the oak woodlands. Skunks, coyotes, bobcats, badger, bats, mice, weasels, squirrels, blacktailed deer, and an occasional bear or mountain lion frequent this type of habitat. Birds include woodpeckers, flickers, swallows, jays, crows, magpies, towhees, sparrow, finches, quail, titmice, bluebirds, warblers, and nuthatches. Salamander and toads live in the moist areas, lizards and snakes in the meadows.

The common tree in the savannah is blue oak. Common species in the annual grass understory of the oak woodland and savannah include wild oat, ripgut brome, soft brome, ryegrass, and filaree.

OPENLAND

Cropland with occasional oak trees comprises the Valley's openland habitat. Various trees and row crops provide feed, cover, and space for gophers, mice, rats, rabbits, moles, bats, opossums, weasels, skunks, badgers, coyotes, squirrels, and deer. Deer coming down from the hills to water and to browse on crops and in the orchards continues to present a special problem to the farmers. The numerous bird species include kites, hawks, owls, eagles, vultures, crows, starlings, blackbirds, sparrows, wrens, larks, bluebirds, swallows, Kingbirds, finches, doves, killdeer, and pheasants. Salamanders, toads, lizards, and snakes are also numerous.

CHAPARRAL

The fourth major habitat is chaparral, occurring primarily on the steep hillsides. Manzanita, chamise, and grasses dominate the hills with toyon, oak, bay trees and digger pines growing in the canyons. These plants and trees provide a home for deer mice, opossums, skunks, bobcats, fox badger, rabbits, black-tailed deer, squirrels, chipmunks and white-throated woodrats, and birds including hawks, owls, vultures, jays, quail, pigeon, wrens, warblers, towhees, bushtits, and sparrows. Snakes and lizards also abound.

AQUATIC AND WETLAND

Cache Creek is a perennial creek with flows controlled by the Yolo County Flood Control and Water Conservation District by regulating releases from Clear lake and Indian Valley Reservoir. Downstream, the Capay Diversion Dam blocks the movement of anadromous fish farther upstream. The creek supports crayfish, blue gill, squawfish, suckers, and small mouth bass.

Along Cache Creek and near springs, small areas of wetland habitat occur. Wetlands vegetation includes that of the surrounding areas, plus willows and water plants. Beaver, mink, raccoons, and muskrats are found here, along with kites, hawks, ducks, and herons.

OTHER HABITAT AREAS

A variety of wildlife can be found around the edges of the towns in the Valley. Squirrels, mice, gophers, and jackrabbits are common, as are house sparrows, white crowned and golden crowned sparrows, magpies, flickers, scrub jays, robins, crows, brown towhees, blackbirds, hummingbirds, and cedar waxwings.

Archaeological and Cultural Resources

Capay Valley is located in Yolo County within the Sacramento Valley, the northern half of California's Central Valley. This area is primarily defined as a hydrographic unit—the contiguous watershed drained by the Sacramento River and its tributaries. This vast drainage stretches 384 miles, from the headwaters in the northern Sacramento Valley to the Sacramento–San Joaquin River Delta (U.S. Forest Service 2001). These watercourses have moved alluvium from the Sierra Nevadas.

PREHISTORY

Although humans may have inhabited the Sacramento Valley as early as 10,000 years ago, the evidence for early human use likely is buried by deep alluvial sediments that accumulated rapidly during the late Holocene epoch.

Although rare, archaeological remains of this early period have been identified in and around the Central Valley (Johnson 1967; Peak & Associates 1981; Treganza and Heizer 1953), although to date none has been located in the county. These archaeological remains have been grouped into what is called the Farmington Complex, which is characterized by core tools and large, reworked percussion flakes (Treganza and Heizer 1953). The economy of this early period is generally thought to have been based on the exploitation of large game. Later periods are better understood because of more abundant representation in the archaeological record.

The taxonomic framework of the Sacramento Valley has been described in terms of archaeological patterns (Moratto 1984). A pattern is a general mode of life characterized archaeologically by

technology, particular artifacts, economic systems, trade, burial practices, and other aspects of culture. Fredrickson (1973) identified three general patterns of resource use for the period between 4,500 B.P. and 3,500 B.P.: the Windmill, Berkeley, and Augustine Patterns. The Windmill Pattern (4,500 B.P.–3,000 B.P.) shows evidence of a mixed economy of game procurement and use of wild plant foods. The archaeological record contains numerous projectile points and a wide range of faunal remains. Fishing was also an important activity, as is evidenced by fishing hooks and spears that have been found in association with the remains of sturgeon, salmon, and other fish (Moratto 1984). Plant use is indicated by ground stone artifacts and clay balls that were used for boiling substances like acorn mush. Settlement strategies during the Windmill period reflect seasonal adaptations: habitation sites in the valley were occupied during the winter months, but populations moved into the foothills during the summer (Moratto 1984).

The Windmill Pattern ultimately changed to a more specialized adaptation labeled the Berkeley Pattern (3,500 BP–2,500 B.P.). A reduction in the number of handstones and millstones and an increase in mortars and pestles indicate a greater dependence on acorns. Although gathered plant resources gained importance during this period, the continued presence of projectile points and atlatls (spear-throwers) in the archaeological record indicates that hunting was still an important activity (Fredrickson 1973).

The Berkeley Pattern was superseded by the Augustine Pattern around A.D. 500. The Augustine Pattern reflects a change in subsistence and land use patterns to those of the ethnographically known people (Nisenan) of the historic era. This pattern exhibits a great elaboration of ceremonial and social organization, including the development of social stratification. Exchange became well developed, and an even more intensive emphasis was placed on the use of the acorn, as evidenced by the presence in the archaeological record of shaped mortars and pestles and numerous hopper mortars. Other notable elements of the artifact assemblage associated with the Augustine Pattern include flanged tubular smoking pipes, harpoons, clamshell disc beads, and an especially elaborate baked clay industry, which included figurines and pottery vessels (Cosumnes Brownware). The presence of small projectile point types, referred to as the Gunther Barbed series, suggests the use of the bow and arrow. Other traits associated with the Augustine Pattern include the introduction of preinterment burning of offerings in a grave pit during mortuary ritual, increased sedentary villages, population growth, and an incipient monetary economy in which beads were used as a standard of exchange (Moratto 1984).

ETHNOGRAPHIC CONTEXT

The Capay Valley lies within the southern part of the territory of the Wintun. Kroeber located the Wintun in a relatively long, narrow territory on the western side of the Sacramento Valley, between the Sacramento River and the crest of the Coast Range. The Wintun are the most numerous and occupied the largest territory of the five tribal groups occupying parts of the Sacramento Valley in late prehistoric times and were important for their role in the development and diffusion of customs to other valley tribes. The Wintun are speakers of a Penutian dialect of language as were other Native American cultures found in the Sacramento Valley. The Wintun of the Capay Valley are one of several valley tribes that have been linked due to proximity and language stock under the name “Patwin”.

Among the Patwin, the major dialects corresponded to the major differences of their places of occupation – the hills and valleys of the Sacramento Valley. Those speaking the valley dialect of Patwin made their permanent villages in the marsh belt near the river during the rainy season and moved to live in the adjacent plains near tributary streams during the dry part of the year. The Hill Patwin, located in and around the Capay Valley lived in winter villages near streams running into the valley and in summer moved into the cooler and more hospitable hills.

HISTORICAL OVERVIEW

The first Euro-American contact with the Wintun of the Capay valley is uncertain, but even before the arrival of great numbers of Euro-Americans, a wave of devastating illnesses known as “the great pandemic of 1833” struck a devastating blow at the stability of Native American cultures throughout the valley. Kroeber estimates the precontact Wintun population at around 12,000. Beginning in 1833 and again in 1838 and 1846 a series of epidemics, including smallpox killed a large percentage of the Wintun population. While no numbers specific to the Wintun population decline in this period are available, by the end of the Mexican occupation of California the overall population of northern California Native Americans had been reduced by 60% by disease and an additional 12% by State-sanctioned killing. Kroeber remarks that the Wintun were more heavily affected by the epidemics than were their neighbors to the North and South.

Further disruption of the traditional economy was a consequence of the destruction of the resources on which the Wintun and other tribes of California had traditionally depended. Cattle and hogs changed the landscape and ate the acorns and grasses whose seeds the tribes had depended upon. Agricultural and fencing removed access to traditional gathering and hunting areas and the California State Legislature in 1850 passed a law that reduced Indians to a state of virtual slavery.

The Capay Valley is located on lands that were a portion of the Canada de Capay Land Grant. In 1843 a huge tract of land, 40,079 acres, along Cache Creek and including all of the Capay Valley was granted by the Spanish to Francisco Berryessa and his brothers Santiago and Demisio. With the arrival of countless Americans on the eastern part of the continent the system of Spanish land grants was quickly disregarded.

Capay Valley is part of Yolo County, which was one of the original 27 counties created when California became a state in 1850. At one time, the region abounded with fields of tule rushes, as well as swamplands, marshes, and sloughs (Gudde 1969; *Daily Alta California* 1850; Coy 1973). As early as 1808, the Central Valley was explored by Spaniards, including Gabriel Moraga who guided an expedition up the Sacramento River to present day Sutter County in search of potential inland mission sites.

During the early 1800s, the region was also explored by hunters and trappers such as Jedediah Strong Smith, Ewing Young, and a group of Hudson’s Bay Company trappers. The hunters found the banks of the rivers and streams rich with beaver, otter, and other animals whose pelts were highly valuable commodity in the worldwide trade of the time (Kyle 1990). They used to “cache” their pelts near Cache Creek, hence the name.

HISTORY OF THE CAPAY VALLEY

Pre-1840

The Cache Creek watershed supported Indian tribes for centuries before nineteenth-century European and American explorers and trappers began to move through the area in the 1830’s. Archeological investigations have established that over 5,000 Native Americans once inhabited the Cache Creek Basin, which extends from Clear Lake east toward the Sacramento River. Surveys within this area have identified numerous archeological sites, some of which possess considerable antiquity. Small remnants of one large village on the bank of Cache Creek have provided the oldest record of human habitation in Capay Valley. The tribes indigenous to the valley primarily consisted of Patwin/Southern Wintun of the Penintian Family. Pomo and Lake Miwok Indians lived on adjacent land. The word Capay is a derivation of the Wintun word for “stream.” Early nineteenth-century disease epidemics took a heavy

toll on the Native Americans, although some of the Southern Wintun tribe continued to inhabit the upper reaches of the Capay Valley even after Mexican land grants appropriated most of the territory.

1840's

In 1842, the Mexican government granted William Gordon two leagues of land (the Guesissosi grant) on both sides of Cache Creek from the western hills to the Sacramento River. In 1846, the nine-league (40,000-acre) Rancho Canada de Capay, extending from the western edge of Gordon's grant through the north end of the Capay Valley was granted to the three Berryessa brothers by Mexico's Governor Pio Pico.

1850's and 1860's

In 1858, the land speculators Arnold and Gillig purchased 13,760 acres of the Berryessa grant and began to subdivide the land into parcels of 200 to 3,800 acres. Gillig planted grain, grapevines, and fruit trees northwest of Langville (the present community of Capay) and established the County's first winery in 1860. Other speculators, Rhodes and Pratt, each took title to 6,800 acres in the northern valley and began to sell parcels to settlers. Scattered ranches and tiny settlements developed along the primitive road leading to the quicksilver (mercury) mines in the canyon country to the west.

1870's

Livestock and grain farming were the mainstays of the region's developing agricultural economy, although several small vineyards and orchards offered promise. The Orleans Hill Winery in the Lamb Valley area west of Esparto gained recognition until disease destroyed its vineyards. In the early 1870's, local farmers formed the Rumsey Ditch Association to build and operate an eight-mile irrigation canal (later shortened) from Cache Creek above Rumsey to the vicinity of Guinda. Several small schools were established in the Capay Valley. After the Central Pacific Railroad established a line from Elmira in Solano County to Winters in Yolo County, five investors incorporated the Vaca Valley and Clear Lake Railroad in 1877, planning to extend the line north from Winters to Cache Creek and thence through the Capay Valley on to Clear Lake. Although financing for the line was not soon secured, the town of Madison was established where the railroad was to curve north toward the valley. Most of the village of Cottonwood to the south was moved to the new town, which became a center for grain shipping.

1880's

In 1887, several San Francisco investors incorporated the Capay Valley Land Company, composed chiefly of officers of the Southern Pacific Railroad. The company planned to divide several large land holdings into 10- to 40-acre parcels for fruit farming and to establish town sites along the length of the coming railroad. In 1888, the new town of Esperanza (renamed Esparto, after a native bunch grass, in 1890) was laid out, and railroad track was laid up to Rumsey (named for a local landowner) at the north end of the valley, with the first passenger train running in July. At the terminus of the railroad were railroad sidings, a manually operated turntable, a section house, and the site for a planned 23-room hotel (never built). Guinda had a house for the section supervisor and a bunkhouse for workers. In 1889, a three-story hotel was completed in Esparto, featuring gaslights, a pressurized water system and electric bells. (The hotel was damaged in the 1892 earthquake but repaired; after a succession of ownerships, the building was torn down in 1935.) Postmasters were appointed at Guinda (the Spanish word for the wild cherry tree) and Rumsey, and Langville was renamed Capay.

1890's

The Guinda store (still in use) was built in 1891. The Guinda Hotel was built in 1893 (torn down in the 1990's). Both were busy and successful during their early years, and the Guinda Hotel supported a popular bar until the 1970's. A substantial two-story elementary school building was erected at Guinda. Fruit packing sheds began to operate in Guinda and Rumsey, making daily seasonal deliveries to two trains with ice cars. Other land company plans were short-lived. A community four miles west of Capay called Cadenasso (after local landowners) never developed into a town, and six miles to the north a colony near Tancred (named for a hero of the First Crusade) lasted only until a hard frost killed many of the young fruit trees in 1896 and the colony went bankrupt. Tancred had a post office from 1892 until 1932 but never became a functioning town. In 1893, Yolo County's second high school was established in Esparto. In the early 1890's a single-wire grounded telephone line between Guinda and Rumsey was laid and a phone placed in a store in each town, for use by the public when the stores were open.

1900's

In 1900, the population of the Capay Valley was recorded at 1,381. Rumsey residents built a hall for a local women's group in 1903, and Guinda built a community hall in 1909 (now the Western Yolo Grange Hall). The small band of local Wintun Indians was relocated from its old village site northeast of Rumsey to a federally purchased rancheria on the other side of the valley (later some of the band moved to a new site near Brooks, while others moved to Colusa County). Plans to extend the railroad through the Rumsey canyon were abandoned. A low-water wooden bridge crossed Cache Creek from County Road 53, and several families lived in the hills on the east side. Constables and judges were elected for each judicial district, and small jails were erected in Guinda and Capay. For a time, a Capay doctor made house calls in the valley.

1910's

A Catholic Church was built in Guinda (demolished about 1930), and in 1914, the Yolo Water and Power Company completed a concrete dam across the outlet of Clear Lake that feeds into Cache Creek, improving storage capacity for flood control and irrigation downstream. In 1915, the valley's first Almond Festival took place, with the crowing of an Almond Queen at Guinda's Methodist Church; thereafter, the festival became an annual celebration of spring blossoms and local products. A new wooden bridge across Cache Creek was built near Guinda about 1916 (later washed out, and then replaced by an iron structure about 1956 on County Road 57). In 1918, a new elementary school was built in Guinda, and a high school building in Esparto (later enlarged in a 1939 WPA project). A second general store opened in Guinda in 1919. The Capay Valley Almond Growers Exchange began to serve the area's growing almond acreage as farmers converted unprofitable fruit orchards.

1920's and 1930's

In 1928, electric power became available in the valley and was extended to outlying areas over the next decade. In 1929, the present Rumsey Bridge replaced an earlier bridge destroyed by flooding; a chair carrier bridge also spanned the creek to carry people and supplies across to the east side. Until the late 1930's there was also a cable suspension footbridge south of Guinda. In the early 1930's, the Victoria Land Company, owned by a Stockton man, farmed a large plot of land in the Guinda and Rumsey areas, producing almonds, apricots and peaches and hiring mostly local people as needed. The Great Depression discouraged local economic activity, but government projects provided some employment. Many local farmers had graded and constructed the original roads, however starting in 1931, State Highway 16 was cut through the Rumsey canyon, and by 1934, and transportation was opened up to

Highway 20. Six gas stations served motorists between Brooks and Rumsey (the last closed in the 1990's). By 1937, the railroad tracks were being taken out from Rumsey on down the valley, and rail service ceased north of Esparto in 1941 (passenger service continued between Esparto and Elmira until 1957). A daily motor stage took passengers and freight from Rumsey to Woodland. During these decades, several families operated small Grade B dairy farms.

1940's and 1950's

Major flooding occurred during the high-water year 1940-41 and again in 1955-56. During World War II, many of the valley's young men served in the military, while remaining residents participated in various wartime activities. Several Japanese families, who had operated fruit orchards in the upper valley, were relocated to wartime internment camps and did not return after the war. In 1948, the original Capay Valley Telephone Company changed hands and began expanding services through a 10-line switchboard in Brooks, which later became a 30-line switchboard in Guinda. (The company was locally owned until 1988.) Efforts to convince voters to create a consolidated school district in Esparto were finally successful in 1959-60, and the small elementary schools dotting the valley closed down as school bus service expanded.

1960's and 1970's

After a series of hard late freezes, walnut plantings began to replace old valley almond orchards. In 1975, the newly completed Indian Valley Dam in the mountains north of the Capay Valley began to store water for flood control and irrigation; the reservoir was not yet filled when the 1976-77 drought period began.

1980's

Organic growers first began farming in the Capay Valley. In 1982, Yolo County Planning staff, in consultation with the resident-formed General Plan Citizens Advisory Group, prepared a Capay Valley Community Area Plan, which became part of the Yolo County General Plan in 1983. In 1985, the Rumsey Band of the Wintun Tribe opened a bingo parlor near Brooks.

1990's

A series of drought years after 1987 ended in 1992. The Rumsey Rancheria bingo parlor became the Cache Creek Casino, which developed rapidly into a major gambling venue. In 1994, the Yolo County Flood Control and Water Conservation District retrofitted the original Capay diversion dam with a "bladder" dam, at that time the longest inflatable dam in the world, to conserve water and revenue from the valley's agriculture. Winter floods in 1995 and 1998 caused severe erosion along Cache Creek. In addition, after years of fundraising, the new Esparto Regional Library branch of the Yolo County Library opened in 1999.

2000 to Present

In year 2001, Capay Valley residents reactivated the Citizen's Advisory Committee for the update of the 1983 Capay Valley General Plan. In 2002, plans were proposed for a massive expansion of the Indian casino at Brooks. Yolo County Supervisors, local residents, and tribal representatives sought ways to find common ground on approaches to growth and change. In late September 2002, the Board of Supervisors reached an agreement with the Wintun Tribe over terms of the expansion and mitigation of environmental impacts. Another expansion of the Casino was planned in 2010

EARLY SETTLEMENTS

The California Gold Rush transformed the Capay Valley area from an isolated farming community into a booming agricultural region as disenchanted miners realized they could make a greater fortune through farming and ranching rather than gold prospecting. The majority of growth occurred in near roads and fords crossing Putah and Cache Creeks. Characteristic of this period in northern California, remaining Native residents were moved to a series of reservations until few remained in their aboriginal homelands. Two Rancheria parcels were reserved in 1907 and 1908 for the remaining Patwin of the area. However, as was frequently the case throughout northern California, these parcels proved to be too productive in their agricultural potential and the residents were removed to a 66-acre parcel between Tancred and Brooks (Gerry).

Guinda

In 1887, Capay Valley Land Company, a subsidiary of Southern Pacific Railroad Company, established the Guinda townsite adjacent to the railroad depot. Called the Guinda Colony Tract, 1,380 acres were laid by the company for a subdivision that included rural lots of 10 and 20 acres. Packing and shipping orchard fruit products stabilized the town's economy until the 1920s. By the 1980s, the town consisted of a small settled residential area and local businesses.

Rumsey

Like Guinda, the Southern Pacific Railroad established the townsite of Rumsey in 1887, as it was the terminus of the railroad alignment from Elmira. The town was named for Captain DeWitt C. Rumsey, a pioneer landowner in the Capay Valley. Growth of Rumsey was slow and the town hall was not constructed until 1906. Agricultural land, especially organic farms, surrounds the town and much of the land is zoned as an agricultural preserve.

PREHISTORIC ARCHAEOLOGICAL RESOURCES

Prehistoric site types include: habitation sites, limited occupation sites, hunting/processing camps, lithic reduction stations, milling stations, quarries/single reduction locations, rock art sites, rock features and burial locations. Sites may fall into more than one category. For example, habitation sites may be associated with rock art. Therefore, sites may be classified as more than one site type. The most common prehistoric site types found in the County are temporary occupation sites, followed by hunting/processing camps, habitation sites, milling stations, lithic scatters, rock features, quarry/single reduction loci, burial sites and rock art sites. The distribution of prehistoric sites is highly correlated to the presence of major rivers in the Sacramento Valley with their associated areas of high ground and natural levees, as well as creeks and minor drainages along the eastern slopes of the North Coast range and their adjacent interior valleys and grasslands.

The overall prehistoric archaeological sensitivity of the area is generally considered high, particularly in those areas near water sources, on terraces along watercourses, or along natural levees above sloughs in the delta area. In particular, the Cache Creek watershed in the Capay Valley watershed possess river terraces that are rich in archaeological resources. In general, the lands on the margins of the Sacramento River are sensitive for prehistoric archaeological resources. Prehistoric archaeological sites often are located along riverbanks in the Central Valley, although they usually are found on natural rises that protected the inhabitants from frequent floods. Sites along the Sacramento River in Yolo County do exist, and the possibility remains that additional prehistoric deposits may be buried in similar locations, in natural buried contexts (such as under alluvial deposits) as well as cultural buried contexts (such as below constructed levees or mixed in as a portion of levee fill material).

HISTORIC LANDMARKS AND POINTS OF HISTORIC INTEREST

Several structures and one point of historic interest lie within the Capay Valley. The Rumsey Town Hall located in Rumsey and the Canon School located north of Brooks have been designated as Historic Landmarks by the County and the State. The site of the former Capay-Langville School in Capay was designated a point of historic interest in July of 1981 by the State Historical Resources Commission upon recommendation by the Yolo County Museum and Historical Landmarks Advisory Committee.

Several other structures may be eligible for inclusion as a state or local historical landmark. The Rumsey School, Guinda Grange Hall, Guinda Store, the Capay Jail, and several of the older homesteads may be future candidates for inclusion in the historical records of either Yolo County or the State or National records. As activity occurs in the Capay Valley, either building or farming, and an archaeological or historical resource be encountered, the Yolo County Planning and Public Works Department is to be contacted prior to any further work. The agency may refer the matter to the appropriate historical agency for a determination as to appropriate safeguards to protect the archaeological find or historic site or structure. The agency may be the University of California at Davis, State Historical Resources Commission, or the Yolo County Museum and Historical Landmarks Advisory Committee.

Guinda Area

In the Guinda and surrounding area, five buildings and structures appear to meet the criteria for listing in the NRHP, the CRHR, or have local designation. However, these have not been formally nominated and listed in the National Register.

Rumsey Area

The town of Rumsey includes seven properties that have been surveyed, evaluated, and found to meet the criteria for listing in the NRHP, the CRHR, or have local designation. The Rumsey Town Hall on Manzanita Street was listed in the National Register in 1972.

Brooks Area

One National Register-listed building is located in the vicinity of the settlement of Brooks in the Capay Valley. The Canon School on State Route 16 was constructed in 1884. It was listed in the National Register in 1972. Seven other historical resources in the vicinity appear in the Nation Register of Historic Places.

REGULATIONS CONCERNING NATIVE AMERICAN CULTURAL RESOURCES AND HERITAGE

California Public Resources Code 5097.9 states that no public agency, or a private party on a public property, shall “interfere with the free expression or exercise of Native American Religion...” The Code further states that:

No such agency or party [shall] cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine...except on a clear and convincing showing that the public interest and necessity so require. County and city lands are exempt from this provision, except for parklands larger than 100 acres.

Senate Bill 18 (SB 18) went into effect March 1, 2005, and is intended to provide additional protection for Traditional Tribal Cultural Places. Any agency contemplating adoption or amendment/ update of any General Plan or Specific Plan must call the Native American Heritage Commission (NAHC) for a consultation as soon as possible in the planning process. NAHC will determine the relevant tribes to contact, and the lead agency must then contact them with their plan proposal. Under the law, the tribes have 90 days from the time they are contacted about the project to respond with comments, which must be considered in the planning process. This legislation stipulates the following planning regulations:

1. Recognize that California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places are essential elements in tribal cultural traditions, heritages, and identities.
2. Establish meaningful consultations between California Native American tribal governments and California local governments at the earliest possible point in the local government land use planning process so that these places can be identified and considered.
3. Establish government-to-government consultations regarding potential means to preserve those places, determine the level of necessary confidentiality of their specific location, and develop proper treatment and management plans.
4. Ensure that local and tribal governments have information available early in the land use planning process to avoid potential conflicts over the preservation of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places.
5. Enable California Native American tribes to manage and act as caretakers of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places.
6. Encourage local governments to consider preservation of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places in their land use planning processes by placing them in open space.
7. Encourage local governments to consider the cultural aspects of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places early in land use planning processes.

Open Space and Recreation Lands

The agrarian character of the Capay Valley depends on the maintenance of large areas of “open space,” principally tracts of rangeland or ridgetop areas reserved as natural habitat for wildlife, both flora and fauna. The policies are to be tailored to the specific geography of the study area based on the following definitions:

- Steep Mountain Slope and High Basins – Blue Ridge and the spur of the Vaca mountains running from Capay to approximately three miles north of Rumsey is largely land held in agricultural preserve or land owned and managed by Bureau of Land Management.
- Foothills, Lower Slopes – The Capay Hills on the eastern border of the Valley, and the lower slopes of the Vaca chain to the west, are a crucial buffer zone between the intensively farmed Valley floor and the rugged mountainous regions or upland grazing lands.
- Valley Floor – Most of the flatland along Cache Creek is devoted to agriculture, primarily orchards, hayfields, grain, row crops, and livestock. The Valley Floor is defined by the following characteristics: all townsites and most existing housing units are located on the Valley Floor; the Valley Floor contains the largest amount of irrigated farmland in the study area; the Valley possesses Cache Creek, the primary creek and drainage channel for the study area; and the Valley contains the only year-round access (State Route 16) and utility corridor to serve the study area.

PUBLIC LANDS

The lower park site of Cache Creek Canyon Regional Park is immediately adjacent to the 70,000 acre Cache Creek Natural Area, which supports recreational opportunities such as hiking, biking, fishing, and horseback riding. In addition, there are other public lands in the area, including the Bureau of Land Management (BLM) lands at Berryessa Peak west of Brooks, and the BLM lands near Glascock Mountain and Cortina Ridge.

OPEN SPACE FOR FLOOD CONTROL

Cache Creek is a violent watercourse, subject to severe flood events. The technical studies performed for the Plan estimate that the creek might overrun its typical boundaries as much as 700 feet in a single flood event. Although restricted by flood easements, lands reserved for flood control can be used for agriculture, wildlife management, recreation (including hunting and fishing), and other compatible uses at non-flood season times. These open spaces along the waterways in Capay Valley work as buffer areas to prevent flooding from endangering the public.

RECREATION

As a component of the land use map, a Parks and Recreation general plan designation has been placed on the Guinda Nichols Park and to the Yocha Dehe Golf Course in Brooks. The Open Space designation is applied to parcels that are publicly owned, but are not developed or accessible as parklands for the public, including large areas in the Blue Ridge that are owned by the federal government (the U.S. Bureau of Land Management), the State of California (Department of Fish and Game), or the University of California. The Open Space designation is also applied to undeveloped park lands along Cache Creek owned by Yolo County, including Cache Creek Regional Park (Upper, Middle, and Lower sites), Camp Haswell, and Otis Ranch.

CACHE CREEK CASINO RESORT

Cache Creek Casino Resort is owned and operated by the Yocha Dehe Wintun Nation, located in Brooks, California. The casino first started as a bingo hall in 1985, but now encompasses 66,000-square feet of casino space with 1,762 slot machines and over 120 table games. The 415,000-square foot property also includes a 200-room hotel, health spa, eight restaurants, live entertainment facility, a 20,000-square foot event center, outdoor swimming pool, casino gift shop and tribal-operated Mini Mart, Gas Station and Fire Station. The casino is now considered to be among the largest in California, and is arguably the most significant tourism attraction in Yolo County. The casino is designated Commercial General (CG) on the land use map.

CAPAY HILLS GOLF CLUB (YOCHA-DE-HE)

The Capay Hills Golf Club project (since named the Yocha-De-He Golf Course) has recently been constructed on the approximately 314-acre Schilling Ranch property. The property consists of two parcels totaling approximately 79 acres held in federal trust for the Yocha Dehe Wintun Nation (i.e., exempt from Yolo County regulations) and four parcels totaling approximately 235 acres owned by the Tribe in simple fee title. The 18-hole golf course includes two ponds; golf course facilities, a clubhouse, golf cart barn, driving range, maintenance building, comfort station and parking lots; and associated utilities to support the project, including water supply and wastewater treatment.

PARK FACILITIES AND PROGRAMS

Four park facilities are owned by the County of Yolo within the Study Area: the Cache Creek Regional Park consisting of approximately 752 acres, the Vernon A. Nichols Park located near Guinda on Cache Creek covering 22 acres, and Camp Haswell Park located just north of Rumsey along State Route 16 (see Figure CN-3, Capay Valley Parks and Tribal Lands).

Cache Creek Regional Park

Cache Creek Regional Park (Canyon Park) was acquired in the early 1970's by the County of Yolo for the development of a park facility that could provide a variety of services to the residents of Yolo County. Located north of Rumsey along State Route 16, Canyon Park is the largest park in Yolo County. Although the total acreage is large, 500 acres serve as buffer land, with only approximately 60 acres considered developed.

The park is divided into three developed sites: the Upper Park, Middle Park, and Lower Park. The Upper Park site contains a parking area, a public beach, and a put-in point for rafters. The Middle Park site is the main center of recreational activity for the entire Yolo County park system. This site consists of 48 campsites, a mobile home for parks hosts, public beaches, a parking lot, a recreational meadow area, and a playground and picnic area. The Middle Park site is heavily used for cycling, hiking, and birding, in addition to overnight camping.

The Lower Park site contains a parking area, two picnic areas, and a public beach. The Lower Park is used for rafting, hiking, biking, fishing, and horseback riding. Additional land for many of these activities is also provided by the adjacent 50,000 acres of Bureau of Land Management (BLM) property, County trails, and Frog Pond (via County Road 40). The County has a cooperative Memorandum of Understanding with the BLM in which both agencies work to expand recreation and interpretive experiences of the area. In addition, an equestrian facility is located approximately 200 yards south of the low water bridge that stages rafting concession operations during the summer months. Adjacent to the equestrian facility is the Blue Ridge Trail, which leads to spectacular views of four neighboring counties. In 1995, estimated annual visitor days were 61,000. Rafting activities have dominated recreational usage.

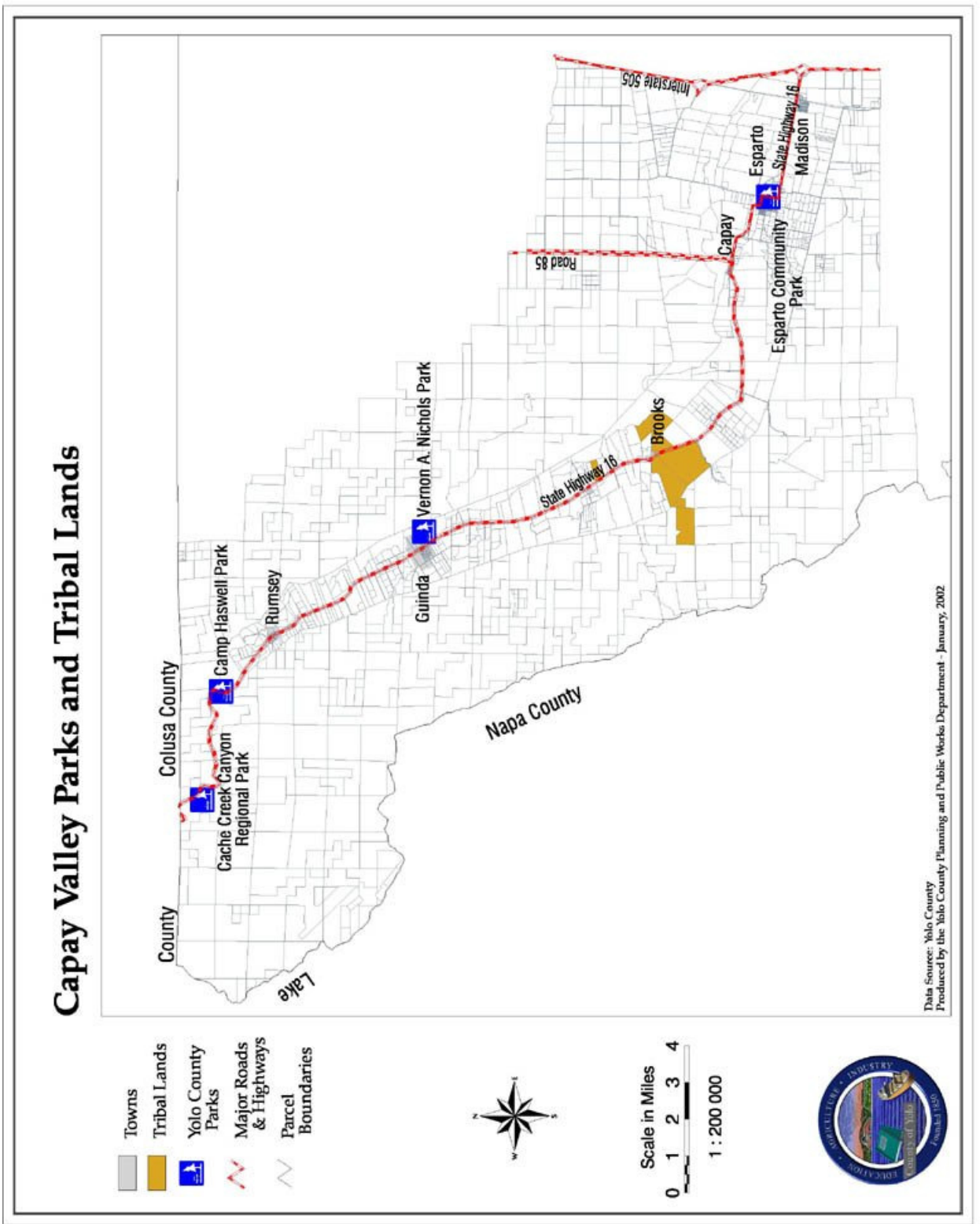
Guinda Park

The Yolo County Parks, Recreation, and Wildlife Committee has recognized Guinda Park, which is dedicated to the County of Yolo, as a local park. A local park is defined as a park of 50 acres or less. The Parks, Recreation, and Wildlife Committee has stated that for improvements to occur to Guinda Park, local area residents would be encouraged to provide funds or energy and time into improving the park. The County also owns a former landfill site just south of Guinda park site which is the potential for expansion of recreational activities. Fishing opportunities exist in the area near the bridge.

Vernon A. Nichols Park

Located just east of the community of Guinda, adjacent to Cache Creek and County Road 57, Vernon A. Nichols Park (see Figure CN-3) has been identified as a riparian area, but much of the native vegetation was removed by storm events in the 1990's. This 22-acre park provides picnic tables, barbecues, a play area, a beach area, swimming, fishing, playground equipment. The park is also used as a mitigation site for the elderberry shrub (*Sambucus mexicana*). Annual visitor days are estimated at 7,200.

Figure CN-3
Capay Valley Parks and Tribal Lands



Camp Haswell Park

Located adjacent to Cache Creek, just north of the community of Rumsey along Highway 16, Camp Haswell Park (see Figure OSR-4) is basically unimproved, with the exception of a 1,100 square-foot building shell. The park, historically used as a camping site for the Boy Scouts of America, is now owned by the County and used as a picnicking and day-use activities site for the general public, and a put-in and take-out site for rafters and kayakers. During the summer months, rafting use is the predominant activity. Approximately one acre of beachfront land with various trees is available. The center of the property is free of vegetation.

ANNUAL RECREATIONAL ACTIVITIES IN THE VALLEY

Almond Festival

The Almond Festival occurs annually and is sponsored by local organizations and citizens. The first Almond Festival originated in Rumsey in 1919, celebrating the large, bountiful harvest at the time. The Almond Festival was discontinued during World War II, and during the 1960s was again sponsored by local citizens and organizations. The Almond Festival has been a major attraction of the Capay Valley during the weekend in February when it occurs.

Double Century Bike Race

The Double Century Bike Race is the second activity which occupies only one weekend but has substantial impacts on the local residents. The California Highway Patrol, the Sheriff's Department, and the local fire district are all involved in monitoring and assisting in maintaining safety along the course route for those participants.

PUBLIC LAND AND PRIVATE HUNTING CLUBS

The Bureau of Land Management (BLM) is an agency within the United States Department of the Interior that administers America's public lands, most of which are located in western states. The BLM has a wide range of responsibilities including collecting geographic information, maintaining records of land ownership and mineral rights, conserving wilderness areas while allocating other areas for grazing and agriculture, and protecting cultural heritage sites on public land.

Members of the local hunting and fishing organizations also have an interest in the Capay Valley with regard to hunting and fishing in the area. Fishing is monitored through the Department of Fish and Game and the practices associated with the water releases by the Yolo County Flood Control and Water Conservation District. Deer hunting has been reflective of the amount of area suitable for forage for deer. When long periods of time have passed without a fire or removal of large amounts of brush in the hill area, the deer numbers tend to decrease due to the lack of suitable forage. When a fire has passed through, or portions have been cleared, the forage and new shoots are plentiful and the deer herds tend to increase. The State Department of Fish and Game has expressed a wish to see a program of systematic removal of specific area vegetation so that forage would be able to grow and the herds locate in that area. The burning of 40 to 60 acres at specific site locations throughout the entire western portion of Yolo County would occur so that the deer herds would be able to locate and forage. The location of these burn areas in relation to existing farms would be a criteria that Fish and Game would consider, if the program were established.

LOCALLY RECOGNIZED ISSUES

Rafting

The most sensitive issue for which property owners adjacent to Cache Creek have expressed concern is the use of the creek by rafters and weekenders who utilize the creek. Conflicts have arisen with the adjacent landowners south of Camp Haswell on Cache Creek when rafters disembark onto private lands.

The Yolo County Parks, Recreation, and Wildlife Committee, local property owners, and the local elected representatives, arrived at an agreement for the establishment of a take-out point for all rafters at Camp Haswell before entering the Capay Valley. With the creation of a termination point at Camp Haswell, trespassing and blockage of the Rumsey Bridge, and other points south, have been reduced.

Public Access

Areas opened for equestrian trails, hiking trails, or other avenues for ingress or egress into fairly remote areas might result in inadequate emergency medical services. Discussions of creating a ridge-top trail beginning in Napa County near Lake Berryessa and heading north along the rim of the west Capay hills have been ongoing for the last decade. The proposed Blue Ridge trail would primarily go through BLM lands. The recently adopted 2030 Yolo Countywide General Plan includes a policy that encourages the County work with affected agencies and landowners on a voluntary basis to complete the trail.

Double Century Bike Race

The Double Century Bike race begins in Davis, California, and covers over 200 miles, part of which passes through the Capay Valley. Injuries for the bicyclists passing through Cache Canyon where the road is narrow and lacks a shoulder have been reported. Local residents feel a concern for the safety of individuals who take this trip and desire to see further safeguards implemented with regard to personal safety. In 1981, over 1,500 bicyclists entered. Because the race operates during the early morning, runs through the entire day, and some riders do not complete it until late evening, many people have expressed concern that more safeguards should be implemented in the timing of the race.

Recreation Outside the Regional Park

The extension of recreational activities associated with Cache Creek Regional Park to the public lands outside the boundaries of the park has also been a concern of landowners in Capay Valley. The development of equestrian trails within the Regional Park with the desire for the extension of those trails beyond the boundaries of the park into the BLM lands is one example. Should an emergency arise, additional demands may be placed upon the fire district and the Sheriff's Department. The possibility also exists that rafting and other water-oriented services would be extended from the park boundaries to other points along Cache Creek both into the Lake and Colusa Counties and south toward Rumsey. Appropriate safeguards must be taken to ensure these facilities minimize impacts on local law enforcement and fire protection, as well as demands on water and sewer provisions and access. The recently adopted 2030 Yolo Countywide General Plan includes a policy to increase public access and recreation along waterways wherever feasible, particularly Cache Creek, lower Putah Creek, the Yolo Bypass and the Sacramento River.

Hunting

Hunting clubs have traditionally utilized the hills in the Capay Valley for hunting, and the Department of Fish and Game, the Yolo County Fish and Game Advisory Committee, and local landowners, specifically the cattle ranchers, have cooperated to allow the hunting of deer in the area during the hunting season. Fish and Game has attempted to encourage the annual removal of certain vegetation to allow deer habitat to expand; however, conflict has arisen in the past with farmers who raise walnuts, almonds or other crops the deer forage in during the harvest season. Deer normally occupying the wildland and foothill areas and in the evenings come down to the Valley floor to browse through the almond and walnut orchards.

Safety and Services

Introduction

The purpose of the Safety and Services chapter is to address the protection of life and property from natural and man-made hazards, and to identify public services. The chapter is designed to identify areas where public and private decision-making need to be sensitive to potentially hazardous conditions which may be caused by soil limitations, geology, water quality, fire, and flooding. In addition, the services related to public health and safety, such as law enforcement and health services, will also be discussed.

Seismic and Geologic Hazards

EARTHQUAKE FAULTS

Within the General Plan Study Area, seismic activity has been evident and is traced through numerous escarpments and slippages in the earth's crust (see Figure SS-1). The two common faults with surface displacements and ruptures most evident are the Switzer and Eisner faults that run along the eastern hills of the Capay Valley due east of the Rumsey and Guinda areas. The most recent active faulting activity has occurred north of the Winters area.

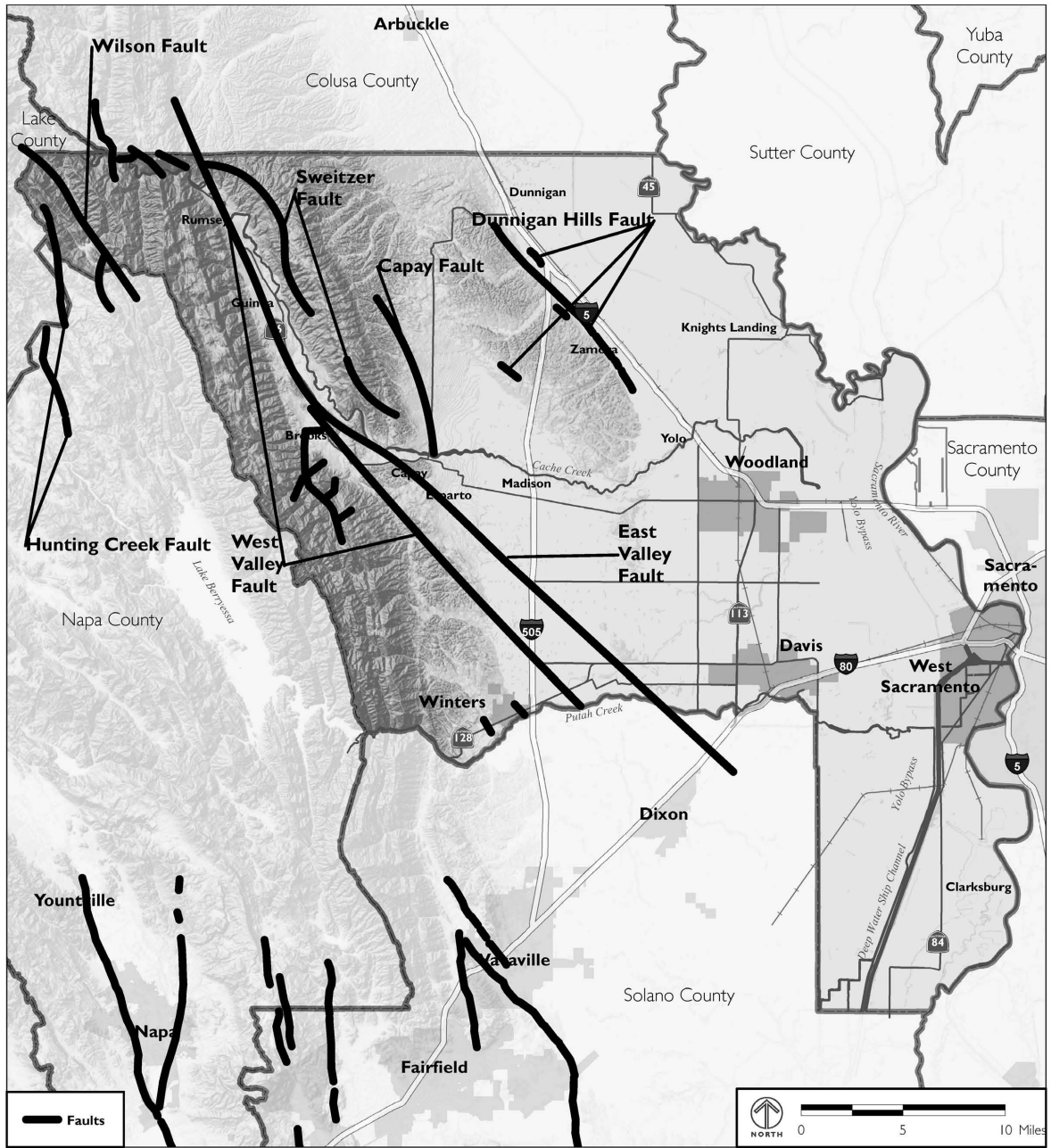
The Capay Valley is formed over an offset synclinal fault. Between the synclinal offset, a fault is mapped parallel to the syncline and Salt Canyon Fault. The Valley is considered to be an area of seismic activity with most historic shocks originating in the Winters-Vacaville region. Two mapped faults pass through the eastern portion of the Valley. These faults are the Eisner and Switzer faults, and are present on the surface through displacement and landslide expressions. Figure SS-2 depicts the relative earthquake groundshaking hazard levels.

DAM FAILURE

The construction of the Indian Valley Reservoir in 1974 places the Capay Valley in the dam inundation flow should the dam break (Figure SS-3). The State of California Office of Emergency Preparedness required that the Yolo County Flood Control and Water Conservation District prepare a dam failure inundation map showing all those areas that would be inundated if the dam were to break. Figure PHS-3 portrays the dam inundation area for Yolo County, which includes the Capay Valley area. As shown in the figure, the area around Cache Creek within the Capay Valley would be inundated in the case of a dam failure. The Yolo County Office of Emergency Services is in the process of preparing emergency evacuation plans and contingency plans for the advents of a dam failure at Indian Valley. The Clear Lake Dam and Reservoir, located on the main branch of Cache Creek, does not pose a potential disaster since the outlet characteristics of a three-mile narrow channel would restrict flows substantially. The Clear Lake Reservoir has been part of the locally controlled water system since 1912 and the small concrete dam structure, which blocks the reservoir, is only 40 feet high.

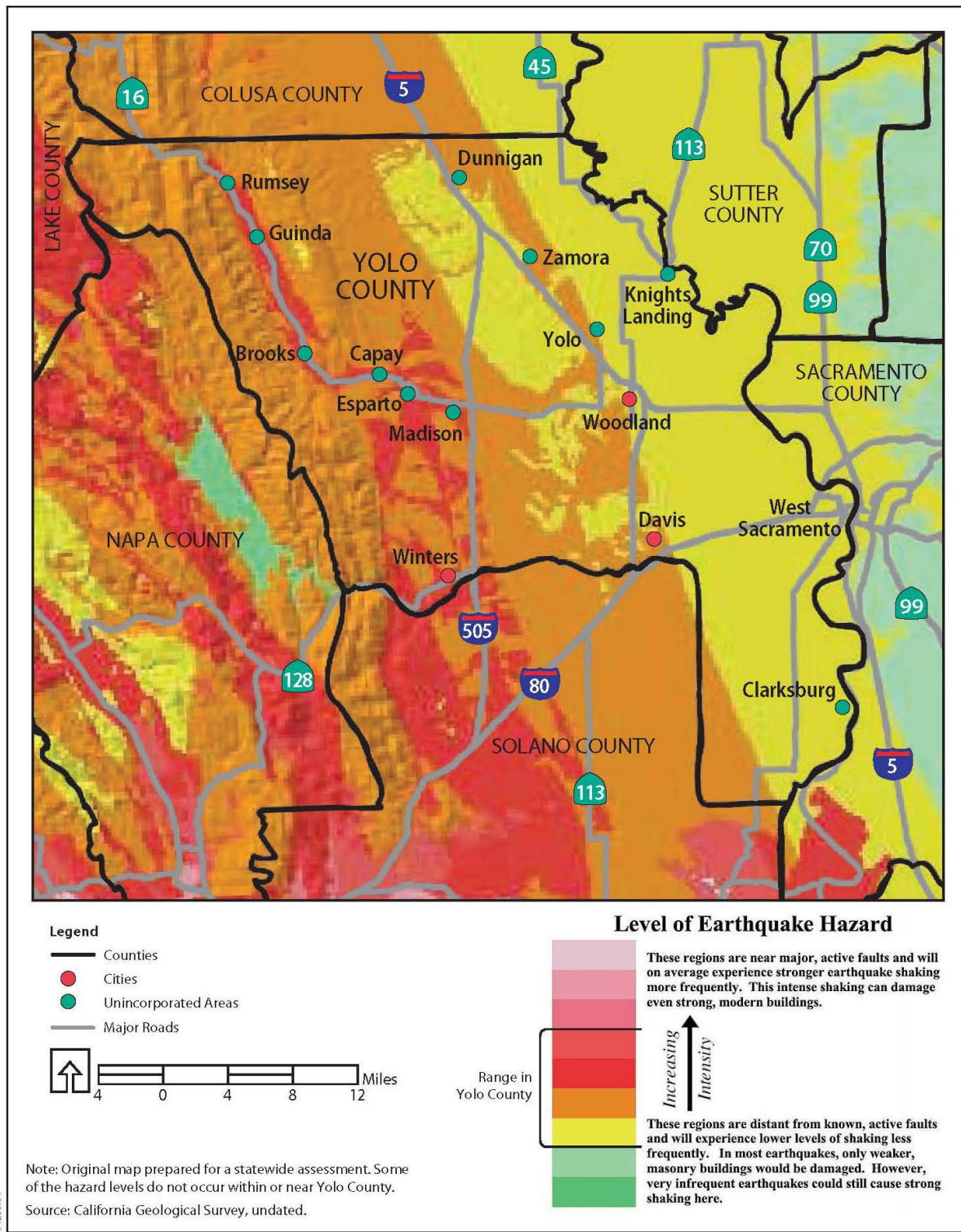
The precautions taken in the construction of Indian Valley Reservoir from potential seismic safety or settling constraints include the placement of gauges for the measurement of water within the soils of the earth-filled dam. Stress gauges have also been placed in strategic locations along the Dam. In the event of an emergency, a caretaker and a portable radio unit are situated at the dam location, 24 hours a day, throughout the year. Information could be relayed to the Communications Center of Yolo County should there be a potential for dam breakage. From the Communications Center, information would be relayed to the local fire districts within the Capay Valley.

Figure SS-1
Earthquake Faults in Yolo County



Source: USGS, 1996; Yolo County GIS, 2009; Cotton/Bridges/Associates, 2004.

Figure SS-2
Relative Earthquake Groundshaking Hazard Levels



LIQUEFACTION AND SUBSIDENCE

The Capay Valley General Plan Study Area has a large number of unstable slopes in areas composed of gravels, siltstones, sands, and clays. Where there is such a combination of slope and loosely unconsolidated materials, potential for subsidence and liquefaction exists. Most of these areas are in the watershed or foothill areas and are free from development at this time. Development on unstable slopes for areas subject to liquefaction and subsidence should be highly restricted by disallowing future road construction or new building construction in those areas.

Flooding

Flooding is a normal process of rivers, but considered a hazard when it threatens human life or damages property. Damage associated with flood events is magnified when natural river floodplains are developed and inhabited. The Capay Valley is susceptible to flooding by Cache Creek (see Figure SS-4, Capay Valley Flood Zones and Waterways).

The Capay Valley Study Area is subject to sheetflow, which occurs when a large amount of rain falls over a short period of time onto the ground, which is either saturated or impervious to water. The watershed and foothill areas of the Capay Valley have a very thin soil mantle and absorb very little water before runoff begins. Runoff is extremely severe after wildland fires have passed through the area. The combination of rocky soils and sparse scrub vegetation makes the watershed areas very sensitive to any changes.

CACHE CREEK

The lower portion of the Cache Creek system is an integral component of the Sacramento River Flood Control System. The capacity in the lower reach of Cache Creek is approximately 36,000 cubic foot per second (cfs) (Yolo County WRA 2004). The Cache Creek Settling Basin, located east of the City of Woodland, is essential to preserving the integrity of the flood control function of the Yolo Bypass. The Settling Basin traps a large portion of the sediment load from Cache Creek that otherwise would be deposited in the Yolo Bypass, and reduce its flood carrying capacity. A levee system extends upstream from the Settling Basin to the communities of Yolo and Woodland. These levees are significantly inadequate at providing the flood protection from the 100-year storm event. The current design capacity of the levee is 30,000 cfs, while modeled 100-year flows at Capay are estimated to be 61,000 cfs (Yolo County WRA 2004).

Prior to the construction of Indian Valley Reservoir, Cache Creek experienced several severe floods, some of which altered the stream course dramatically. The Yolo County Flood Control and Water Conservation District has stated the likelihood of a flood like the 1955 or 1964 floods is very remote because the Indian Valley Reservoir captures over 30 percent of the water that flows into Cache Creek.

Flooding along the lower reach of Cache Creek, the portion within the County, occurs along the main channel and from tributary areas to the north of the channel. The area within the 100-year floodplain of lower Cache Creek is not protected because the State intended to build dams in the upper watershed to provide flood storage for the Cache Creek watershed. These dams were never built; thus, the area is under-protected. A levee system does exist, from Cache Creek's mouth at the Sacramento River to three miles upstream of the Town of Yolo. This levee system was designed to convey 30,000 cfs flows from Cache Creek to the Cache Creek Settling Basin, which prevents sediment and debris from entering the Yolo Bypass. Capay Valley communities partly located within the 100-year floodplain of Cache Creek include Capay, Brooks, Rumsey and Guinda. The Army Corps of Engineers is actively investigating opportunities to increase flood protection in the County.

Noise

In general, very few noise conflicts exist in Capay Valley. A key indicator of noise conflicts is the number of complaints registered with the County, which does not track noise complaints separately from other violations. Generally, noise complaints are few in number but typically are associated with mining, airports, and/or SR 16 traffic and agricultural operations.

ROADWAY TRAFFIC

State Route 16 is the dominant source of traffic noise in the planning area. Truck traffic has been observed as being the most significant contributor to noise in the planning area. Agricultural operations are not seen as major problems generating noises.

Public Safety Services

FIRE PROTECTION

Capay Valley Volunteer Fire Department

Two County Fire Districts and the State of California Department of Forestry provide fire protection for the Capay Valley. The following discussion will outline the services and equipment of the Capay Valley Fire District. For information on the Esparto Fire District, refer to the Esparto Area General Plan. The Esparto Fire District includes that area west of the Town of Capay to County Road 82B.

The Capay Valley Fire District is responsible for the prevention and control of fires to structures. The District was formed in 1927 and covers approximately 175 square miles of area. Approximately 27 square miles occupy the valley floor, 125 square miles of private hill ranches, and 30 square miles of public land under the control of the Bureau of Land Management. The District has access to the majority of the area through the Valley. However, the East Capay Hills are accessible year-round only through County Road 85 through the Dunnigan Hills and Hungry Hollow areas or via the Arbuckle grade, which is closed during the winter months. Emergency services provided by the Fire District include basic fire protection and first responder-level medical assistant services. Advanced life support services are provided by ground ambulance from the City of Woodland. Air ambulance services respond from Sacramento to Vacaville.

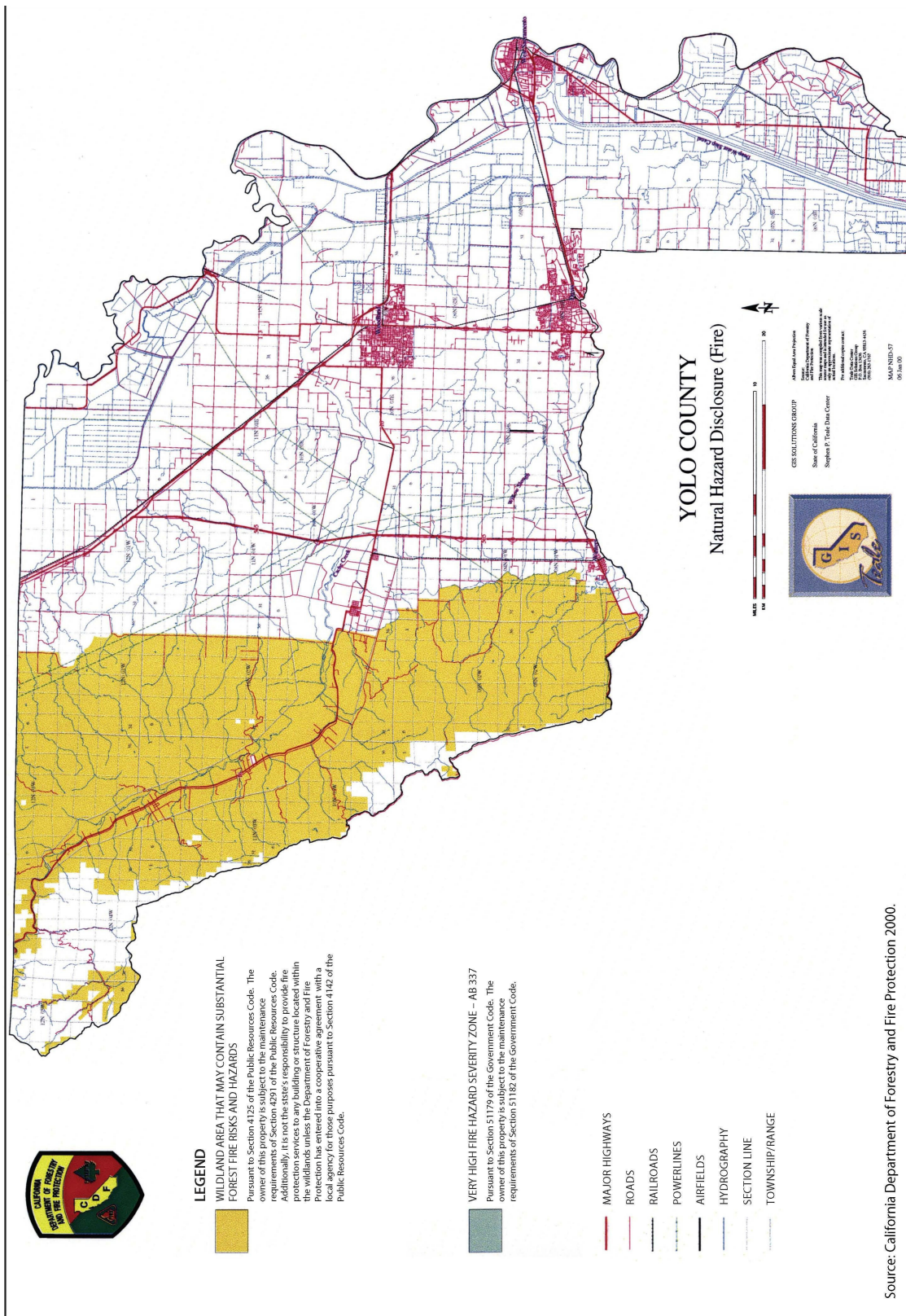
The District is staffed by volunteers who receive minimal reimbursements while on duty. The District has a fire chief and two assistant fire chiefs. The fire District is governed by a five-member Board of Commissioners that meets monthly.

As shown in Figure SS-5, most of the Capay Valley planning area lies within a fire hazard area.

The volunteers have a program of continuous training and education not only in fire prevention techniques but the latest in first aid and emergency medical care. The District personnel are often the first at the scene of an accident or a call to a residence for first aid.

Every fire district in the United States is given a rating by the Insurance Services Office. This rating determines the fire insurance rates of the residences and businesses within that particular agency's jurisdiction. The ratings range from 10, meaning very limited fire protection, to 1, which is the best fire protection possible. In the Capay Valley Fire District, the entire District has an I.S.O. rating of Rural 8, and was last evaluated approximately 10 years ago. According to Capay Valley Fire Department staff,

Figure SS-5
Fire Hazard Areas



Source: California Department of Forestry and Fire Protection 2000.

the construction of the on-site fire station at the casino and the placement of hydrants and other facilities will greatly reduce the current ISO rating.

The Capay Valley Fire District is funded through the General Fund of the County in the post-Proposition 13 and AB 8 financial allocation program.

Among the many services performed by the Fire District are the following: (1) responding to all fires and emergencies; (2) control burns during the permissible burn season of the year; (3) issuance of permits for burns to farmers and monitoring of burn activities when necessary; (4) control burning of brush and stubble in the foothill areas where required and ditches used for irrigation; (5) assistance in rescuing individuals rafting on Cache Creek, including resuscitation from drowning accidents and other mishaps along the Creek; (6) first responder-level medical assistance; (7) advising persons of appropriate safeguards to prevent structures from fire such as the maintenance of clear zones around dwellings or structures where fire may spread; and (8) responding to complaints of possible fire hazards within the confines of the District boundary.

The District operates 365 days a year and has been viewed as one of the main services upon which the Capay Valley relies. The communications system that ties the volunteers together consists of pocket receivers and mutual aid with all other Yolo County Fire Departments. This communications system is augmented by key individuals having pocket receivers that monitor the appropriate channels for fire calls.

In light of the reduction of revenues from traditional sources of funding for the special districts in the State of California, the fire district has been augmenting its budget through the charging of fees for various services rendered, such as for the cost of firefighters and trucks during control burns. This rental fee is not substantial in that it pays for the cost of the man and the wear and tear of diesel fuel for the truck, and no more. The District has a strong desire to augment and expand its financial resources in light of the studies being conducted by Yolo County.

Yocha Dehe Fire Department

The Yocha Dehe Fire Department, formerly called the Rumsey Rancheria Fire Department, began operations in April, 2004. The Department is a full-service career fire department that has jurisdiction over the Yocha Dehe Wintun Tribal Trust Lands. The Yocha Dehe Fire Department is a primary first-responder in the Capay Valley and the first Native American fire department to earn accreditation by the Commission on Fire Accreditation International (CFAI) which is the highest standard set. In addition to traditional fire services, the Department also provides emergency medical services at the paramedic level. The Tribal Trust Lands consist of three parcels totaling approximately 257 acres and containing Cache Creek Casino, the Capay Hills Golf Club area, and tribal housing. In addition, the Department has entered into an automatic aid agreement with Esparto and Capay Valley Fire Districts to assist as needed. The Department is governed by a seven-member Fire Commission Board that meets monthly, comprised of five tribal members and two community members.

The Department is staffed with a Fire Chief, an Assistant Chief, and administrative assistant, as well as three rotating firefighting shifts which currently include one battalion chief, one captain (who splits time among all three shifts), one engineer, and two firefighter paramedics. Final staffing will have each shift staffed with one battalion chief, two captains, two engineers, and three firefighter paramedics. Communications are centrally dispatched from the Yolo County Communications Center located in Woodland.

The California Department of Forestry – Brooks Station

The California Department of Forestry (CDF) maintains a seasonal forest station in the Capay Valley located at Brooks. Figure SS-6 identifies the location of the Brooks station and the CDF area of jurisdiction.

The primary area of responsibility for the California Department of Forestry is the control of wildland fires. Mutual aid agreements exist between the Capay Valley, Esparto, Madison, Dunnigan, and Winters Volunteer Fire Districts for additional support in those areas. The Department has unlimited resources with regard to manpower and equipment should the size and severity of a fire warrant it. It should be noted that the Wilbur Springs Forestry Station services the northwestern portion of Yolo County. The response time from both these stations to most points within the boundaries is approximately 30 minutes at the most. By air, the time is greatly reduced. Diammonium phosphate spraying airplanes and helicopters can be dispatched and in the area within one hour from the point of departure.

The relationship between the Department of Forestry and the Bureau of Land Management is one of cooperation and assistance. Because the Bureau of Land Management oversees over 25,000 acres of land in the Capay Hills, the department has contracted with the Bureau of Land Management to protect the watershed and wildland for that area, not only in the Capay Valley, but statewide.

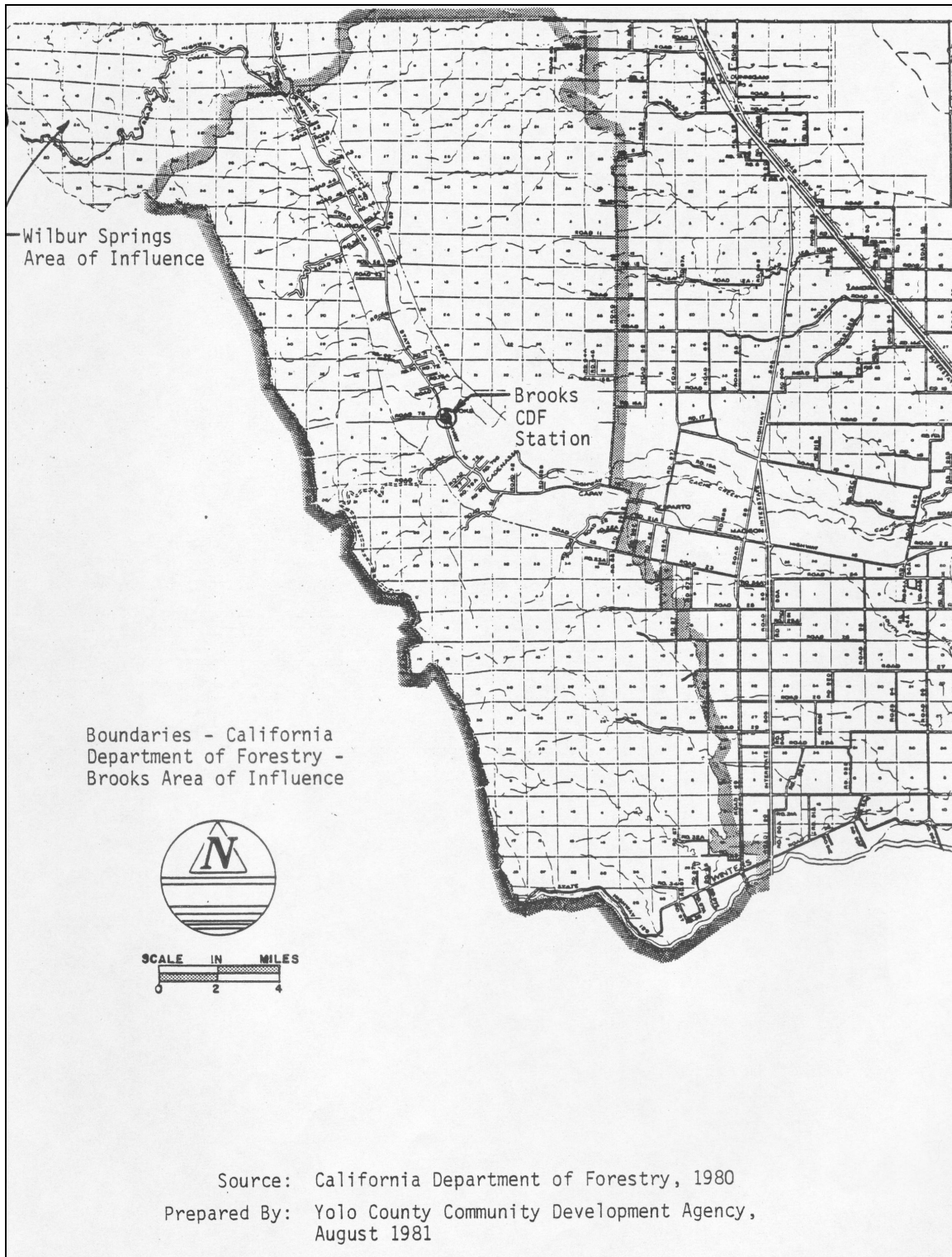
The Department also has a program of control burning in sparsely populated, remote areas similar to the watershed areas in the Capay Valley. Chaparral and underbrush is removed as part of a range management program through the use of caterpillar tractors and large lengths of chain being dragged over areas where the brush could accumulate.

The Department also issues burn permits to local residents and farmers in the Valley and report those permits to Fire Control for Yolo County.

Regarding the future of the maintenance of the Brooks Forestry Station, with budget cutbacks at the State level affecting all forms of local services provided through State agencies, the Brooks Station will likely be maintained at the present level of activity, open seasonally from May 1 to November 1 for the fire season. Should further reductions in various branches of the State government occur, the District may be merged with the Wilbur Springs District or the Berryessa District for response.

Historically, the station in Brooks was established in 1948 through an act and sponsorship of the local Assemblyman from the area. Since that time, three major fires have occurred in the hills which have done substantial amounts of damage to both the watershed and property. The largest and most severe fire occurred in the hills which have done substantial amounts of damage to both the watershed and property. The largest and most severe fire occurred in 1964, the Hanley fire, which began in Santa Rosa and burned over 100,000 acres of the hills. In 1979, the area between Lake Berryessa and Winters, over 2,400 acres of watershed burned. The area will continue to be a high source potential combustible fire material, since within the chaparral and woodland habitat of California, the scrub native vegetation provides a high fuel source if not cleared on a regular basis.

Figure SS-6
Brooks Station – CDF Area of Influence



Law Enforcement

Law enforcement in the Capay Valley is provided primarily through the Yolo County Sheriff's Department. Because State Route 16 passes through the area, the California highway patrol also provides limited services to the area.

The current philosophy of the Sheriff's Department is to decentralize the provisions of services in the rural area of the County. The Resident Deputy program was designed to provide a local law enforcement official who would live in his district and work.

Currently, all calls for services are routed to the central dispatch station in Woodland. From this point, deputies are assigned to respond. Should the population increase in the Valley and town of Esparto, establishing a sub-station in the town of Esparto may be necessary. In order to justify the staffing of a 24-hour substation, a dramatic increase in population and building activity would be necessary.

In order to plan for future demands on the Sheriff's Department, the standard of 1.5 officers per 1,000 population is being used. As increases in population occur, this standard will be used in review of development projects.

Among major calls received by the deputies are thefts and burglaries of ranches and farm equipment, the theft of switches on pumps, trespassing, enforcement of speed limit laws, and responding to complaints registered by property owners. During the Almond Festival in February and the Double Century Bicycle Ride, additional deputies are assigned to the area and are usually supplemented by the California Highway Patrol.

Health Services

The Capay Valley has limited medical health services provided through the Esparto Clinic. Health services must be sought in Woodland or Davis for any complicated or extensive medical treatment. Woodland is over 30 minutes from the Valley and requires an ambulance from the Woodland area to drive to the Valley and return. Many people choose to drive the injured or ill into Woodland rather than rely on an ambulance.

The local clinic is named the Esparto Family Practice Center and is run by the Regional Rural Health Program, Inc., a non-profit organization. The clinic's staff includes a full-time physician and full-time family nurse practitioner, as well as additional part-time physicians and nursing staff.

The Regional Rural Health clinic provides home visits, is available 40 hours per week, and on call 24 hours, seven days a week. Patients pay based on their financial ability. The clinic has been of benefit to a few residents who take advantage of the home visits that are provided through the program.

The service does not require residency in Yolo County so that migrant workers can seek immediate medical attention, although the actual number of migrant workers seeking this service has decreased along with the decline in the number of migrant workers employed in the area.

Funding comes from the local, state, and federal level. The amount from each source varies depending on availability of funds. At the present time, the Regional Rural Health Program, Inc. receives about 90 percent of its funds from the Federal government and the remaining 10 percent is supplied through State applications.

The Regional Rural Health Program also offers a Woman Infant Children Program (W.I.C.) that is similar to a service provided by the Yolo County Health Department. The program tries to relieve any nutritional problems or questions that might arise. A family planning clinic is also available for birth control information.

Another provider for the health needs of the Capay Valley is the Yolo County Department of Public Health. The Department works at three levels of prevention: (1) preventing those health problems that are preventable; (2) arresting or terminating those health problems that do exist; and (3) reducing disability resulting from the long-term effects of personal illness. These items are accomplished through direct services and through support of the community and individuals concerned with health practices and the health needs of the people of Yolo County, which includes the Capay Valley.

With the exception of some limited visits by County nurses for follow-ups, general health promotion and counseling, the remaining services are offered only in Woodland. The services offered in Woodland by the County Health Department are quite extensive and include:

- Tuberculosis Skin Testing: pre-school and general.
- Well Baby Clinics: one per month.
- Crippled Children Services.
- Communicable Disease check-ups and treatments.
- Women, Infants, and Children Program; nutritional assistance.
- Alcohol and Drug Abuse, Detoxification, and Counseling
 - a. Residential treatment
 - b. Classes
 - c. Walk-in treatment
- Mental Health Counseling
 - a. Older adult programs
 - b. After care programs

Community Services and Facilities

SCHOOLS

The Esparto Unified School District has three schools within its 550 square mile jurisdiction. A combined elementary/middle school and the high school are in Esparto. A continuation school is located in Madison. The district also rents a bus yard facility in Esparto, owns land in the town of Guinda, and houses the district office at the high school in Esparto.

Esparto High School currently has approximately 303 students, 15 full and part-time teachers, and one counselor. Esparto High currently exceeds its capacity by 33 students. EUSD's long-range school facility plans include constructing a new high school to accommodate all of the District's current and projected high school students.

Esparto Middle School has approximately 200 students and 10 teachers, and currently exceeds its capacity by 168 students. After the new high school is constructed and Esparto High vacates its current facilities, EUSD plans to move all of the middle school students to the current high school site. As enrollment grows beyond this site's capacity, EUSD will eventually construct an additional middle school.

Esparto Elementary School has approximately 405 students and 22 teachers. In addition to the 405 current students, the facilities and staff at Esparto Elementary can accommodate approximately 120

new students. After Esparto Middle is moved to Esparto High's current facilities, EUSD plans to create a second elementary school at the middle school site. Additionally, projected enrollment growth over the next 25 years is sufficient to justify eventually constructing a third elementary school.

Busing the students to Esparto from the Capay Valley or Dunnigan Hills areas accommodates approximately 74 percent of the students' needs for transportation for both schools. The six District buses travel approximately 461 miles daily.

Enrollment in the schools fluctuates seasonally during the 175 days of instruction. From May to October each year, the Madison Farm Labor Camp contributes students to the school system. Assistance in teaching these seasonal students comes from the Migrant Education program administered through Butte County as part of a Federal grant program. Also, a certain proportion of funds for are allocated for bilingual education through the Yolo County Office of Education.

LIBRARY

There are no library facilities in the Capay Valley, although there is a county library nearby in Esparto, just outside the planning area.

CHURCHES

The Guinda Community Church is the only active church with facilities located in the Capay Valley Study Area. There are three churches located in Esparto serving the Capay Valley. The Esparto Baptist Mission is on Madison Street, and the Countryside Community Church, and St. Martin's Catholic Church are both located on Grafton Street.