

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
ACTION AGENDA SUMMARY

DEPT: CEO/Office of Emergency Srvcs/Fire Warden

BOARD AGENDA # B-16

Urgent

Routine

*G. Hirschow*

AGENDA DATE May 24, 2011

CEO Concurs with Recommendation YES  NO   
(Information Attached)

4/5 Vote Required YES  NO

SUBJECT:

Adopt the Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan

STAFF RECOMMENDATIONS:

Adopt the Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan

FISCAL IMPACT:

The costs associated with developing the plan was funded from the County Office of Emergency Services operating budget for fiscal year 2009-2010.

BOARD ACTION AS FOLLOWS:

No. 2011-326

On motion of Supervisor O'Brien, Seconded by Supervisor DeMartini  
and approved by the following vote,

Ayes: Supervisors: O'Brien, Chiesa, Withrow, DeMartini, and Chairman Monteith

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1)  Approved as recommended

2)  Denied

3)  Approved as amended

4)  Other:

MOTION:

*Christine Ferraro*

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

File No.

## **DISCUSSION:**

In the State of California and around the world natural disasters occur frequently. The time and money needed to recover from these events can strain or deplete local resources. The purpose of hazard mitigation planning is to identify policies, actions, and strategies that will help to reduce risk and prevent future losses. Hazard mitigation is most effective when it is based on a comprehensive long-term plan that is developed prior to a disaster occurring.

Stanislaus County has committed itself to reducing long-term risk to our citizens and damage to property from the effects of natural hazards. By planning, preparing, and adopting a Hazard Mitigation Plan, the County is taking a proactive approach to reduce or eliminate the impacts of hazards before they occur.

On December 13, 2005, the Board of Supervisors adopted the first County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP). The plan in its entirety must be reviewed, updated, and re-submitted for approval every five years. The California Emergency Management Agency (Cal EMA) and the Federal Emergency Management Agency (FEMA) have both independently reviewed and approved the updated Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan pending formal adoption by the Board of Supervisors.

In October 2009, the County contacted 111 jurisdictions explaining the importance of participating in hazard mitigation planning and asking them to declare their intent to participate in the planning process with the County. Fifty-eight responses were received from various community service districts, fire districts, hospital districts, irrigation districts, school districts and cities within the County that they intended to participate with the County as one of our multi-jurisdictional partners. A County Planning Team was developed comprised of the Assistant Director of Emergency Services, various department heads and county staff. This team met for over a year to update each section of the plan.

Stanislaus County identified several hazards that are addressed in the County's Multi-Jurisdictional Hazard Mitigation Plan update. These hazards were identified through a process that utilized input from the various multi-jurisdictional partners, Work Groups, Stanislaus County Emergency Operations Plan, the Safety Element of the General Plan, input from the Planning Director, Public Works Director, Public Health Director, Assistant Director of Emergency Services, City governments, researching past disaster declarations in the County and public input. Hazards that are unlikely to occur, or for which the risk of damage is accepted as being very low, were eliminated from consideration after review by the Planning Team. The County's Public Work's Department developed a Geographical Information System (GIS) database that mapped the County's infrastructure, critical facilities, and land uses.

Initial data from this study was also used to determine those hazards that present the greatest risk. The County concentrated on five hazards because they have the greatest potential to cause a negative impact on the community. They are:

- Earthquake
- Landslide
- Dam Failure
- Flood
- Wildfire

The Multi-Jurisdictional Hazard Mitigation Plan accomplishes the following:

- Ensures compliance with the Disaster Mitigation Act of 2000 that establishes requirements for local governments and requires that in order to remain eligible to receive Federal funding for both pre-disaster and post-disaster mitigation project funding, a local government must have a FEMA approved Local Hazard Mitigation Plan written in accordance with Section 322 of the Act; and
- Ensures that Stanislaus County complies with the Disaster Mitigation Act requirement that only local governments with a State and FEMA approved Local Hazard Mitigation Plan will be eligible to receive Hazard Mitigation Grant Program project grants for disasters declared after November 1, 2004; and
- Ensures compliance with the requirement that only local governments with a State and FEMA approved Local Hazard Mitigation Plan will be eligible to receive future mitigation project funding awarded through the Flood Mitigation Assistance program, the Pre-Disaster Mitigation grant programs, and the U.S. Small Business Administration's (SBA) low-interest, pre-disaster, small business loan program; and
- Unlike past years, when a local plan was created after the disaster damage, the County must now have an approved local plan in place **before a disaster strikes**.

The Multi-Jurisdictional Hazard Mitigation Plan includes the following components:

1. Prerequisites—includes the adoption of the final plan by the local governing body. This demonstrates the County's commitment to fulfilling the mitigation goals and objectives outlined in the plan.
2. Planning Process—documents the planning process used to develop the plan, including how it was prepared and who was involved in the process.
3. Risk Assessment—includes seven requirements for each of the five hazards identified in our Multi-Jurisdictional Hazard Mitigation Plan.

- A. Identifying Hazards—includes a description of the hazards.
- B. Profiling Hazard Events—identifies the location, extent, previous occurrences and probability of future events.
- C. Assessing Vulnerability/Overview—identifies an overall summary description of the vulnerability to each hazard and the impact of each hazard on the jurisdiction.
- D. Assessing Vulnerability/Identifying Structures—includes the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas.
- E. Assessing Vulnerability/Estimating Potential Losses—includes estimates of potential dollar losses to vulnerable structures and describes the methodology used to prepare the estimate.

- ◆ Assessing Vulnerability: Addressing Repetitive Loss Properties

As of October 1, 2008, all mitigation plans must also address National Flood Insurance Program insured structures that have been repetitively damaged by floods. Repetitive Loss Properties (RLP) are those for which two or more losses of at least \$1,000 each have been paid under the National Flood Insurance Program (NFIP) within any 10 year period since 1978. The County's updated plan complied with this new requirement.

- F. Assessing Vulnerability/Analyzing Development Trends—includes the land uses and development trends.
  - G. Multi-Jurisdictional Risk Assessment—each of the participating jurisdictions must include their unique risks, if different from the County's, in their individual plan.
- 4. Mitigation Strategy—provides the County's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources and expands on and improves these existing tools. This entails the development of goals from which specific mitigation actions will be derived. All mitigation actions must be prioritized and the plan must describe the strategy for implementation.
  - 5. Plan Maintenance—describes the method and schedule for monitoring, evaluating and updating the plan every five years to make sure the plan remains an active and relevant document.

### Summary

This plan is designed to help jurisdictions identify specific actions to reduce loss of life and property. It is not intended to help jurisdictions establish procedures to respond to disasters or replace an existing Emergency Operations Plan. The goal of hazard mitigation is to decrease the need for response as opposed to outlining a plan for responding to a disaster. Natural disasters cannot be prevented from occurring. However, it is the intent of this MJHMP to steadily lessen the impacts associated with future hazard events.

### Continued Public Involvement

Stanislaus County and each of the participating jurisdictions remain dedicated to involving the public directly in the continual reshaping and updating of the MJHMP. The website designed for the plan update will remain live and the updated plan has been posted. This will provide an opportunity for the public to comment on the plan at anytime. In addition to the plan being downloadable from the Stanislaus County Office of Emergency Services (OES) website, the site also contains contact information with an e-mail address and phone number to which people can direct their comments or concerns. Each participating jurisdiction has also added a link on their jurisdiction's web page to the County mitigation planning website as part of the plan development process.

The Assistant Director of Emergency Services also has the opportunity to raise County and community awareness of the MJHMP by his attendance and participation at other meetings such as: the Operational Area Council, Disaster Council, Fire Chief's Association, Annual Community Conference, and Department Head meetings to name a few. Operational Area Council meetings are attended by all nine cities as well as participating agencies such as the American Red Cross, United Way, Latino Emergency Communication Council, private industry, schools, California Emergency Management Agency, CERT, Mountain Valley EMSA, utilities, and other Stanislaus County departments. Any public comments received regarding the MJHMP will be collected by the Office of Emergency Services, included in the annual report, and considered during future plan updates.

To view the Stanislaus County Multi-Jurisdictional Hazard Mitigation plan in its entirety, please visit our website at: <http://www.stanoes.com/mjhmp.shtm>

### Conclusion

Stanislaus County, as well as many of our local multi-jurisdictional partners, has sought Federal and State funding for reimbursement for repair, rebuilding or clean-up, following a large scale emergency or declared disaster. Often, the cost of rebuilding or repair exceeds the cost for preventive measures and many times the entire cost of the post-incident project cannot be fully recovered.

Mitigation projects are generally more cost effective, as well as providing a preemptive opportunity to minimize the impact of natural hazards. Compliance with the Disaster Mitigation Act of 2000 ensures Stanislaus County's eligibility to receive pre and post-event funds.

In recent years, the Federal government has placed an increased emphasis on pre-event mitigation measures as a means of not only reducing the cost associated with disaster incident reimbursement, but to make a significant effort to reduce the loss of life, property and resources associated with these occurrences.

**POLICY ISSUE:**

The development of the Multi-Jurisdictional Hazard Mitigation Plan provides additional tools to assist emergency responders in development planning, consistent with the Board of Supervisor's top priority of A Safe Community.

**STAFFING IMPACT:**

Chief Executive Office staff will continue to coordinate with the other participating jurisdictions to receive the required documents and forward them to FEMA for final approval. Staff from each of the participating jurisdictions will have their governing body formally adopt the County of Stanislaus Multi-Jurisdictional Hazard Mitigation Plan, along with their individual plan, as their own Local Hazard Mitigation Plan. The County's plan serves as the umbrella plan with each individual jurisdiction's plan considered an annex.

**CONTACT NAME:**

Gary Hinshaw, Assistant Director of Emergency Services. Telephone (209) 552-3600.

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
STATE OF CALIFORNIA

Date: May 24, 2011

No. 2011-326

On motion of Supervisor O'Brien Seconded by Supervisor DeMartini  
and approved by the following vote,  
Ayes: Supervisors: O'Brien, Chiesa, Withrow, DeMartini, and Chairman Monteith  
Noes: Supervisors: None  
Excused or Absent: Supervisors: None  
Abstaining: Supervisor: None

Item # B-16

**THE FOLLOWING RESOLUTION WAS ADOPTED:**

**A RESOLUTION OF THE STANISLAUS COUNTY BOARD OF SUPERVISORS TO ADOPT THE COUNTY OF STANISLAUS MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**

WHEREAS, the Disaster Mitigation Act of 2000 added Section 322 to the Stafford Act; and

WHEREAS, to implement the Disaster Mitigation Act of 2000, the Federal Emergency Management Agency (FEMA) published Interim Final Rules; and

WHEREAS, these rules established requirements for local governments and required that in order to remain eligible to receive Federal funding for both pre-disaster and post-disaster mitigation project funding, a local government must have a FEMA approved Local Hazard Mitigation Plan written in accordance with Section 322 of the Act; and

WHEREAS, local governments without a State and FEMA approved Local Hazard Mitigation Plan will not be eligible to receive Hazard Mitigation Grant Program project grants for disasters declared after November 1, 2004; and

WHEREAS, local governments without a State and FEMA approved Local Hazard Mitigation Plan will also not be eligible to receive future mitigation project funding awarded through the Flood Mitigation Assistance program, the Pre-Disaster Mitigation grant programs, and the U.S. Small Business Administration's (SBA) low-interest, pre-disaster, small business loan program; and

WHEREAS, this type of funding is at risk after November 1, 2004 without an adopted Local Hazard Mitigation Plan; and

WHEREAS, over the past ten years, every County in California has been declared a disaster area at least once, therefore, each County has qualified to participate in the Hazard Mitigation Program; and

WHEREAS, by planning, preparing and adopting a Multi-Jurisdictional Hazard Mitigation Plan, Stanislaus County is taking a proactive approach to reduce and/or eliminate the impacts of hazards before they occur; and

WHEREAS, the plan will serve the citizens of the County by providing for A Safe Community, improve our level of preparedness, and ensure our eligibility for Federal funding assistance in the future; and

WHEREAS, the California Emergency Management Agency (Cal EMA) and the Federal Emergency Management Agency (FEMA) have independently approved the County's Multi-Jurisdictional Hazard Mitigation Plan pending formal adoption by the Board of Supervisors.

THEREFORE, BE IT RESOLVED that the Board of Supervisors of the County of Stanislaus, State of California, does hereby adopt the County of Stanislaus Multi-Jurisdictional Hazard Mitigation Plan.

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk  
Stanislaus County Board of Supervisors,  
State of California



File No.



# Stanislaus County, California



Striving to be the Best



## Multi-Jurisdictional Hazard Mitigation Plan Updated 2010

### BOARD OF SUPERVISORS

Dick Monteith, Chairman  
William O'Brien  
Vito Chiesa  
Terry Withrow  
Jim DeMartini

Submitted by  
Chief Executive Officer  
Richard W. Robinson

OFFICE OF EMERGENCY SERVICES

# Multi-Jurisdictional Hazard Mitigation Plan

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For more information please contact:  
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# Stanislaus County



Striving to be the Best



## Introduction

# INTRODUCTION

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## INTRODUCTION

In State of California and around the world natural disasters occur frequently. The time and money needed to recover from these events can strain or deplete local resources. The purpose of hazard mitigation planning is to identify policies, actions, and strategies that will help to reduce risk and prevent future losses. Hazard mitigation is best realized when community leaders, businesses, citizens, and other stakeholders join together in an effort to undertake a process of learning about hazards that can affect their area and use this knowledge to prioritize needs and develop a strategy for reducing damages. Hazard mitigation is most effective when it is based on a comprehensive long-term plan that is developed prior to a disaster occurring.

## HAZARD MITIGATION PLANNING

The Federal Emergency Management Agency (FEMA) has determined that there is a critical link between Hazard Mitigation Planning and sustainability. This means if Stanislaus County has the foresight to plan ahead to reduce the impacts of hazards, we will be better able to prevent injury, loss of life and damage to our homes, businesses, and neighborhoods. The County can use the threat of disaster as a catalyst to act and develop a plan so we can bounce back more quickly following a disaster.

Stanislaus County has committed itself to reducing long-term risk to our citizens and damage to property from the effects of natural hazards. By planning, preparing, and adopting a Hazard Mitigation Plan, the County is taking a proactive approach to reduce or eliminate the impacts of hazards before they occur.

FEMA defines Hazard Mitigation as any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. The County's plan will serve as a tool for learning from disasters that have already occurred, so we can deal with them more effectively and efficiently with less expenditure than in the past.

### Direct benefits include:

- Reduced loss of life;
- Reduced loss of property and essential services;
- Reduced economic hardship;
- Reduced reconstruction costs;
- Increased cooperation and communication within the community through the planning process; and
- Expedited post-disaster funding.

### Indirect benefits include:

- Disaster resilience;
- Environmental quality;
- Economic vitality; and
- Improved quality of life.

## PLANNING REQUIREMENTS

Section 322, Mitigation Planning, of the Robert T. Stafford Disaster Relief and Emergency Assistance Act ("the Stafford Act"), enacted by Section 104 of the Disaster Mitigation Act of 2000 ("DMA 2000"), provides new and revitalized approaches to mitigation planning. Section 322 continues the requirement for a State mitigation plan as a condition of disaster assistance, and establishes a new requirement for local

mitigation plans. In order to apply for Federal aid for technical assistance and post-disaster funding, local jurisdictions must comply with DMA 2000 and its implementing regulations (44 CFR Part 201.6).

Under the new 2008 44 CFR update, requirements have changed governing mitigation planning requirements for local mitigation plans published under 44 CFR §201.6. Local mitigation plans now qualify communities for the following Federal mitigation grant programs:

**Disaster Funded Grants:**

- Hazard Mitigation Grant Program (HMGP)

**Hazard Mitigation Assistance Grants:**

- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Severe Repetitive Loss (SRL)
- Repetitive Flood Claim (RFC)

**PLAN UPDATE**

The Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan is a countywide plan that identifies risks posed by disasters, and identifies ways to minimize damage from those disasters. The plan is a comprehensive resource document that serves many purposes, including: enhancing public awareness and understanding, creating a decision tool for management, promoting compliance with State and Federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination.

The MJHMP previously approved by FEMA on January 12, 2006, must be updated every five years. This Plan Update will demonstrate the County and participating jurisdiction's commitment to reducing risk and serve as a guide for decision makers as they commit resources to minimize the effects of natural hazards. It just makes sense to be pro-active and not wait for disaster to strike before the County takes action to reduce risk to human life and property.

Federal emergency management agencies will now only provide disaster relief funds to those counties/communities that have shown positive steps to prevent loss and damage from disasters by adopting a Hazard Mitigation Plan. By planning now, we ensure that the County will be covered later, in the event that disaster strikes.

Each section of the County's Multi-Jurisdictional Hazard Mitigation Plan was reviewed and revised as appropriate to reflect changes in development, updated property values, and progress in local mitigation efforts. It will be resubmitted for approval to State Cal EMA and FEMA. If FEMA determines the plan is "approvable pending adoption," the County will then proceed with the adoption process by the Board of Supervisors as required in the prerequisites. Adoption legitimizes the plan and authorizes responsible agencies to execute their responsibilities. The plan, upon adoption, shall include documentation of adoption in the form of a Board Resolution and Board Agenda item and minutes.

**PLAN COMPONENTS**

The basic elements involved in our Hazard Mitigation Plan include:

**Prerequisites**—This section addresses the formal adoption of the plan by each governing body to demonstrate the commitment of the community and elected officials to the County's goal of becoming disaster-resistant.

**Community Profile**—This section provides the history and background of the County, including population trends and the demographic and economic conditions that have shaped the area.

**Planning Process**—This section identifies the planning process, the Planning Team members, the meetings held as part of the planning process, documents the outreach efforts, and the review and incorporation of existing plans, reports, and other appropriate information.

**Risk Assessment**—This section describes the process through which the Planning Team and our multi-jurisdictional partners identified, screened, and selected the hazards to be profiled. The hazard analysis includes the description, location, extent, and probability of future events for each hazard.

**Vulnerability Analysis**—This part of the Risk Assessment identifies potentially vulnerable assets—buildings, properties and critical infrastructure including roads, bridges, traffic signals, drainage facilities, lighting facilities, and airports in the incorporated and unincorporated areas of the County. This data was compiled by assessing each of the five identified hazards using the County’s Geographic Information System (GIS) and input received from our multi-jurisdictional partners. The information shows the potential financial and economic losses that the County could face in the event of one of these hazards. The Vulnerability Analysis includes the following sections: Overview, Identifying Structures, Addressing Repetitive Loss Properties, Estimating Potential Losses, Analyzing Development Trends, and Multi-Jurisdictional Risk Assessment information.

**Mitigation Plan/Strategy**—The mitigation strategy section provides a plan for reducing the potential losses identified in the vulnerability analysis. Mitigation goals and potential actions to minimize the risks and losses associated with each hazard will be described along with a strategy for implementation.

**Plan Maintenance**—This section describes the method and schedule for monitoring, evaluating and updating the plan to ensure that the MJHMP remains an active and applicable document.

**Multi-Jurisdictional Mitigation Planning**—While certain elements are common to all our participating jurisdictions such as the planning process and hazard identification, there are some elements that are specific to each participating jurisdiction. These include: risk assessment unique to jurisdiction, mitigation actions, and adoption of the plan by each jurisdiction.

## **SUMMARY**

This plan is designed to help jurisdictions identify specific actions to reduce loss of life and property from the following five hazards: earthquake, landslide, dam failure, flood, and wildfire. It is not intended to help jurisdictions establish procedures to respond to disasters or replace an existing Emergency Operations Plan. The goal of hazard mitigation is to decrease the need for response as opposed to outlining a plan for responding to a disaster.

Natural disasters cannot be prevented from occurring. However, it is the intent of this MJHMP to steadily lessen the impacts associated with future hazard events.

# Stanislaus County



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Prerequisites

# BOARD OF SUPERVISORS

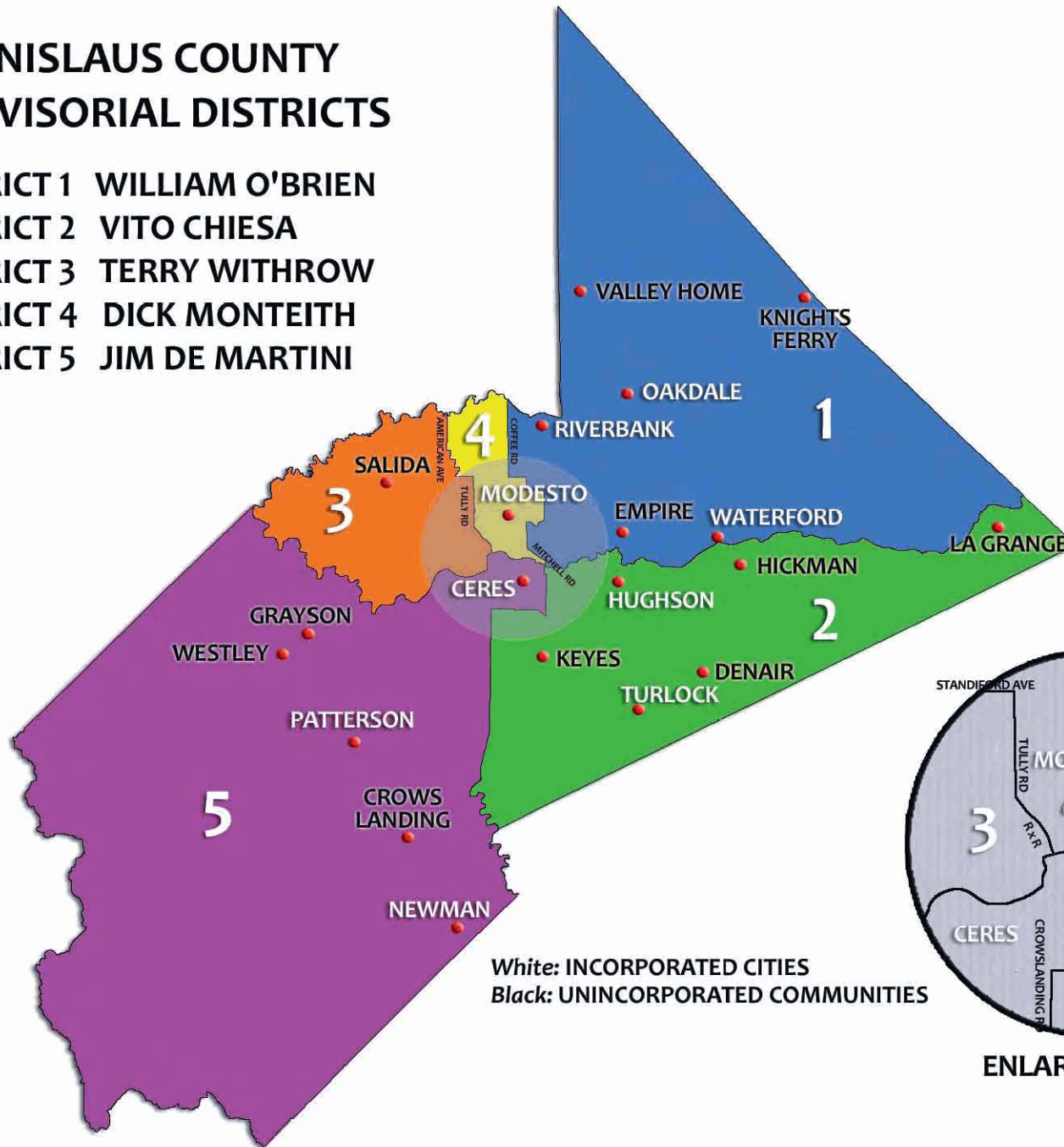
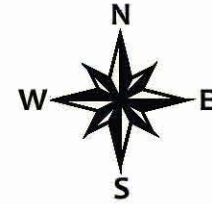
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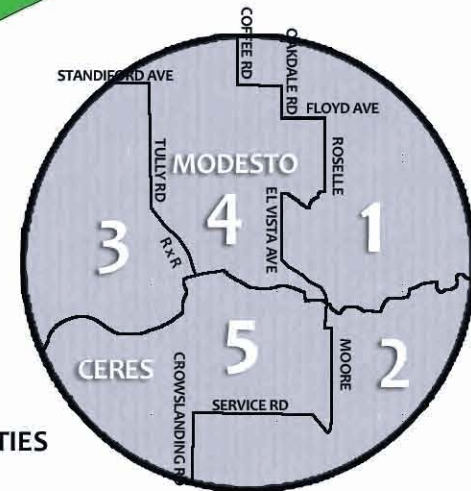
From left to right: Supervisor Dick Monteith, District 4; Supervisor William O'Brien, District 1; Supervisor Jim DeMartini, District 5; Supervisor Terry Withrow, District 3; and Supervisor Vito Chiesa, District 2.

# STANISLAUS COUNTY SUPERVISORIAL DISTRICTS

- DISTRICT 1 WILLIAM O'BRIEN
- DISTRICT 2 VITO CHIESA
- DISTRICT 3 TERRY WITHROW
- DISTRICT 4 DICK MONTEITH
- DISTRICT 5 JIM DE MARTINI



White: INCORPORATED CITIES  
Black: UNINCORPORATED COMMUNITIES



ENLARGEMENT

# PREREQUISITES

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## ADOPTION BY LOCAL GOVERNING BODY

**Requirement §201.6(c)(5):** For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

Each participating jurisdiction shall include in the plan, documentation of plan adoption, usually in the form of a resolution. If the plan is not adopted by a participating jurisdiction, that jurisdiction will not be eligible for project grants. In addition, those jurisdictions within the planning area that do not participate in its development, and fail to adopt the mitigation plan, will not be eligible for project grants.

“Approval Pending Adoption” is a recommended and potentially time-saving process by which the County and participating jurisdictions submit the final draft of the MJHMP to the California Emergency Management Agency (Cal EMA), and the Federal Emergency Management Agency (FEMA) for a review *prior* to formal jurisdictional adoption. If the County’s plan meets all the plan requirements, the plan will then be returned with an approvable pending adoption status. When the approval pending adoption plan is adopted by the jurisdiction, and FEMA has received the documentation of adoption, it will then be formally approved through a signed FEMA approval letter.

The County and its participating jurisdictions intend to follow this recommended process and as such will wait to receive an “Approval Pending Adoption” before taking the plan to our local governing bodies for adoption.

If the plan is not adopted, the County is not eligible to apply for and/or receive project grants under the following hazard mitigation assistance programs:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Severe Repetitive Loss (SRL)
- Repetitive Flood Claim (RFC)

## PLAN UPDATE

Each participating jurisdiction is required to review and revise its plan, and resubmit it for approval within five (5) years in order to continue to be eligible for mitigation project grant funding. The County and its participating jurisdictions understands, that a plan update is not an annex to the previously approved plan, but stands on its own as a complete and current plan, that has been reviewed and updated in all aspects.

## PLAN EXPIRATION DATE

Previous participants in the County’s Multi-Jurisdictional Hazard Mitigation Plan, assume the expiration date five years from the first jurisdiction’s approval date regardless of the other participant’s subsequent adoption dates. The County’s MJHMP was approved on January 12, 2006. Therefore, all County approved participants plans expire on January 12, 2011.



**MULTI-JURISDICTIONAL PLAN ADOPTION**

Adoption of the MJHMP by the Stanislaus County Board of Supervisors on \_\_\_\_\_ Resolution Number \_\_\_\_\_ demonstrates the County's commitment to fulfilling the mitigation goals and objectives as outlined in the plan. Adoption legitimizes the plan and authorizes responsible agencies to execute their responsibilities.

# Stanislaus County



Striving to be the Best



## Community Profile

# COMMUNITY PROFILE

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Stanislaus County is located in Central California. With over 530,000 people calling this area home, its communities reflect a region rich in diversity and a strong sense of community. Stanislaus County is within 90 minutes of the San Francisco Bay Area, the Silicon Valley, Sacramento, the Sierra Mountains and California's Central Coast. It is also within a five-hour drive to Los Angeles. Two of California's north-south routes intersect the area: Interstate 5 and Highway 99. The mild Mediterranean climate makes this County one of the best agricultural areas in the world, positioning it as a global center for agribusiness. Established in 1854, its total land area is 1,494 square miles. The County averages just 12 inches of rainfall each year and experiences a full spectrum of the seasons. Temperatures range from an average low of 38 degrees Fahrenheit in the winter, to an average high of 85 degrees Fahrenheit during the spring and fall, and to an average high in the 90's during the warm summer months.

## **RIVERS**

There are four major rivers in Stanislaus County. Three, the Stanislaus, Calaveras, and the Tuolumne Rivers, run east to west. The fourth, the San Joaquin River, runs southeast to northwest. Dry Creek also runs east to west, then merges with the Tuolumne River in Modesto. There are no flow control systems on Dry Creek. Rainfall and runoff in the eastern portion of the county directly affect this creek. The County also has three major reservoirs; Modesto, Woodward and Turlock.

## **HIGHWAYS/ROADS/BRIDGES**

State Highways 99, 108/120, 33, 132 and Interstate 5 are the major transportation routes through the County. Highways 99, 33 and I-5 run north – south and Highways 108/120 and 132 run east – west. These major highway / freeway routes would be highly utilized by both County residents and tourists as possible evacuation routes.

Public roadways and bridges within Stanislaus County are owned and maintained by California Department of Transportation, Stanislaus County Public Works Department and the nine city Public Works Departments. A high potential exists for road closures due to severe winter storms or flooding. Parts of the County can become isolated for a period of time when these conditions exist. While most secondary roads are paved, there are still a number of unpaved public roads within the County.

## **AIRPORT**

There is one joint County / City of Modesto operated airport in Stanislaus County. Modesto Airport's runways are 5911' and 3459' respectively. The airport operates 24 hours daily, although the tower is closed at night. It is capable of multiple engine propeller aircraft or jet aircraft, as large as a 737-400. Additionally there are four additional airports in Stanislaus County; Oakdale Municipal Airport (2400 foot east-west runway), Turlock Airpark (2000 foot north-south runway), Patterson Airport (2500 foot north-south runway) and the Crows Landing Naval Air Station, at present not an operating airport.

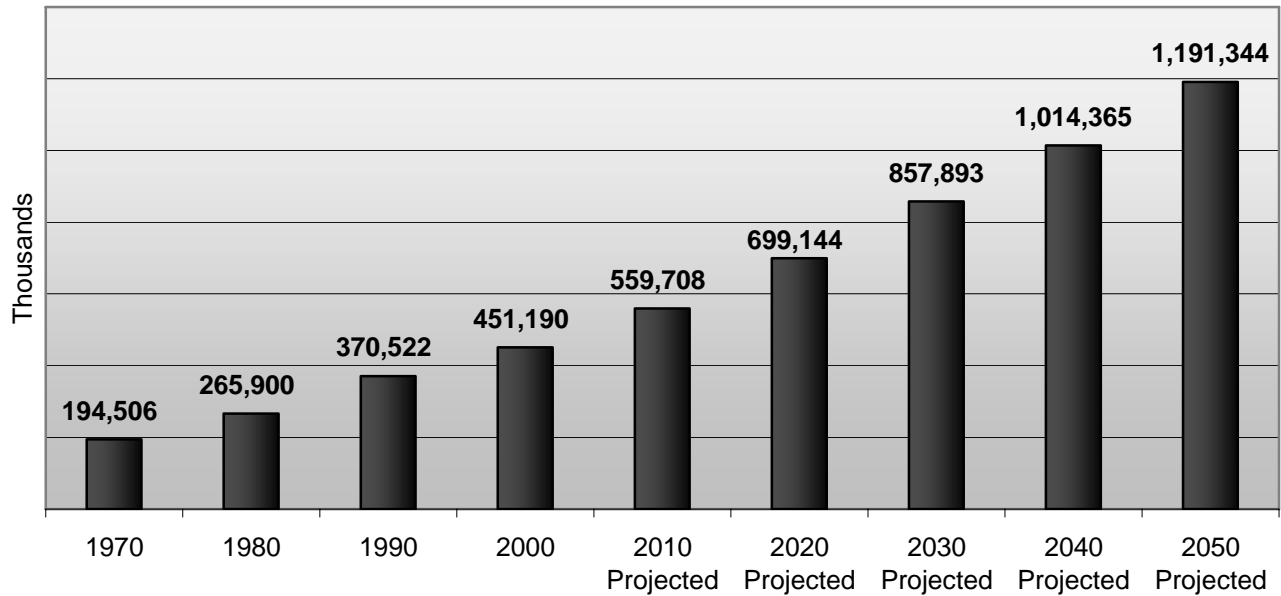
## **RAILROADS**

The Union Pacific and Burlington Northern Santa Fe Railroads are the freight lines serving Stanislaus County. Both have trackage running north – south in the county. Amtrak passenger service is provided on the BNSF track with a passenger station located in eastern Modesto. Sierra Railroad serves between Tuolumne County and the City of Oakdale in Stanislaus County. Also, the Modesto and Empire Traction Company (M&ET), a shortline freight railroad, provides interconnection services between UP and BNSF Railroads, as well as serving the industrial hub of the county. M&ET operates 5 miles of yard main track and 39 miles of spurs and sidetracks.

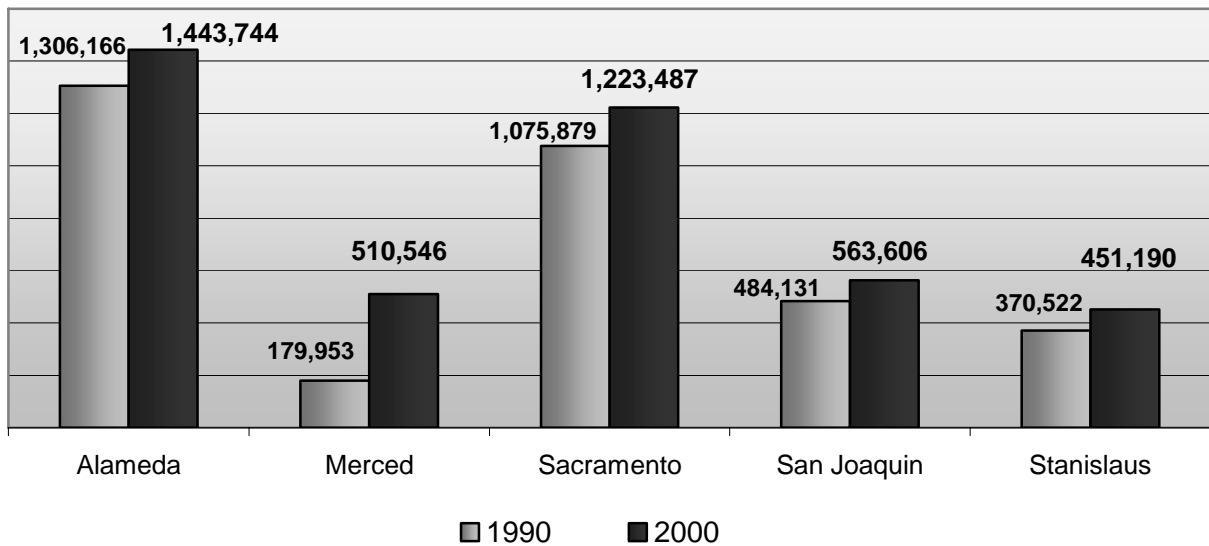
## **COUNTY POPULATION**

Stanislaus County has seen tremendous population growth. This trend is expected to continue well into the future. From fewer than 200,000 residents as recently as 1970, Stanislaus is projected to be home to over one million people by the year 2050. This represents a 164% change from 2000 to 2050. This growth represents an ongoing challenge for our area. A few of the major issues include job availability, farmland preservation, air quality, road and water infrastructure, and school capacity.

## County Population Trends

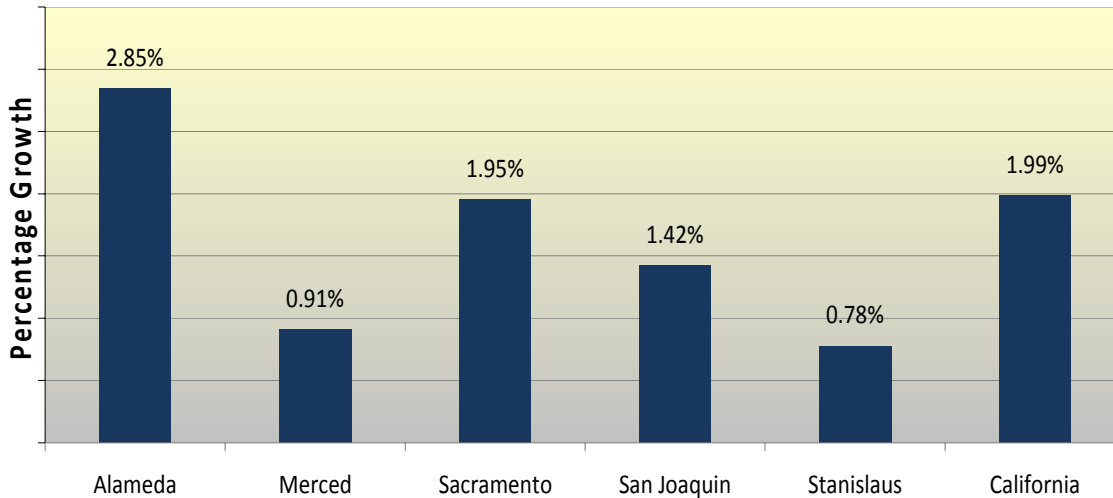


## Ten-Year Population Growth by County



Population growth for Stanislaus County is slower than that of the comparison counties of Alameda, Merced, San Joaquin, Sacramento, and San Francisco. In comparing US Census data for 2007 and 2009, the following chart demonstrates the comparison growth for these counties and the State of California.

## Population Growth 2007 - 2009



### COUNTY POPULATION BY CITY

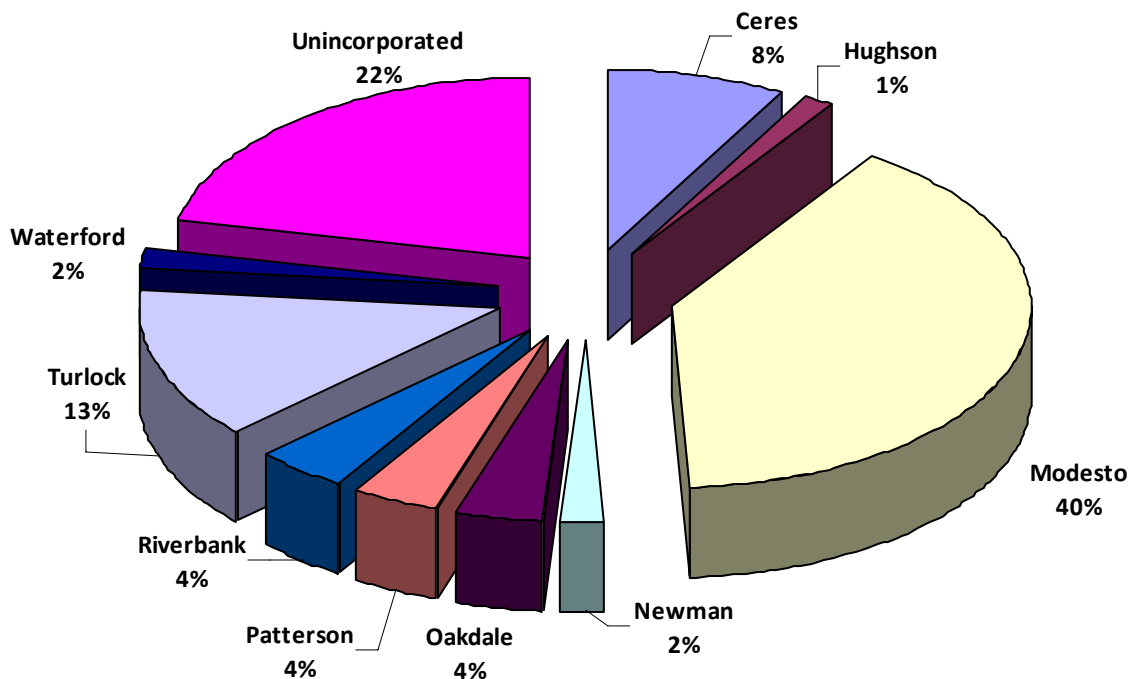
Within Stanislaus County, there are nine incorporated cities: Ceres, Hughson, Modesto, Newman, Oakdale, Patterson, Riverbank, Turlock, and Waterford. Additionally, there are 13 unincorporated communities within the County and substantial areas of State and Federally controlled lands such as parks, wildlife areas and other public lands. From 2009 to 2010, the County's population increased approximately .1%, slightly less than that of the State of California. Modesto is the largest city with a population of 211,536. Between January 2009 and January 2010, the unincorporated areas of the County experienced an increase in population as did all of the nine cities of growth between .98% to 1.0%. The Cities of Patterson and Waterford experienced slightly higher growth with an increase of 1.0%.

### Population by City

City	Census 2000	Jan. 2007	Jan. 2008	Jan. 2009	Jan 2010
Ceres	34,609	41,787	42,813	42,998	43,219
Hughson	3,980	6,054	6,187	6,193	6,240
Modesto	188,856	208,150	209,936	210,088	211,536
Newman	7,092	10,254	10,586	10,739	10,824
Oakdale	15,503	18,538	19,337	19,608	19,854
Patterson	11,606	20,773	21,229	21,168	21,251
Riverbank	15,826	21,384	21,757	21,805	22,201
Turlock	55,811	68,984	70,158	70,256	71,181
Waterford	6,924	8,547	8,763	8,816	8,860
<u>Unincorporated</u>	<u>106,790</u>	<u>114,467</u>	<u>115,137</u>	<u>114,712</u>	<u>115,418</u>
<b>County Total</b>	<b>446,997</b>	<b>518,938</b>	<b>525,903</b>	<b>526,383</b>	<b>530,584</b>

The following chart illustrates the distribution of citizens throughout Stanislaus County as of January 2010.

## Stanislaus County Population 2010



### ECONOMY

Population growth has historically played a role in driving the area's economic expansion. However, the drop in residential construction has resulted in layoffs of workers and a downturn in purchases of materials and supplies as well as impacted services and suppliers of household amenities. Agriculture, which is the County's core industry, generates almost \$2.5 billion in farm gate revenue. The crop value in 2008 increased over \$52 million or 2.15% from 2007 to 2008. Exporting opportunities are increasing which adds to the positive outlook for agricultural production and processing in the County.

The region is still faced with a daily exodus of nearly 36,000 citizens who leave the County for jobs elsewhere, with over 13,000 undertaking the long and fuel-expensive commute across the Altamont Pass. Incentive for this trend is the Bay Area make-up of higher salary for positions, a lower jobless rate, and a greater diversity of positions there.

The County has relatively low electricity rates because of the power from the Modesto and Turlock Irrigation Districts. While the agencies have increased rates recently, both continue to provide a lower rate for customers than found elsewhere, particularly on industrial rates. Industries that rely on railways for shipping and receiving are also in luck as the County sits between two main rail lines in the West, the BNSF Railway and the Union Pacific. It is also served by three short-haul line; California Northern, Modesto Empire & Traction, and Sierra Northern.

The Alliance, a local organization overseeing both economic development and workforce training activities in the Stanislaus River Valley, conducted its annual 2009 Stanislaus Economic Outlook Survey and found that worries about the economy were the chief concern of over two-thirds of businesses. Respondents continue to forecast a decline in their profitability, with 50 percent projecting a decrease in revenue. The survey is not a scientific measure of the economy, but does provide insight into how local business leaders view their prospects for 2009.

Manufacturing continues to be an important employer in Stanislaus County. The top ten employers within the manufacturing industry are listed in the following chart.

### Major Manufacturing Employers - 2009

<u>Employer</u>	<u>Description</u>	<u>Employees*</u>
E&J Gallo Winery	Winery	3,308
Seneca Foods	Fruit Products	2,100
Del Monte Foods	Fruit Products	1,700
ConAgra	Food Processing	1,550
Foster Farms	Poultry Processor	1,508
Stanislaus Food Products	Tomato Products	1,500
Frito-Lay	Snack Food Products	750
Foster Farms Dairy	Dairy Products	650
Racor	Filtration Products	601
Patterson Vegetable Company	Frozen Food Products	550

*\* Reflects peak seasonal levels where applicable.*

The County's largest employers remain in the non-manufacturing field. While Stanislaus County remains the largest employer, recent economic factors have led to a reduction from the 2009 numbers. The top ten employers for 2009 are listed in the following chart.

### Major Non-Manufacturing Employers - 2009

<u>Employer</u>	<u>Description</u>	<u>Employees*</u>
Stanislaus County	County Government	3,990
Modesto City Schools	Education District	3,113
Memorial Medical Center	Healthcare	3,013
Turlock Unified School District	Education District	2,120
Doctors Medical Center	Healthcare	1,984
Modesto Junior College	Education Institution	1,643
Ceres Unified School District	Education District	1,561
Save Mart Supermarkets	Retail Supermarket	1,503
Kaiser Permanente	Healthcare	1,500
Wal-Mart	Retailer	1,453

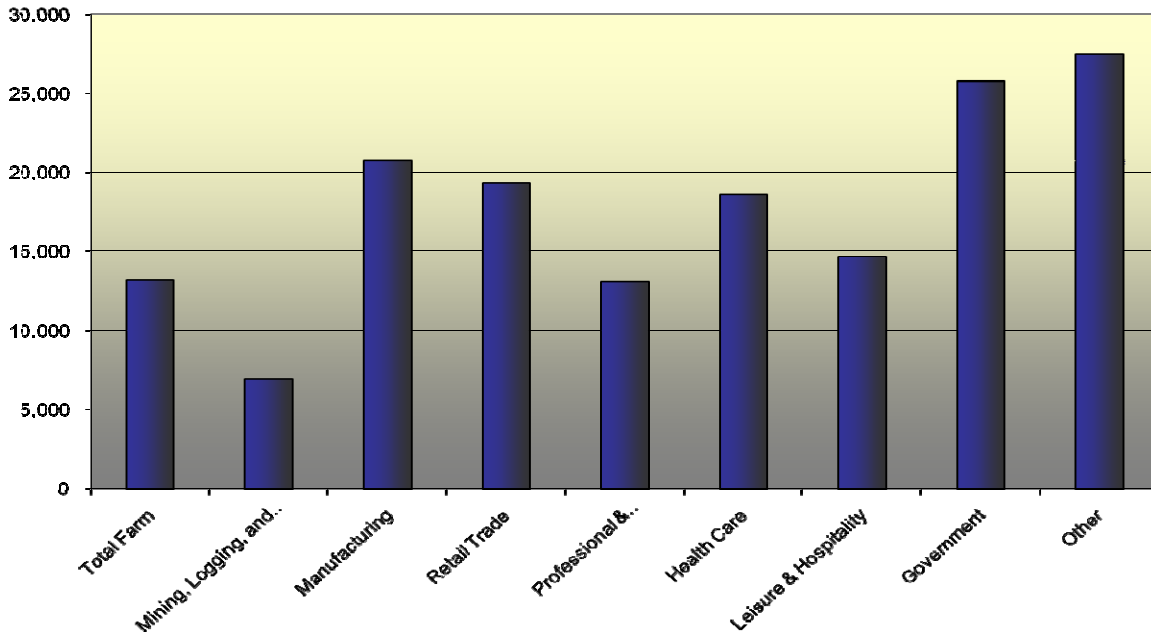
*\* Reflects peak seasonal levels where applicable.*

## INDUSTRY

Payroll positions are spread across various sectors. Government, which includes education, was the single largest employer with 16% of the jobs equating to 25,800 positions. Manufacturing was the second largest employer at 13% followed by Retail at 12% and Health Care at 12%.



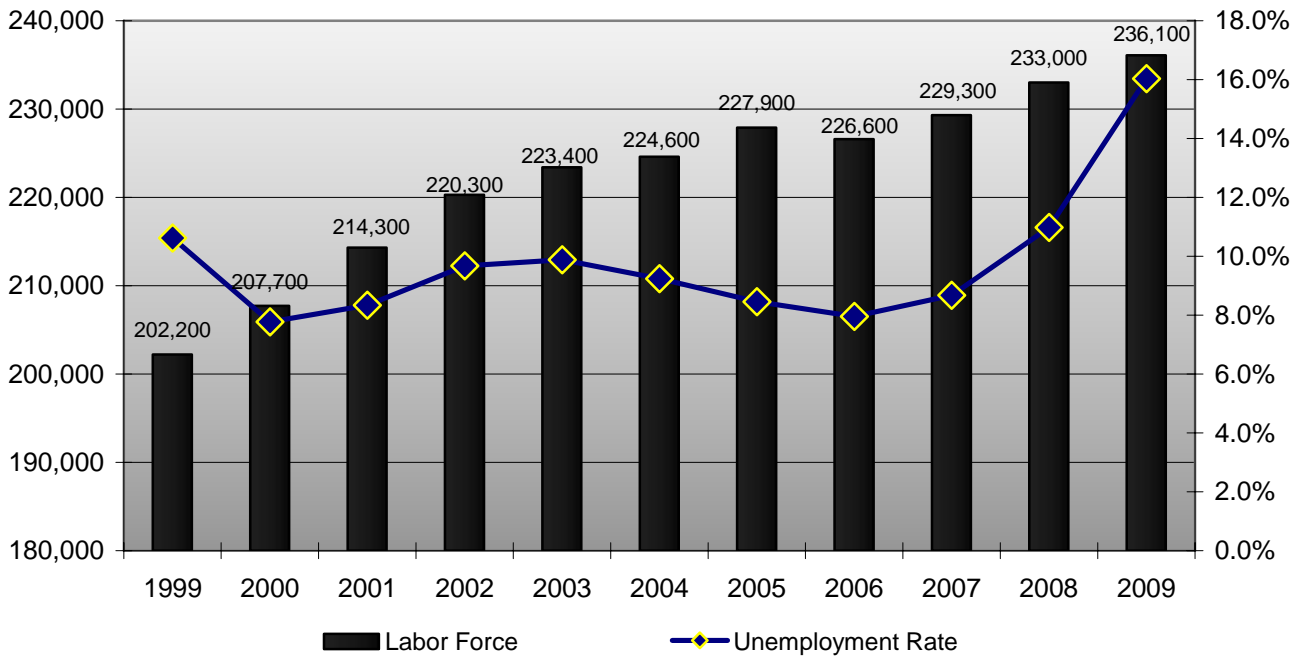
### Stanislaus Employment by Industry - 2009



### WORKFORCE

The labor force expanded to 236,100 people in 2009 which represents a 16.8% gain from a decade earlier.

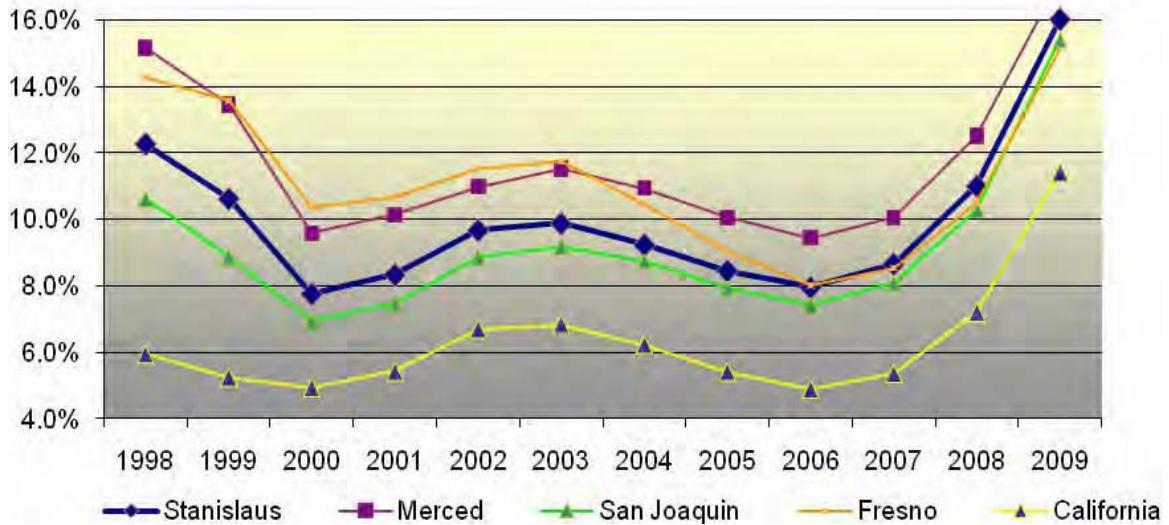
### Workforce Trends 2009



## UNEMPLOYMENT RATE COMPARISON

The County's unemployment rate rose to 16% for 2009, the highest annual figure recorded in ten years, up almost 5% from last year, according to State Employment Development Department (EDD) statistics. An EDD analyst said, "counties across the State of California are suffering from job losses and rising unemployment rates, largely tied to the housing and credit crises. Those statewide trends adversely affect the County's unemployment rate, because of the number of commuters who travel outside the County for work."

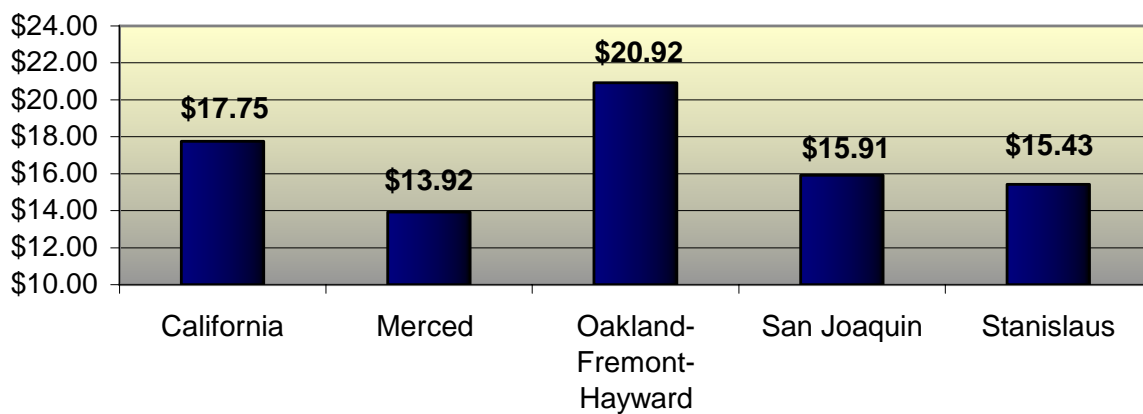
### Unemployment Rate Comparison



## WAGES

Local median hourly wages in the County are at just 73.8% of those seen in the nearest Bay Area region and 86.9% of the statewide median.

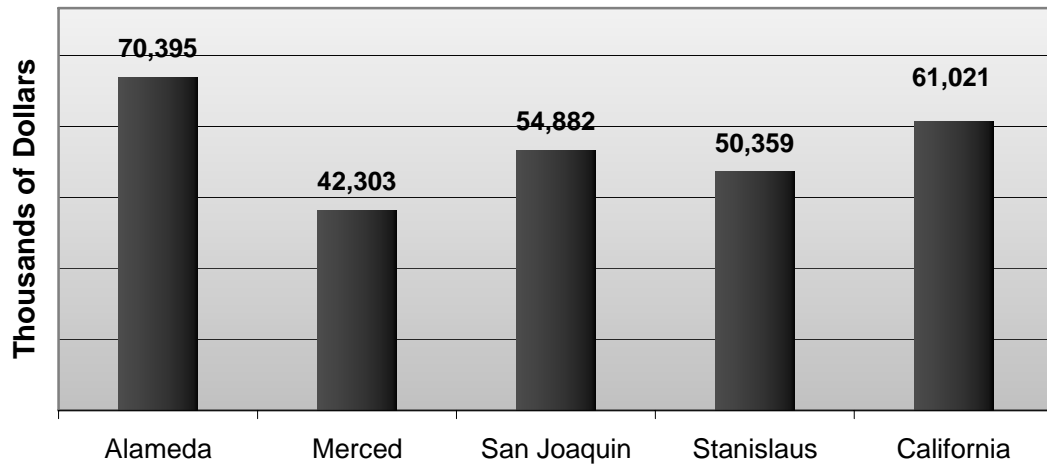
### Median Hourly Wages in 2009



## MEDIAN INCOMES

Statistics just released from the State Franchise Tax Board show that Stanislaus, Merced, and San Joaquin County incomes were 19.4% behind the State as a whole, according to tax returns for couples filing jointly.

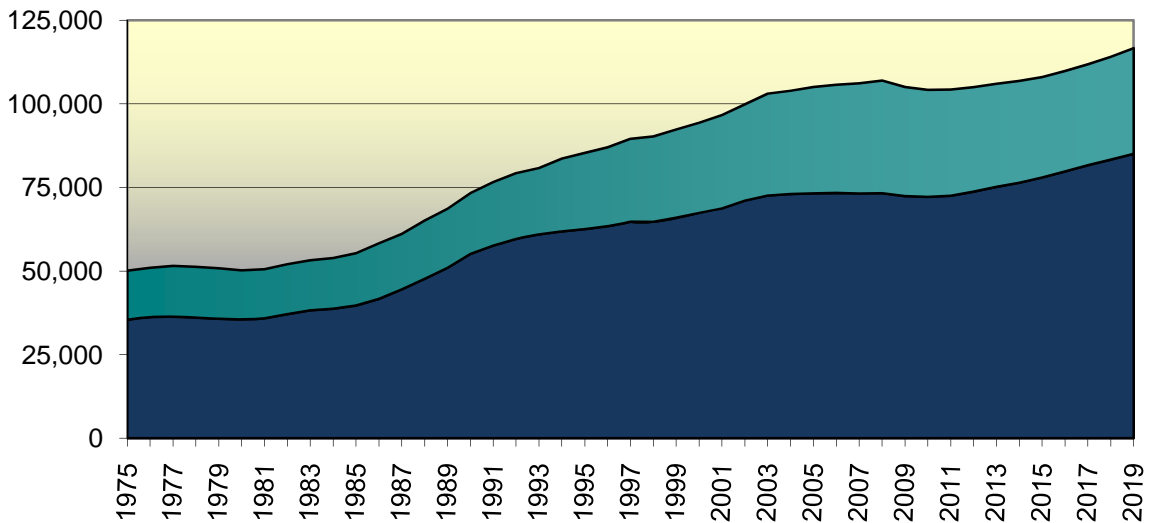
### Median Income for 2008



## EDUCATION

Enrollment in Stanislaus County public schools is projected to grow from 50,000 students to 116,657 by the year 2019. While student counts have grown steadily from 1975 through 2008, enrollment is projected to decline over the next 5 years, until experiencing another anticipated increase beginning in 2015.

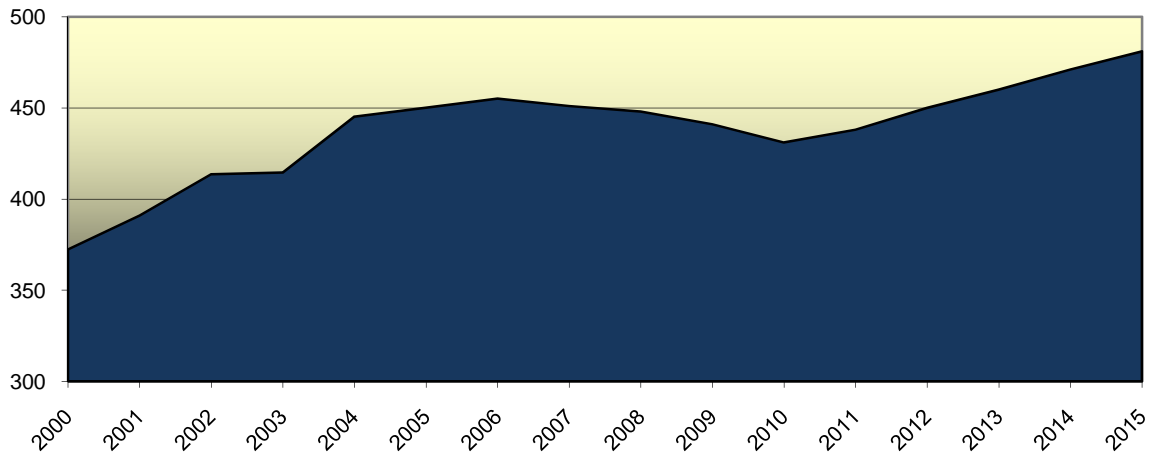
### Stanislaus Public School Enrollment



## TRANSPORTATION

The number of vehicles in 2000 was 372,300. The Department of Transportation estimates this number will grow to over 481,000 by the year 2015.

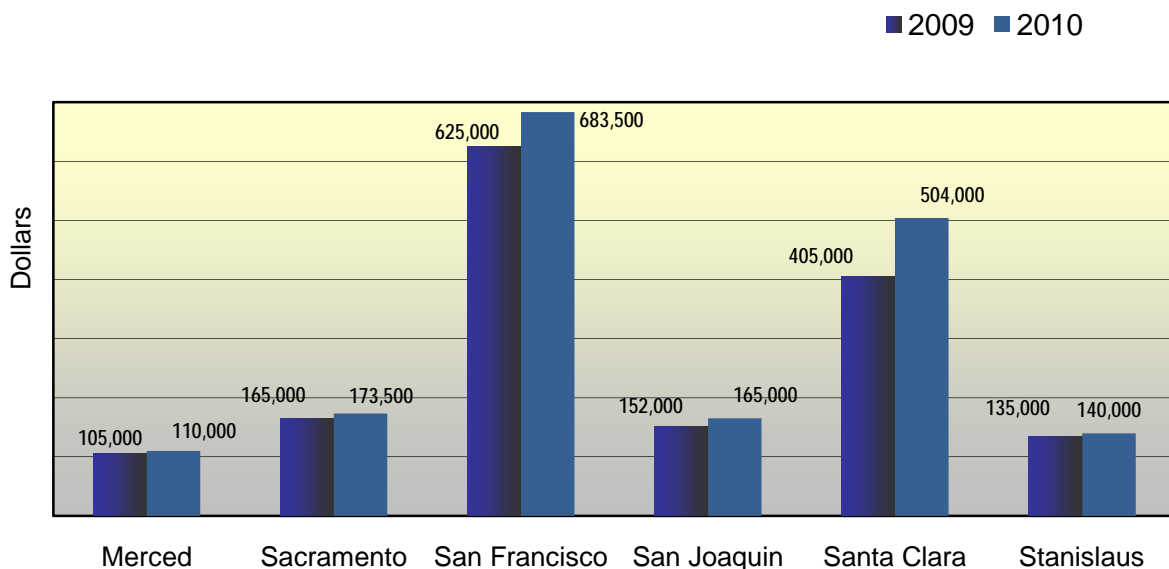
### Registered Vehicles in Stanislaus



## HOUSING

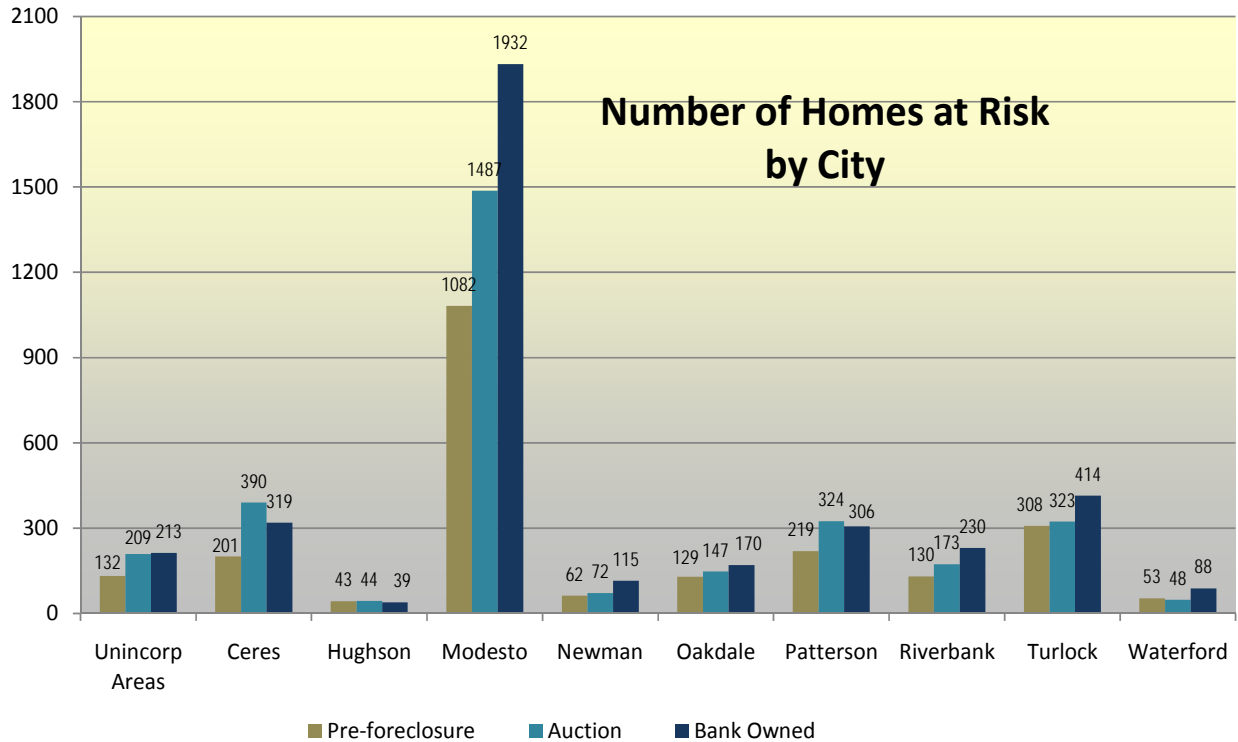
Recent data shows that the typical house in Stanislaus County sells for roughly 72% of the median price of a home in Santa Clara County. Home affordability is an enormous issue throughout California, and Stanislaus County is no exception. Wage levels, the availability of developable land, migration patterns, the economy, and a myriad of other factors affect home prices. Sales of new and resale of single-family homes and condos soared to record levels before peaking in 2005. During the recent real estate plunge, the median home price for Stanislaus County dropped 41.3% from March 2008 to March 2009. Current data however indicates an increase throughout the state. Although median home prices in Stanislaus County increased 3.57%, the county still lagged behind the five comparison counties. Santa Clara County showed the largest increase, coming in at 19.64%.

### Median Home Prices by County

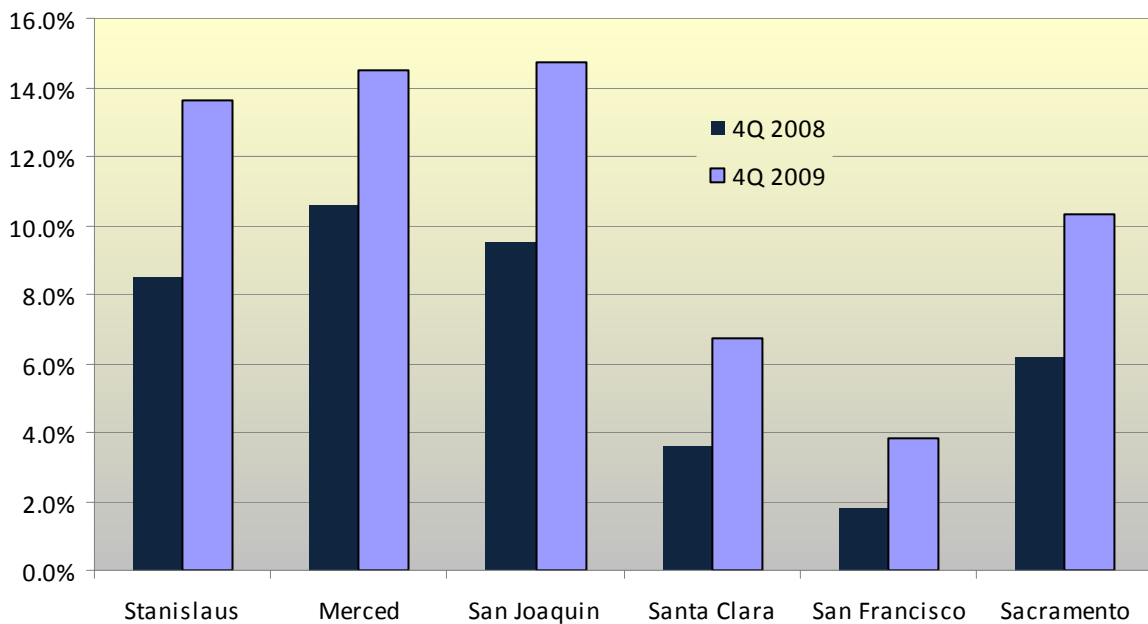


## FORECLOSURE ACTIVITY

According to Realty Trac, monitors of real estate activity since 1996, April 2009 foreclosure activity in California was the nation's third highest state foreclosure rate, with one in every 138 housing units receiving a foreclosure filing during the month. As of April 2009, the state foreclosure filing rate dropped to one in every 192 housing units, a decrease of approximately 28%.



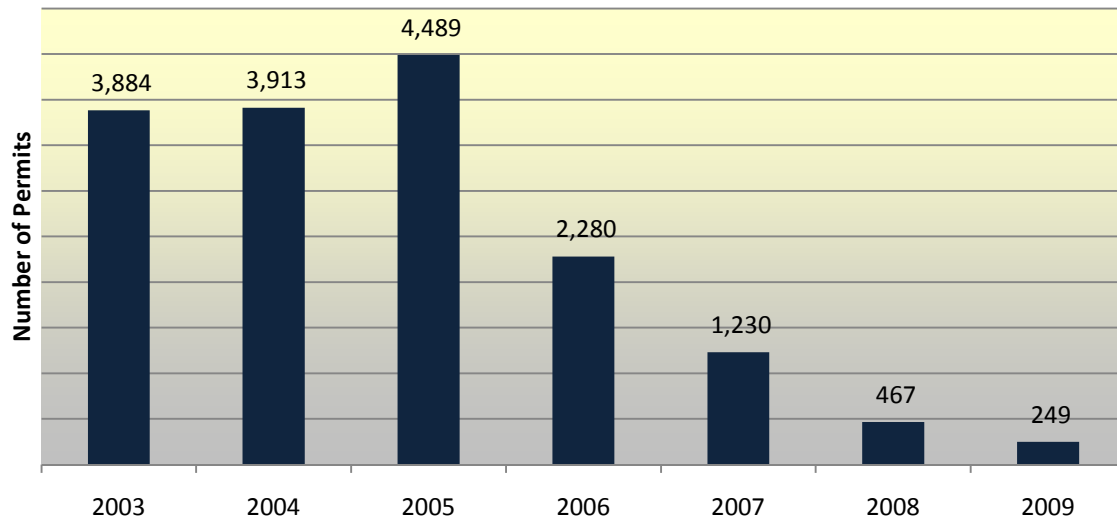
## % of Mortgages 90 days or More Past Due



## SINGLE-FAMILY BUILDING PERMITS

One of the strongest indicators of the construction slowdown is building permit activity. After reaching a high in 2005 of 4,489, the number of single-family building permits has steadily declined to a low of 249 in 2009 for a decline of nearly 95%. Although it is generally agreed that the new home construction industry is currently dragging bottom, experts disagree as to the timing of a rebound.

### Stanislaus Single-Family Building Permits



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#### Sources:

Alliance Business Research Center at: [www.stanalliance.com](http://www.stanalliance.com)  
California Department of Finance Forecast  
California Employment Development Department  
California Department of Transportation  
Construction Industry Research Board  
California Building Industry Association  
Modesto Bee article March 20, 2010  
Realty Trac Information Systems  
The Real Estate Center at Texas A & M University

# Stanislaus County



Striving to be the Best



## Planning Process

# PLANNING PROCESS

This section identifies the planning process, the Planning Team members, the meetings held as part of the planning process, documents the outreach efforts, and the review and incorporation of existing plans, reports, and other appropriate information.

Stanislaus County took a multi-jurisdictional approach to preparing its hazard mitigation plan. Throughout the development process, the Office of Emergency Services worked tirelessly to involve all of the cities, schools, and special districts. These local jurisdictions were not only invited to participate, but were guided through the process. The inclusive process was also open to public involvement and input. Reaching out to the public helped to ensure that citizens understood that a plan update was underway and provided residents with opportunities to support local jurisdictions in their planning efforts.

A comprehensive description of the planning process in this document informs citizens and other readers about the plan's development and serves as a record of how decisions were reached. A detailed summary of the participation demonstrated by each jurisdiction is presented under Supporting Documentation at the end of this section.

At the Operational Area Council Meeting on August 20, 2009, the Assistant Director of Emergency Services and the MJHMP Project Manager gave a PowerPoint presentation on Hazard Mitigation Planning. Representatives from each of the nine cities in the County and other participating agencies such as the American Red Cross, United Way, and the Latino Emergency Communication Council were in attendance. All were invited to participate with the County in our Plan Update. Following that meeting the Assistant Director of Emergency Services, met with the Chief Executive Officer of the County to establish our Planning Team.

## PLANNING TEAM MEMBERS

ROLE	NAME	DEPARTMENT
<p><b>Assistant Director of Emergency Services/Fire Warden</b></p> <ul style="list-style-type: none"> <li>Authority on mitigation planning, hazard response, and community issues.</li> </ul>	Gary Hinshaw	Office of Emergency Services
<p><b>Project Manager/Plan Author</b></p> <ul style="list-style-type: none"> <li>Writes and prepares the plan update;</li> <li>Involves participating jurisdictions and stakeholders and represents the Chief Executive Office; and</li> <li>Develops text and orchestrates actual production of plan document.</li> </ul>	Marnie Ardis	Chief Executive Office
<p><b>Planner</b></p> <ul style="list-style-type: none"> <li>Plan development, land use, future development, and safety element of the General Plan.</li> </ul>	Kirk Ford, Director	Planning & Community Development



ROLE	NAME	DEPARTMENT
<b>Planner</b> <ul style="list-style-type: none"> <li>Plan development, land use, future development, and safety element of the General Plan.</li> </ul>	Angela Freitas, Deputy Director	Planning & Community Development
<b>Interim Chief Building Official</b> <ul style="list-style-type: none"> <li>Building code enforcement, land use, and mitigation goal and strategy contact.</li> </ul>	Steve Treat	Planning & Community Development
<b>Senior Planner</b> <ul style="list-style-type: none"> <li>Housing Element Project Manager for General Plan</li> </ul>	Bill Carlson	Planning & Community Development
<b>Fire Marshall</b> <ul style="list-style-type: none"> <li>Responsible for Federal, State and local code interpretations; and</li> <li>Code variance, pre-engineering analysis, new business development, and fire code development for the County.</li> </ul>	Kenneth Slamon, Jr.	Office of Emergency Services
<b>Engineer/Public Works</b> <ul style="list-style-type: none"> <li>Expert on County infrastructure. This includes inventory and valuation information for public infrastructure for each of the five identified hazards. The inventory is comprehensive and includes: roads, traffic signals, drainage facilities, lighting facilities, bridges, and airports; and</li> <li>GIS mapping is now done through the Public Works Department. Previously handled by the Strategic Business Technology department.</li> </ul>	Matt Machado, Director	Public Works
<b>Chief Information Officer</b> <ul style="list-style-type: none"> <li>GIS/IT expert; and</li> <li>Coordinating efforts between SBT and Public Works.</li> </ul>	Paul Gibson	Chief Executive Office
<b>Public Works/GIS Manager</b> <ul style="list-style-type: none"> <li>GIS implementation and mapping.</li> </ul>	Peou Khiek	Public Works

ROLE	NAME	DEPARTMENT
<p><b>Public Works/GIS Application Specialist</b></p> <ul style="list-style-type: none"> <li>• GIS map creation, research, data collection, data verification, and hazard analysis.</li> </ul>	Mike Wilson	Public Works
<p><b>Hazard Knowledge</b></p> <ul style="list-style-type: none"> <li>• Historical data of past events; and</li> <li>• Knowledge of Emergency Operations Plan for the County and nine cities.</li> </ul>	Chris Holmer	Office of Emergency Services
<p><b>Emergency Management</b></p> <ul style="list-style-type: none"> <li>• Assists in coordinating emergency services for OES and Operational Area.</li> </ul>	Deborah Thrasher	Office of Emergency Services
<p><b>Assessor</b></p> <ul style="list-style-type: none"> <li>• Determines property values of parcels in County; and</li> <li>• Shares database and resources to aid in determining property values for risk assessment and integration with GIS mapping of hazards.</li> </ul>	Doug Harms, Assessor	Assessor's Office
<p><b>Capital Facilities</b></p> <ul style="list-style-type: none"> <li>• Provides inventory of current and future County facilities for integration into GIS mapping.</li> </ul>	Tim Fedorchak	Chief Executive Office
<p><b>Public Information Officer</b></p> <ul style="list-style-type: none"> <li>• Public information official for Stanislaus County.</li> </ul>	David Jones	Chief Executive Office
<p><b>Risk Management</b></p> <ul style="list-style-type: none"> <li>• Provides a list of the insured value of each County owned facility.</li> </ul>	Ed Fenton	Risk Management Division/Chief Executive Office

## **MJHMP KICK-OFF MEETING**

On August 31, 2009, the Project Manager sent an e-mail to the cities, schools, and special districts in the County inviting them to participate in the Kick-Off Meeting for the MJHMP Update. Jurisdictions were asked to complete the Hazard Identification Questionnaire and Plan Survey and fax completed results prior to the meeting. A reminder email was sent out September 14, 2009.

On September 17, 2009, twenty-seven jurisdictions participated in the Kick-Off Meeting held at the Salida Library. The Assistant Director of Emergency Services explained the importance of participating in the plan update and presented an overview of the process with a PowerPoint presentation explaining the plan requirements.

Participants provided feedback during the Kick-Off Meeting through their completion and submittal of the Hazard Identification Questionnaire. Each entity was asked to review the hazards and state if they concurred with the determination and to provide information on: (a) any unique concerns; (b) any notable events since 2004, including the date, number of injuries, and types (and or dollar amounts) of damages to buildings, utilities, infrastructure and, especially, critical facilities; and (c) any areas of the County and/or specific facilities that they felt were particularly at risk, even if there are no historic occurrences.

The participants had a lively discussion and reached consensus that the County would include the following five hazards in the plan update: earthquake, landslide, dam failure, flood, and wildfire.

Participants also provided feedback using the Plan Survey tool to assess ways to improve the MJHMP and make it more meaningful. Feedback was sought on ways to improve the plan format, content, and types of codes, or zoning that could be implemented in the update to make our communities safer from natural hazards.

The Kick-Off meeting was the perfect opportunity to discuss the benefits of multi-jurisdictional mitigation planning. A multi-jurisdictional plan ideally makes sense because it offers an opportunity to cooperate on mutual concerns, allows economies of scale, and avoids duplication of efforts.

The Project Manager clarified that as the lead agency the County would coordinate the meetings, be the point of contact for the plan, communicate with participants, inform them of due dates and requirements, and share resources when appropriate. In turn, each participating jurisdiction is responsible for writing their own plan, meeting the requirements, preparing their own crosswalk, and having their local governing body adopt the plan. Satisfactory participation was discussed and defined as: attendance at meetings or work sessions, submission of requested data, submission of completed questionnaires, review and comment on draft materials, update risk assessment and mitigation strategies, and link local internet presence to the MJHMP website.

The MJHMP Update website <http://www.stanoes.com/oes.shtm> was shared at the Kick-Off Meeting. Resource materials such as: Plan Facts, Newsletter, and Hazard Identification Questionnaire and Survey were reviewed.


## **PUBLIC INVOLVEMENT IN THE PLAN DEVELOPMENT PROCESS**

It is important to provide the general public with a means to not only learn about the Plan Update, but to voice concerns and to provide input throughout the planning process. The MJHMP website served as a means to alert the public to the fact that the County was working to develop a Hazard Mitigation Plan Update and to provide the public with an opportunity to participate, ask questions, and submit comments and/or suggestions on the process. The website provided an opportunity to ensure that the participating jurisdictions were fully aware of the plan update and to make it easier for them to become involved and engaged during the planning process. The website will continue to be maintained on a regular basis to alert the public on the progress of the update and subsequent updates. The website also has a Contact Us link with the name and phone number of the Assistant Director of Emergency Services and Project Manager so individuals can reach out for information on how to become involved. The following screen shots show the County's site.

Office of Emergency Services (OES) - Microsoft Internet Explorer

Address: <http://www.scoes.info/oes.shtm>

- » OES Home
- » About Us
- » Emergency Preparedness
- » News & Events
- » Past Events/Photo Gallery
- » Resources for Emergency Managers
- » Important Links
- » DFW Home
- » About Us
- » Region IV Fire & Rescue
- » Fire Authority
- » Past Events / Photo Gallery
- » Important Links
- » DFM Home
- » About Us
- » Development Requirements
- » Permits, Fees & Special Services
- » Forms & Applications
- » Brochures
- » Fire Department Contacts
- » Contact Us
- » Stanislaus County Home



**Office of Emergency Services (OES)**

The Office of Emergency Services provides preparedness before, and coordination direction during, large-scale emergencies and disasters. OES coordinates with partner agencies including nine cities, special districts, and key private agencies in providing planning, response, recovery, and mitigation activities as a result of disaster related incidents.

**Office of Emergency Services (OES)**  
 3705 Oakdale Rd., Modesto, Ca. 95357  
 (209) 552-3600 FAX: (209) 552-3602  
 Monday - Friday, 8 a.m. - 5 p.m.

**After hours Emergency number**  
 (209) 552-3911

- » [Who are we? Find out about us](#) and the services we provide.
- » [Learn how you can be prepared for an emergency](#) and find valuable resources.
- » [Be informed](#) about upcoming events, current topics, alerts & warnings.
- » [Get helpful information for emergency managers.](#)
- » **[Multi-Jurisdictional Hazard Mitigation Plan Update](#)**
- » [Obtain useful links](#) related to Agriculture, weather / floods, & Public Health / Safety.

**Disaster Council**

- » [Disaster Council](#)
- » [Operational Area Council](#)

**Related Agencies**

- » [Fire Warden](#)
- » [Ag. Commissioner](#)
- » [Sheriff's Department](#)
- » [Health Services Agency](#)
- » [Stanislaus Regional 911](#)

**Hot Links**

- » [About Exotic Newcastle Disease - END](#)
- » [About West Nile Virus](#)
- » [Past Events/Photo Gallery](#)
- » [StanEmergency.Com](#)

**Other Related Agencies**

- » [Homeland Security](#)
- » [Federal Emergency Mgmt. Agency](#)
- » [American Red Cross](#)

OES :: Multi-Jurisdictional Hazard Mitigation Plan Update - Microsoft Internet Explorer

Address: <http://www.scoes.info/mjhmp.shtm>

HOME VISITORS DOING BUSINESS COUNTY SERVICES ONLINE SERVICES

**Stanislaus County**

Emergency Services Home

- » OES Home
- » About Us
- » Emergency Preparedness
- » News & Events
- » Past Events/Photo Gallery
- » Resources for Emergency Managers
- » Important Links
- » DFW Home
- » About Us
- » Region IV Fire & Rescue
- » Fire Authority
- » Past Events / Photo Gallery
- » Important Links
- » DFM Home
- » About Us
- » Development Requirements

**OFFICE OF EMERGENCY SERVICES**  
PHONE: 209-552-3600

» **OES :: Multi-Jurisdictional Hazard Mitigation Plan Update**

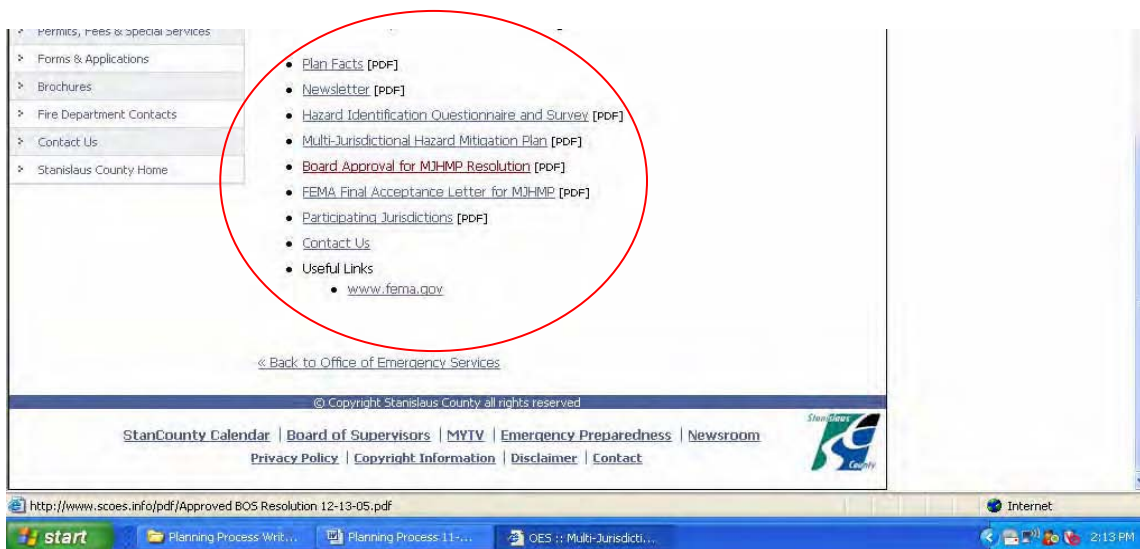






The Multi-Jurisdictional Hazard Mitigation Plan is a countywide plan that identifies risks posed by disasters, and identifies ways to minimize damage from those disasters. The plan is a comprehensive resource document that serves many purposes, including: enhancing public awareness and understanding, creating a decision tool for management, promoting compliance with State and Federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination.

Stanislaus County is in the process of updating our Multi-Jurisdictional Hazard Mitigation Plan. The MJHMP previously approved by FEMA on January 12, 2006, must be updated every five years. The Plan will demonstrate the County and participating jurisdiction's commitment to reducing risk and serve as a guide for decision makers as they commit resources to minimize the effects of natural hazards. It just makes sense to be pro-active and not wait for disaster to strike before the County takes action to reduce risk to human life and property. Federal emergency management agencies will now only provide disaster relief funds to those counties/communities that have shown positive steps to prevent loss and damage from disasters by adopting a Hazard Mitigation Plan. By planning now, we ensure that the County will be covered later, in the event that disaster strikes! The Multi-Jurisdiction Hazard Mitigation Plan identified and profiled the following hazards: Earthquake, Landslide, Dam Failure, Flood, and Wildfire.



Participating jurisdictions were encouraged to create similar pages or links on their jurisdiction's website to the overall County website to promote outreach to our stakeholders.

## PLAN FACTS

Plan Facts was created to increase public awareness of the hazard mitigation plan process by providing a simple one page handout that could be used to inform the public and community leaders and other stakeholders about the importance of hazard mitigation planning and the plan update. Hard copies were handed out at the Operational Area Council Meeting and the Kick-Off Meeting.

All jurisdictions received an email following the Kick-Off meeting with an update of what was discussed along with copies of the resource materials and link to the website. The initial meeting generated a lot of interest and subsequent one-on-one meetings with various jurisdictions wanting additional information on how to proceed.

## SCHOOLS TASK FORCE LEADERS

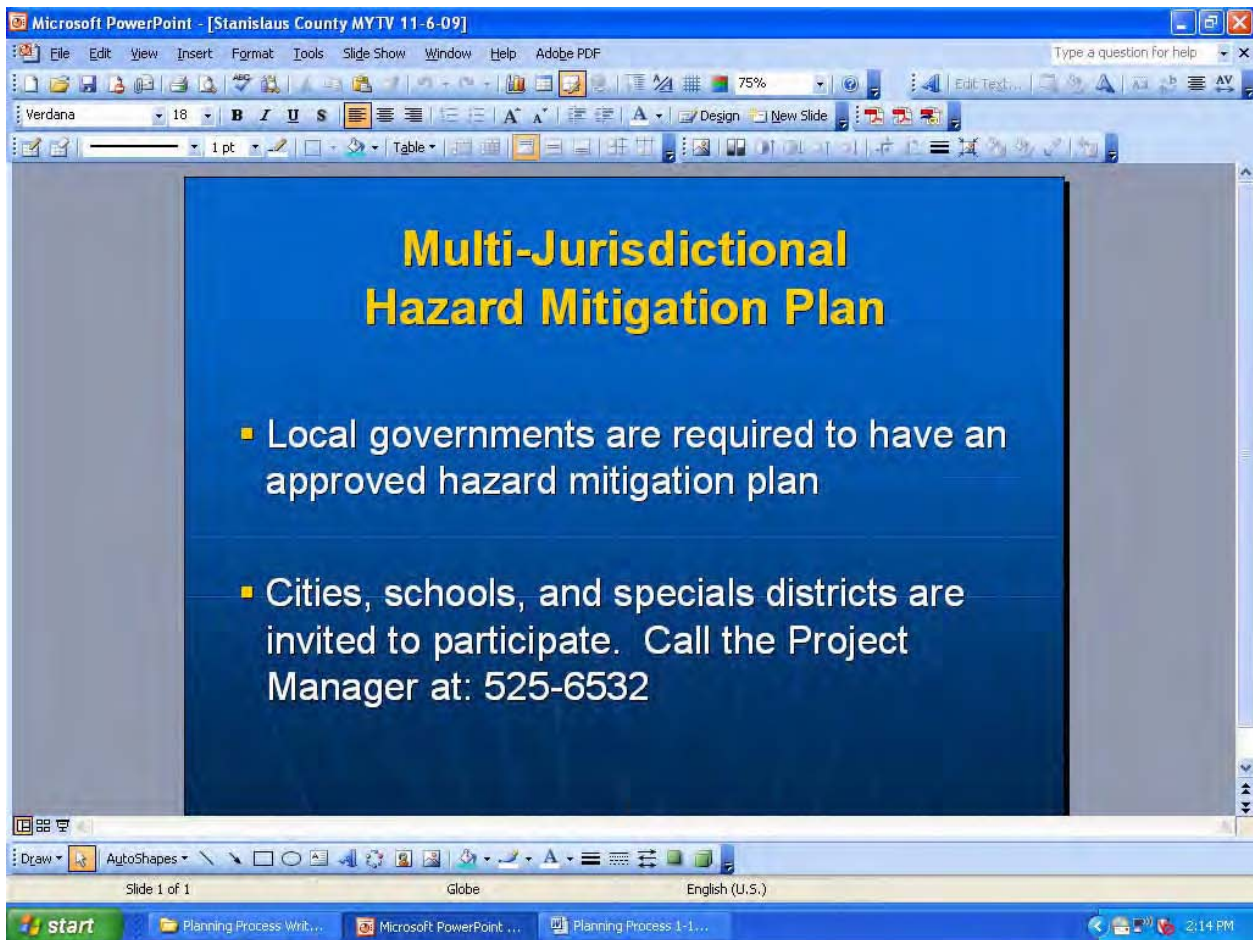
Two task force leaders were chosen to represent the schools. Ken Fitzgerald, Planning Coordinator for the Stanislaus County Office of Education, volunteered to coordinate outreach efforts with the Small School Districts. On September 30, 2009, Ken coordinated a meeting with the Small School District Superintendent's and shared the PowerPoint presentation from the Kick-Off meeting, along with the Plan Fact Sheet, Newsletter, and website.

Miguel Galvez, Director of Facilities Development and Support from City of Modesto Schools volunteered to coordinate with the Large School Districts. On October 22, 2009, he met with the Stanislaus County Consortium of School Facility Planners. He reviewed the County's proposal for the Multi-Jurisdictional Hazard Mitigation Plan. He prepared a summary overview, passed out copies of the memo from Gary Hinshaw, the newsletter, and the September 17, 2009 Stanislaus County MJHMP agenda packet (including a hard copy of the PowerPoint slides). Miguel encouraged the attendees to join the County in this effort.

## INVOLVEMENT OF OTHER STAKEHOLDERS IN THE PLAN DEVELOPMENT PROCESS

In order to meet Federal requirements, the plan development process must be open to stakeholders beyond planning group members and the general public. Opportunities must be available for other stakeholders such as businesses, neighboring communities, academia, and other relevant private and non-profit interests to become involved in the planning process. The Planning Team determined that the MJHMP website previously mentioned, in addition to public announcements on the Stanislaus County

MYTV local government virtual television channel would provide daily opportunities for the public to be notified of the plan update. This program on local cable television provides news and streaming video with current information on County programs and services. The following slide runs on a continual basis.

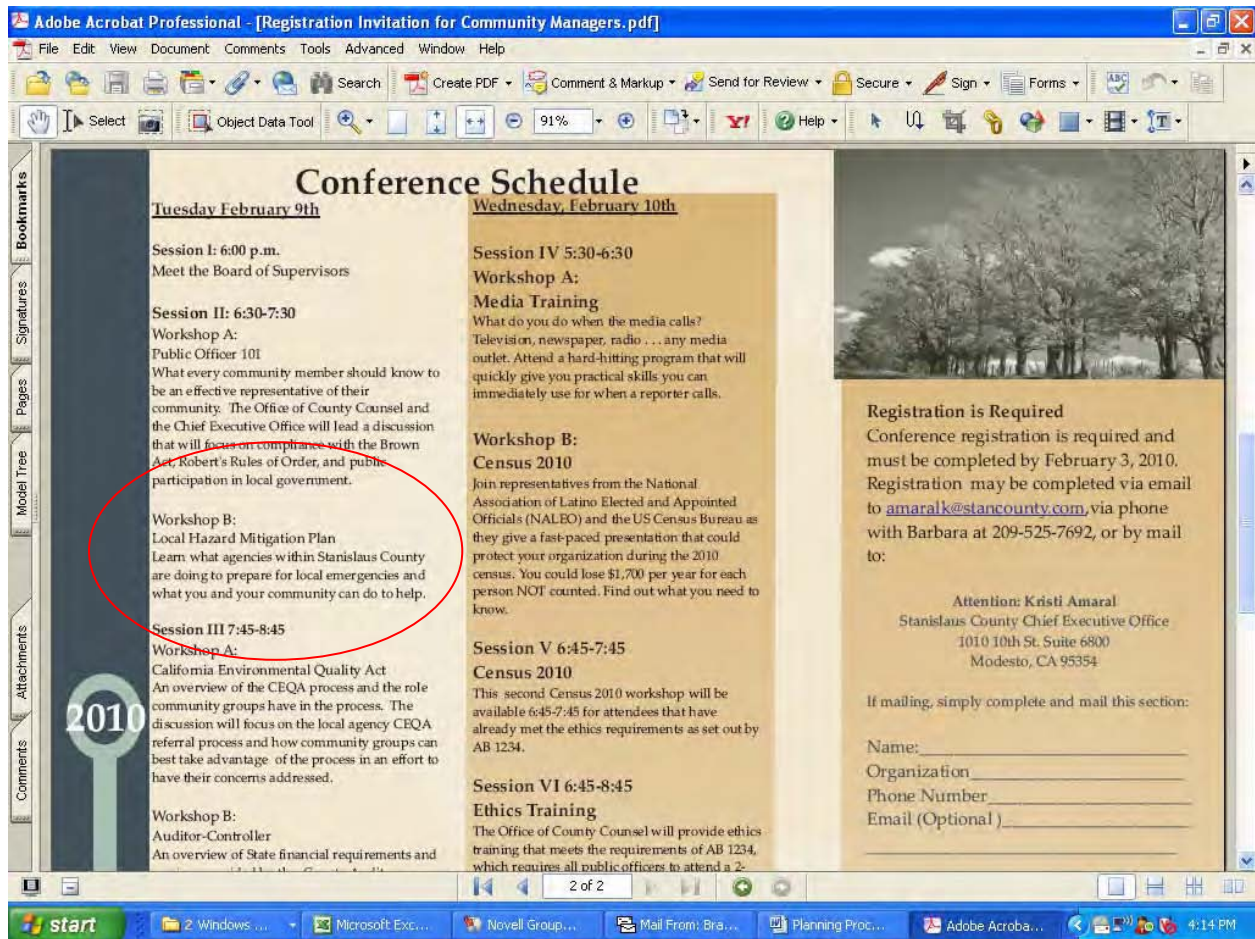


### **STANISLAUS COUNTY FIRE CHIEFS' ASSOCIATION MEETING**

On February 4, 2010, the Project Manager and Assistant Director of Emergency Services gave a PowerPoint presentation to the Fire Chiefs' of Stanislaus County. The importance of participating with the County in hazard mitigation planning and being proactive to prevent disasters was stressed. This was a good opportunity to reach out to Fire Chiefs' who may have missed previous training sessions.

### **EIGHTH ANNUAL COMMUNITY CONFERENCE**

On February 9, 2010, the Assistant Director of Emergency Services conducted a workshop on the Multi-Jurisdictional Hazard Mitigation Plan at the 8<sup>th</sup> Annual Community Conference. This was the perfect venue for outreach to all community leaders in Stanislaus County.



## MITIGATION STRATEGY MEETINGS

On October 22, 2009, the Project Manager met with representatives from the Planning and Community Development building code section. The previous plan was reviewed and new mitigation goals and actions were discussed along with incorporating information from the Safety Element of the General Plan.

On January 7, 2010, the Project Manager met with the Interim Chief Building Official and Fire Marshall to review and further analyze the mitigation goals and strategies. It was determined that input from the Fire Marshall would be invaluable since he manages the County Fire Prevention Program and is responsible for Federal, State, and local code interpretations; code variance, pre-engineering analysis, new business development, fire code development, plan review, and serves as a liaison with the Board of Supervisors, City Councils, and fire districts. The Fire Marshall coordinates the adoption of the California Fire Code throughout the County and in conjunction with the local jurisdiction, has final authority on the fire component of all new development. It was helpful to incorporate his feedback and comments into the draft plan.

The Project Manager had subsequent meetings with the Interim Chief Building Official on February 25, 2009 and again on March 5, 2010.

The Planning Team then developed a mitigation strategy with goals and actions to increase the disaster resistance of the County, along with procedures for monitoring, evaluating, and updating the Plan to ensure that it remains a "living document."

## **HOUSING ELEMENT PLANNING**

On March 10, 2010, the Project Manager met with Bill Carlson, from Planning and Community Development. The Housing Element of the General Plan is updated every five years and the department recently completed that effort. The Housing Element will be reviewed by the Planning Commission on March 18, 2010 and go to the Board of Supervisors on April 20, 2010 for adoption. The new Housing Element will be incorporated into the Risk Assessment to make sure the County has updated information under the "Analyzing Development Trends" section of the plan.

## **GEOGRAPHICAL INFORMATION SYSTEM (GIS) PROJECT PLANNING**

When the Risk Assessment for the Multi-Jurisdictional Hazard Mitigation Plan was originally prepared in 2004, the County's Strategic Business Technology (SBT) Department was responsible for all GIS mapping. However, since that time, the GIS mapping function has been transferred to the Public Works Department.

The Chief Information Officer, Deputy Chief Information Officer, and Project Manager met on August 21, 2009 to determine how to effectively transfer the knowledge needed for the plan update from SBT to Public Works. Fortunately, Kenneth Miller who prepared the original GIS maps was available to assist with this transition; and he agreed to serve as a consultant. It was determined that having the previous GIS Manager work collaboratively with the current GIS Manager would be the most efficient way to ensure the requirements were met.

On September 4, 2009, the Chief Information Officer, Project Manager, Capital Projects Lead, and past and present GIS Manager met to review and discuss the plan update requirements. The Chief Information Officer facilitated the process by preparing a Statement of Work for the MJHMP update. This document detailing the GIS mapping requirements was ultimately approved by the Chief Executive Officer of the County on October 15, 2009. The GIS Manager contacted Rob Mead at State Cal EMA for assistance with historical base maps and contacted FEMA to obtain HAZUS-MH, the nationally standardized GIS software that is recommended.

On October 9, 2009, the Director of Public Works was contacted by e-mail to notify him of the data collection component that is outside the scope of GIS mapping. The Public Works Director is responsible for basic data collection regarding infrastructure. This includes inventory and valuation information for public infrastructure for each of the five identified hazards: earthquake, landslide, dam failure, flood, and wildfire. The inventory should be comprehensive and include: roads, traffic signals, drainage facilities, lighting facilities, bridges, and airports.

Other data collection partners include: Ed Fenton from Risk Management who was contacted on October 8, 2009 to provide a list of the insured value of each County owned facility, and Tim Fedorchak of Capital Projects, who was contacted on October 12, 2009 to provide a list of the County-owned and occupied facilities.

Assessor, Doug Harms, was contacted by the GIS Manager to provide access to the Assessor's database for the MJHMP update. The Assessor previously assisted the County in 2004 when the original Hazard Mitigation Plan was drafted. Most of the inventory and risk data can be layered into the County's existing GIS system to provide nearly instant aggregation of asset values within specifically identified risk areas. This data will then be updated and made available in a live database to ensure that the information is current. A GIS-based solution provides an interactive tool that can be shared with emergency responders and policy-makers in addition to supplying the preventative hazard mitigation-planning tool for development analysis purposes. Use of the GIS system will also be expanded in the future to provide for automation of notification to responders for virtually any "emergency alert" situation such as evacuations.



## **PUBLIC WORKS/GIS PROJECT PLANNING MEETINGS**

The Chief Information Officer met with the GIS Manager on August 31, 2009 to describe the role, responsibilities and expectation of Public Works in the plan update. The Chief Information Officer also met with the Assistant Director of Emergency Services and the Chief Executive Officer on September 17, 2009 to discuss project costs, and met with the GIS Manager and Public Works Director on September 18, 2009 to review how the Public Work's Department would be charged for the project.

Public Works had an internal department meeting on October 27, 2009 to discuss what information was needed to prepare the GIS maps and how to obtain resources from State Cal EMA and FEMA. In attendance were Laurie Barton, Denny Ferreira, Dianne Haugh, Peou Kheik, David Leamon, Julie Serrano, and Michael Wilson. On December 8, 2009, the Project Manager met with the Chief Information Officer and GIS Manager to review the progress on the GIS maps. On March 16, 2010, the Project Manager met with the Director of Emergency Services, Chief Information Officer, Public Works Director, Planning Director, and GIS Manager to review the outcomes for the MJHMP. The team discussed strategies to improve the process in the next plan update.

## **GIS PROJECT OBJECTIVE**

The development of the MJHMP ensures the County is protected in the event of a disaster and provides tools to assist emergency responders. The plan is consistent with the Board of Supervisor's priorities to ensure "a safe community" and provide "efficient delivery of public services."

## **GIS SCOPE OF WORK FOR EACH HAZARD INCLUDES:**

- Identify Structures—buildings, infrastructure, critical facilities, structures that house elderly or disabled and transportation systems—both for present assets and those planned for the future.
- Address Repetitive Loss Properties—by type including residential, commercial, and institutional.
- Estimate Potential Losses. The development of the Multi-Jurisdictional Hazard Mitigation (MJHMP) will include an inventory of assets from each publicly governed jurisdiction, coordinated by Stanislaus County, and an assessment of hazard risks: earthquakes, flooding, dam failure, wildfires and landslides.
- The MJHMP must include the five specified risks gauged at 22 levels. The asset inventory provided by the County Assessor's Office database includes individual parcels, various lands use codes, and various taxing agencies or districts.
- County property (building asset) inventory and valuation—for both present assets and those planned for the future. This inventory to be by APN number with Assessor's use code, government jurisdiction, and valuation data for all APN's.
- Update the separate GIS layers for present assets and those planned for the future, to allow for GIS queries and reports to distinguish between the two. When new facilities are completed, the corresponding feature will be moved from the "future assets" layer to the "current asset" layer.
- From Census data, the number of people that would be affected by each natural hazard.
- During an update to the risk assessment, local jurisdictions must consider current and expected future vulnerability to all hazards and integrate new hazard data such as flood studies. Local jurisdictions are asked to incorporate updated estimates of cost of living and replacement costs for vulnerable buildings and impacts of population growth or loss in vulnerable areas.

- The number of properties/assets by general use code, for privately owned properties, and the sum of the property values, and improvement values from the Assessor's database.
- A listing of the public assets separately for each jurisdiction.
- The number of people impacted by the disaster.

**PUBLIC WORKS—GEOGRAPHICAL INFORMATION SYSTEM (GIS)**

The GIS maps and reports developed for the Multi-Jurisdictional Hazard Mitigation Plan were created exclusively by the Stanislaus County Public Works Department. This system is not connected to, dependent on, or in any way related to the GIS system developed by California CAD Solutions for the Alliance project. The Alliance project was developed using the Autodesk MapGuide software—a browser based “inquiry only” type system with limited analysis and mapping capabilities. That project addressed the specific needs of the Alliance group, and runs on an entirely different server from any other County GIS system.

The GIS system used for the MJHMP, is based on ESRI's ArcInfo software, and is capable of performing sophisticated GIS layer creation, analysis, and mapping tasks. ESRI's software is the County GIS standard, used by most, if not all other County departments actively involved in GIS—including SBT, the Emergency Operations Center, and 9-1-1.

**DECLARATION OF INTENT TO PARTICIPATE WITH STANISLAUS COUNTY**

On October 29, 2009, the Fire Warden/Assistant Director of Emergency Services sent a letter to one-hundred and eleven (111) jurisdictions explaining the importance of participating in hazard mitigation planning. Each jurisdiction was asked to formally declare if they were going to participate with Stanislaus County. This information will be used to determine who is participating so the Project Manager can schedule our next planning meeting.

<b>JURISDICTIONS INVITED</b>	<b>PARTNERS INVITED</b>
<b>Mayors/City Managers</b>	18 partners
<b>School Districts</b>	27 partners
<b>Community Service Districts</b>	8 partners
<b>Fire Protection Districts</b>	15 partners
<b>Fire Services</b>	7 partners
<b>Police Services</b>	5 partners
<b>Hospital Districts</b>	3 partners
<b>Irrigation Districts</b>	6 partners
<b>Sanitary Districts</b>	2 partners
<b>Cemetery districts</b>	3 partners
<b>Drainage Districts</b>	2 partners
<b>Flood Control Districts</b>	2 partners
<b>Mosquito Abatement Districts</b>	2 partners
<b>Reclamation Districts</b>	2 partners
<b>Resource Conservation Districts</b>	2 partners

JURISDICTIONS INVITED	PARTNERS INVITED
Water Districts	7 partners

## INTENT TO PARTICIPATE RESPONSES

Of the 111 letters that went out to various jurisdictions, 58 responses were received stating they wanted to participate with the County. Knights Ferry Cemetery District, West Stanislaus Resource Conservation District, and East Stanislaus Resource Conservation District responded that they did not intend to participate with the County in the plan update. El Solyo Water District, Newman Crows Landing USD, Riverbank Unified School District, Rock Creek Water District, and Valley Home Joint School District participated in the original MJHMP, but did not respond with a letter of intent and are not considered participating jurisdictions in the plan update. The Planning Coordinator for the Stanislaus County Office of Education said he would contact these non-participating school districts and encourage them to participate with the County in the plan update.

The table below reflects the names of those entities declaring their intent to participate. The far right column shows whether the jurisdiction previously participated with the County or if they are new to the process.

JURISDICTION	NAME OF DISTRICT	CONTACT NAME	PRIOR PARTICIPATION
Community Services District	Crows Landing Community Services District	Ignacio H. Lopez	NO—NEW
Community Services District	Denair Community Services District	Gaylon W. Wade	NO—NEW
Community Services District	Grayson Community Services District	Ignacio H. Lopez	NO—NEW
Community Services District	Keyes Community Services District	Harinder Grewal	NO—NEW
Cemetery District	Patterson/Grayson Cemetery District	Bryan Bingham	NO—NEW
Cemetery District	Hills Ferry Cemetery District	Ken Moeller	NO—NEW
Fire District	Salida Fire District	Dale Skiles	NO—NEW
Fire District	Burbank-Paradise Fire Protection District	Lance Silva	NO—NEW
Fire District	Oakdale Rural Fire Protection District	Danielle Denczek	NO—NEW
Fire District	Ceres Fire Protection District	Richard Scola	NO—NEW
Fire District	Industrial Fire Protection District	Mike Payton	NO—NEW
Fire District	Hughson Fire Protection District	Scott Berner	NO—NEW
Fire District	Keyes Fire Protection District	Bob Watt	NO—NEW
Fire District	Modesto-Ceres Fire Protection Agency, a JPA	Richard Scola	NO—NEW
Fire District	Mountain View Volunteer Fire Protection District	Kevin Blount	NO—NEW
Fire District	Stanislaus Consolidated Fire Protection District	Steve Mayotte	NO—NEW
Fire District	Turlock Rural Fire Protection District	Rick Fortado	NO—NEW
Fire District	West Stanislaus Fire Protection District	Steven Hall	YES—PRIOR
Fire Department	Modesto Fire Department	Mike Payton	NO—NEW
Hospital District	Oak Valley Hospital District	Vivian Thompson	NO—NEW
Hospital District	Del Puerto Health Care District	Bill Danforth	YES—PRIOR
Hospital District	Patterson District Ambulance	Bill Danforth	NO—NEW
Irrigation District	Modesto Irrigation District	Jahna Colby	NO—NEW
Irrigation District	Oakdale Irrigation District	Derek Davis	NO—NEW
Irrigation District	Turlock Irrigation District	Richard Eastman	YES—PRIOR
Water District	Oak Flat Water District	Anthea Hansen	YES—PRIOR
Water District	Del Puerto Water District	Anthea Hansen	YES—PRIOR
Sanitary District	Salida Sanitary District	Michael Gilton	NO—NEW
School District	Modesto City Schools	Miguel Galvez	YES—PRIOR
School District	Stanislaus County Office of Education	Ken Fitzgerald	YES—PRIOR
School District	Ceres Unified School District	Fred VanVleck	YES—PRIOR
School District	Chatom Unified School District	Jack Mayer	YES—PRIOR
School District	Gratton School District	Shannon Rice	YES—PRIOR
School District	Hart-Ransom Union School District	R. Ream Lochry	YES—PRIOR
School District	Hickman Community Charter District	Rusty Wynn	YES—PRIOR
School District	Hughson Unified School District	Cindy Whiteman	YES—PRIOR
School District	Keyes Union School District	Jerry Hines	YES—PRIOR

JURISDICTION	NAME OF DISTRICT	CONTACT NAME	PRIOR PARTICIPATION
School District	Knights Ferry School District	Beverly Noe	YES—PRIOR
School District	Empire Union School District	Pamela Wall	YES—PRIOR
School District	La Grange School District	Joseph Maganu	YES—PRIOR
School District	Paradise Elementary School District	Douglas Fraser	YES—PRIOR
School District	Roberts Ferry Union School District	George Johnson	YES—PRIOR
School District	Salida Union School District	Douglas Baughn	YES—PRIOR
School District	Shiloh School District	Seth Ehrler	YES—PRIOR
School District	Stanislaus Union School District	Sandy Putnam	YES—PRIOR
School District	Sylvan Union School District	John Halverson	YES—PRIOR
School District	Turlock Unified School District	Roger Smith	YES—PRIOR
School District	Waterford Unified School District	Jose Aldaco	YES—PRIOR
School District	Yosemite Community College District & MJC	Becky Crow	YES—PRIOR
City	City of Ceres	Richard Scola	YES—PRIOR
City	City of Modesto	Jolene Gonzales	YES—PRIOR
City	City of Hughson	Janet Rasmussen	YES—PRIOR
City	City of Newman	Brett Short	YES—PRIOR
City	City of Oakdale	Mike Botto	NO—NEW
City	City of Patterson	Steve Hall	YES—PRIOR
City	City of Riverbank	Norma Manriquez	YES—PRIOR
City	City of Turlock	Tim Lohman	YES—PRIOR
City	City of Waterford	Matthew Erickson	NO—NEW

### PLANNING PROCESS/RISK ASSESSMENT MEETING

All participating jurisdictions were invited to attend a meeting held on January 19, 2010 in the Board Chambers of 1010 10<sup>th</sup> Street, Modesto. The Project Manager and Assistant Director of Emergency Services reviewed the FEMA Planning Guide requirements and discussed the importance of accurately completing the crosswalk. The Project Manager provided training on the desired organization of the plan document and reviewed the requirements of the Prerequisites, Planning Process, and Risk Assessment sections of the plan. Training on the Mitigation Strategy and Plan Maintenance sections of the plan will be discussed at our next meeting.

### MITIGATION STRATEGY/PLAN MAINTENANCE MEETING

On April 20, 2010, the County hosted the final MJHMP training session at County Center III, located at 917 Oakdale Road in Modesto. Training sessions were purposely held at three different locations in an attempt to accommodate the needs of all participating jurisdictions that would be traveling from various regions of the County. All jurisdictions were notified via email of the meeting and provided with several training tools to assist them in developing a mitigation strategy. For the Plan Maintenance section of the plan, jurisdictions were encouraged to participate with the County by using the *Progress Report Form*. The form will be used to focus on any new hazard occurrences and to report any mitigation actions that may have been implemented and completed since the plan update was adopted. The findings will be reviewed by the Assistant Director of Emergency Services and used for the plan update in 2015. Comprehensive directions were given on the plan submittal process and the requirement that the Crosswalk must be submitted in Word format so the reviewers are able to write comments and score the plan.

### PLANNING TEAM REVIEW

On April 12, 2010, all members of the Planning Team received a draft copy of the hazard mitigation plan for review and feedback. The Chief Executive Officer and Chief Operations Officer/Assistant Executive Officer also received a draft copy of the plan for their input. The Planning Team was given a one month turnaround time in which to review the plan and provide comments to the Project Manager for incorporation into the final submission to CalEMA and FEMA.

## THANK YOU

The Project Manager would like to thank the Assistant Director of Emergency Services for his continued support and assistance in preparing the hazard mitigation plan. His guidance and direction was instrumental in providing a unified team approach among the participating jurisdictions and planning team members. He set the tone for all participants that it makes sense to be pro-active and not wait for disaster to strike before the County takes action to reduce risk to human life and property.

Stanislaus County is also fortunate to have a Chief Executive Officer who understands the importance of hazard mitigation planning. He was able to foster harmony between the various departments participating in the plan update. In spite of tough fiscal constraints, the necessary resources and staff time was provided to ensure the successful completion of the project.

## REVIEW AND INCORPORATION OF EXISTING PLANS

In the process of preparing this hazard mitigation plan, many other existing plans, studies, reports, and technical information were evaluated. Data was incorporated as applicable from the following sources:

- **U.S. Government:**
  - FEMA Federal Emergency Management Agency to current obtain 100 and 500 year flood data;
  - HAZUS-MH nationally standardized GIS software from FEMA;
  - USGS to obtain seismic data;
  - FEMA's Integrating Manmade Hazards into Mitigation Planning;
  - Census Bureau to obtain County census block data; and
  - FEMA RIX/MT/RA/NFIP for consultation with Michael Hornick to obtain repetitive loss property record for Stanislaus County.
  
- **State of California:**
  - Finance Department to obtain January 1, 2009 Housing and Population estimates;
  - Office of Emergency Management. Consultation with Rob Mead on all hazards. (Dam Inundation, Earthquake, Flood, Landslide, and Wildfire) and to obtain a 2009 Dam Inundation updated CD;
  - Department of Conservation for consultation with Chris Wills on seismic hazards;
  - California Geologic Survey for consultation with William Bryant on seismic hazards;
  - California Division of Mines and Geology for earthquake and soil information; and
  - California Department of Forestry and Fire Prevention to obtain current "Fire Severity Zones" and "Historical Burn Areas."
  
- **Stanislaus County:**
  - The Safety Element of the General Plan;
  - Housing Element of the General Plan;
  - Capital Improvement Plan 2009-2010;
  - Multi-Jurisdictional Hazard Mitigation Plan adopted January 12, 2006;
  - Stanislaus County Emergency Operations Plan;
  - Stanislaus County GIS;
  - Assessor for parcel data including Use Codes; assessed categories; and values;
  - Facilities Maintenance for County facility list and geographic placement of facilities;
  - Health Services Agency for verification of current facilities and geographic placement of facilities;
  - Parks and Recreation for verification of current facilities and geographic placement of facilities;
  - Public Works for current infrastructure list (Bridges, Drainage, Street Lights, and Traffic Lights) and their geographic placement;
  - GIS for numerous base map shape files such as cities, county, parcels, rivers, and roads;
  - Strategic Business Technology for information on how last mitigation plan was prepared;
  - Sheriff for verification of current facilities and geographic placement of facilities;

- Capital Projects contact Tim Fedorchak for list of planned “Future Facilities”; and to correct and update facility list;
- Alliant Insurance Services for facilities list including property schedule and values; and in addition
- All relevant plans, codes, and ordinances currently in place such as building codes, zoning ordinances, subdivision ordinances, special purpose ordinances, site plan review requirements, growth management ordinances, economic development plans, and emergency response plans were reviewed.

## **MULTI-JURISDICTIONAL PARTICIPATION**

Jurisdictional Assessment Teams met individually throughout the plan development process as they deemed necessary. Jurisdictional Assessment Team members supplemented County efforts by reaching out to the public and other stakeholders within their respective jurisdictions to get the word out through various means and provide opportunities for feedback and participation.

The hazard mitigation planning process consisted of the following key steps:

- Researching a full range of natural hazards to identify which hazards could affect the County;
- Identifying the location and extent of hazard areas;
- Identifying assets located within these hazard areas;
- Characterizing existing and potential future assets at risk;
- Assessing vulnerabilities to the most prevalent hazards; and
- Formulating and prioritizing goals, objectives, and mitigation actions to reduce or avoid long-term vulnerabilities to the identified hazards.

If you have any questions or comments on the Multi-Jurisdictional Natural Hazard Mitigation Plan for Stanislaus County, additional information can be obtained by contacting:

**Gary Hinshaw**  
**Assistant Director of Emergency Services**  
**3705 Oakdale Road**  
**Modesto, California 95357**  
**Phone (209) 552-3600 • Fax (209) 552-3602**

# PLANNING PROCESS—Plan Update



## Supporting Documentation



# Stanislaus County Operational Area Council



## JPA

August 20, 2009, 1:30 p.m.  
Regional Fire Training Center

## Members

- Stanislaus County
- City of Ceres
- City of Hughson
- City of Modesto
- City of Newman
- City of Oakdale
- City of Patterson
- City of Riverbank
- City of Turlock
- City of Waterford

## Agenda

- I. Welcome and Roll Call
- II. H1N1 in Stanislaus County – Dr. John Walker
- III. Hazard Mitigation – Gary Hinshaw & Marnie Ardis
- IV. Projects
  - a. Emergency Operations Plans / EFs
  - b. Bylaws for Operational Area Council
  - c. Operational Area Council Agreement
  - d. Facility Survey Project – Care and Shelter
- V. Local Operational Area Reports
  - a. Emergency Management
    1. NIMSCAST
  - b. Fire
  - c. Law Enforcement
  - d. Mountain Valley EMSA
- VI. State Report
- VII. JPA / Partner Agencies / Public Comment
- VIII. Next Meeting - September 17, 2009
- IX. Adjourn

## Participating

### Agencies

American Red Cross

United Way

CERT

Advancing Vibrant Communities

California Emergency Management Agency

Schools

Latino Emergency Communication Council (LECC)

Mountain Valley EMSA

Utilities

Stanislaus County Departments

Private Industry

National Weather Service





**MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
OPERATIONAL AREA COUNCIL MEETING  
AUGUST 20, 2009**

FEMA requires that your attendance and participation in the development of the Multi-Jurisdictional Hazard Mitigation Plan be documented. Each individual jurisdiction should also document their own participation and contribution throughout the planning process. Each jurisdiction that is included in the plan must have its governing body adopt the local plan as their "own" before the final submission to the State and FEMA.

PRINT NAME AND TITLE	JURISDICTION	E-MAIL ADDRESS	PHONE #	PARTICIPATE WITH COUNTY?	
				YES	NO
<i>Debbie Calcote - Emergency Services Manager American Red Cross</i>		<i>debbie.calcote@amredc.org</i>	<i>209-346-1854</i>	<input checked="" type="checkbox"/>	
<i>STEVEN AUC - DIVISION CHIEF</i>	<i>CITY OF PATTERSON/ WEST STANBIS AREA</i>	<i>Shal@ci.patterson.ca.us</i>	<i>209-595-0636</i>	<input checked="" type="checkbox"/>	
<i>CHRIS FOLMANN</i>	<i>Stan Co OES</i>	<i>cholfmann@oes.com</i>	<i>209-8552-3600</i>		
<i>REV. MICHAEL DOUGLASS</i>	<i>AUC</i>	<i>INFO@ VIBRANTCOMMUNITIES.ORG</i>	<i>209- 544-9571</i>		
<i>Brian F. Weber</i>	<i>Ceres</i>	<i>brian.weber@ci.ceres.ca</i>	<i>209 538-5704</i>	<input checked="" type="checkbox"/>	
<i>DAVE FUNK</i>	<i>Stan. OES</i>	<i>dfunk@stanoes.com</i>	<i>552-3713</i>	<input checked="" type="checkbox"/>	
<i>JOHN WALKER</i>	<i>HSA/PH</i>	<i>jwalker@schsa.org</i>	<i>558-8864</i>	<input checked="" type="checkbox"/>	
<i>STEVE ANDRESE</i>	<i>MV EMSA</i>	<i>ANDRESEM@AOL.COM</i>	<i>529-5085</i>	<input checked="" type="checkbox"/>	

*GARY HINGMAN*      *COUNTY OES*      *hingman@stancounty.com*      *552-3600*



**MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
OPERATIONAL AREA COUNCIL MEETING  
AUGUST 20, 2009**

FEMA requires that your attendance and participation in the development of the Multi-Jurisdictional Hazard Mitigation Plan be documented. Each individual jurisdiction should also document their own participation and contribution throughout the planning process. Each jurisdiction that is included in the plan must have its governing body adopt the local plan as their "own" before the final submission to the State and FEMA.

PRINT NAME AND TITLE	JURISDICTION	E-MAIL ADDRESS	PHONE #	PARTICIPATE WITH COUNTY?		
				YES	NO	DO OWN
Jeff Wilson / Director Risk Management Interim (EO)	Gallo	jeff.wilson@ejgello.com	209-341-7964			
Francis DiCiano	United Way	fdiciano@vwaystan.org	523-4562x101	X		
Adam McGee, C.O.P.	NEUMAN	AMC671@cityofnewman.com	8622902	X		
Jahna Colby, Work Methods Tech.	MID	jahnac@ <del>Mid</del> Mid.org	526-7660		?	
Linda Abid-Lummings	Riverbank	labid@riverbank.org	843-7114	✓		
Deb Thomas	Stan Co.	DThomas	552-3857 N/A			
Gracie Jean	FUGHTSON'S	CSMISSJ@stanislaus sheriff.com	883-4053	✓		
Marnie Ardis, Project Manager	Stanislaus County	Marnie.Ardis@stanislauscounty.com	525-6532	✓		



**MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
OPERATIONAL AREA COUNCIL MEETING  
AUGUST 20, 2009**

FEMA requires that your attendance and participation in the development of the Multi-Jurisdictional Hazard Mitigation Plan be documented. Each individual jurisdiction should also document their own participation and contribution throughout the planning process. Each jurisdiction that is included in the plan must have its governing body adopt the local plan as their "own" before the final submission to the State and FEMA.

PRINT NAME AND TITLE	JURISDICTION	E-MAIL ADDRESS	PHONE #	PARTICIPATE WITH COUNTY?		
				YES	NO	DO OWN
AMY THOMAS ASST. DIR. SAFETY & RISK	CSU Stanislaus	athomas@csustan.edu	667-3035			✓
BECKY SLAUGHTER EXEC. DIRECTOR	CENTRAL REGION SCHOOL INS. GROUP	becky@csrsig.com	579-7535			✓
John Turner, Administrator	Stan Co. CERT	turner879@csu Stanislaus.edu	526-0982			
Jean Anderson CHIEF, MAN. OFF.	BHRS	jeanderso@stancounty.com	595-6005	✓		
Tim Lohman D.C.	Turlock Fire	Tlohman@Turlock.ca.us	668-5580	✓		
Dana Owens	CPR-EMMA	dana.owens@esca.gov	916 205-8920			
Elaine Harte	Stanislaus Co	info@vibrantcommunity.org	544-9571	✓		
Mike Payton, Division Chief	MFD		571-5876	✓		



**MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
OPERATIONAL AREA COUNCIL MEETING  
AUGUST 20, 2009**

FEMA requires that your attendance and participation in the development of the Multi-Jurisdictional Hazard Mitigation Plan be documented. Each individual jurisdiction should also document their own participation and contribution throughout the planning process. Each jurisdiction that is included in the plan must have its governing body adopt the local plan as their "own" before the final submission to the State and FEMA.

PRINT NAME AND TITLE	JURISDICTION	E-MAIL ADDRESS	PHONE #	PARTICIPATE WITH COUNTY?		
				YES	NO	DO OWN
Janet Neira - Emergency Coordinator manager II	CSA	neiraj@stancounty.com	558-2853			
Becky Crew, KOD Dir. of Compliance	District	crowb@yosemite.edu	525-6260	X		
Dan Davis	G. DES		525-3600	X		
Ken Fitzgerald	BL0E	k.fitzgerald	208-1381	X		
Dale Butler	LECC	butterdale@comcast.net	522-8537	X		
DANAEU FAREAS	SOLOS SAGUI		552-3861	X		
Julie Mef Reed	STARC SSA	mefreed@stancounty.com	525-7640	X		
Troy LUTE	Gello	Troy.Lute@stancounty.com	208-8409			



**CHIEF EXECUTIVE OFFICE**  
**Office of Emergency Services**  
**Richard W. Robinson**  
Chief Executive Officer

**Patricia Hill Thomas**  
Assistant Executive Officer

3705 Oakdale Road, Modesto, CA 95357

Phone: 209.552.3600 Fax 209.552.3602

August 31, 2009

TO: All County Multi-Jurisdictional Partners

FROM: Gary Hinshaw  
Fire Warden/Assistant Director of Emergency Services

SUBJECT: **MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE**

Stanislaus County's Multi-Jurisdictional Hazard Mitigation was approved by FEMA on January 12, 2006. At that time, numerous school districts, special districts, and cities were invited to partner with the County. Forty-nine jurisdictions chose to participate with the County, forty of whom successfully completed their individual plans and had them approved by FEMA and adopted by their local governing body.

Participants of a multi-jurisdictional plan assume the expiration date five years from the first jurisdiction's approval date regardless of the other participant's subsequent adoption dates. Therefore, the expiration date for all multi-jurisdictional partners is January 12, 2011.

As you know, all local governments in California are required to have an approved Hazard Mitigation Plan in order to qualify for Federal mitigation funding. Unlike past years when a local plan was created after the disaster damage, this program requires that an approved local plan be in place **BEFORE A DISASTER STRIKES**.

FEMA defines "local government" in broad terms to include cities, school districts, and special districts. The Multi-Jurisdictional Hazard Mitigation Plan is intended to be a collaborative process using the skills and resources from a variety of individuals and departments within our jurisdiction. We invite you to be a part of that process. **If you do not choose to participate, your entity will be on its own.** FEMA requires that your attendance be documented during this development process. The actual planning process is as important to FEMA as the plan itself.

The County will be meeting on **September 17, 2009 from 3:00 p.m. to 5:00 p.m. at the Salida Library located at 4835 Sisk Road.** This facility has plenty of parking. During this meeting, we will provide an overview of the requirements for updating your plan and outline the process. If your agency is interested in being part of Stanislaus County's Multi-Jurisdictional Hazard Mitigation Plan, please plan on attending or send a representative to this meeting. We will be identifying the hazards in our region using the attached Hazard Identification Questionnaire as a tool.

We need to retain our eligibility for future funding and make our community disaster resistant. The County welcomes you to join with us in this process.

We are operating under a tight deadline and need to move quickly! Please contact Marnie Ardis at (209) 525-6532 to RSVP or email her at [Marnie.Ardis@stancounty.com](mailto:Marnie.Ardis@stancounty.com) to confirm your attendance. We would appreciate receiving your completed Hazard Identification Questionnaire by Monday, September 14, 2009 so the results can be tabulated prior to the meeting.



**STANISLAUS COUNTY  
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
KICK-OFF MEETING  
THURSDAY, SEPTEMBER 17, 2009  
3:00 p.m. to 5:00 p.m.  
SALIDA LIBRARY**

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**A G E N D A**

1. Welcome
2. Components of the MJHMP—PowerPoint Training
3. Hazard Identification Questionnaire
4. Plan Survey
5. Multi-Agency Participation—What are the expectations
6. Review new MJHMP Website: <http://www.scoes.info/mjhmp.shtm>
7. Discuss Plan Fact Sheet and Newsletter
8. Identify Task Force Leaders for:
  - Fire Protection Districts
  - Schools
  - Community Service Districts
9. Schedule Next Meeting
10. Questions/Comments

# STANISLAUS COUNTY MULTI-JURISDICTIONAL PARTNERS CONTACT SHEET

JURISDICTION	NAME OF BOARD	CONTACT NAME	EMAIL ADDRESS	PHONE	CITY	Participate		SIGNATURE
						YES	NO	
Community Service District	Crows Landing Community Services District	Coleen Sanguinetti	coleen@evansin.net	837-4676	Crows Landing			
Community Service District	Denair Community Services District	Pamela Owens	POwens@charterinternet.com	634-4986	Denair			
Community Service District	Grayson Community Services District	Connie Payton	cityclerk@ci.patterson.ca.us	650-5251	Westley			
Community Service District	Hickman Community Charter School District	Bob Loretelli	bloretelli@hickman.k12.ca.us	874-1816	Hickman			
Community Service District	Keyes Community Services District	Rosemary Winter	ksosnw@chartermet.com	668-8341	Keyes			
Community Service District	Knights Ferry Community Services District	Christine Bonjour	atlascc@sbcglobal.net	881-3300	Knights Ferry			
Community Service District	Monterey Park Tract Community Services District	David McNeir	mcneidav@aol.com		Ceres			
Community Service District	Riverdale Park Tract Community Services District	Kelly Murphy	murphyology101@aol.com	537-1214	Modesto			
Community Service District	Westley Community Services District	Coleen Sanguinetti	coleen@gvni.com	892-7953	Crows Landing			
Drainage District	Newman Drainage District	Dennis Hay Esq	dhay@whw-law.com	759-3222	Clements			
Drainage District	Patterson Storm Drain District #8	Patrick Alves		892-6983	Patterson			
Fire District	Burbank-Paradise Fire Protection District	Mike Hillar	BPPD@comcast.net	523-1129	Modesto	<input checked="" type="checkbox"/>		M. Robert Hillar
Fire District	Ceres Fire Protection District	M. Robert Adkison	mraesa@sbcglobal.net	537-5820	Modesto			
Fire District	Ceres Emergency Services	Brian F. Weber	Brian.Weber@ci.ceres.ca.us	538-5704	Ceres	<input checked="" type="checkbox"/>		B.F. Weber
Fire District	Ceres Emergency Services	Richard Scola	Richard.Scola@ci.ceres.ca.us	538-5704	Ceres	<input checked="" type="checkbox"/>		
Fire District	Denair Fire Protection District	Karl Currow	bluepumper@aol.com	632-5032	Denair			
Fire District	Hughson Fire Protection District	Scott Berner	sberner@hughsonfire.com	883-2863	Hughson	<input checked="" type="checkbox"/>		Michael Crubstrie
Fire District	Keyes Fire Protection District	Bob Watt	bwatt@ci.ceres.ca.us	634-7690	Keyes	<input checked="" type="checkbox"/>		ERIK FLEUMYZ
Fire Dept	Modest Fire Dept- Division Chief	Mike Payton	mpayton@modestogov.com	571-5876				
Fire District	Modesto-Ceres Fire Protection Agency, a JPA	Diane Navares Perez	dperez@modestogov.com	587-5396	Modesto			
Fire District	Mountain View Volunteer Fire Protection District	Kevin Blount	mvdchiefb@ci.ceres.ca.us	634-4766	Crows Landing			
Fire District	Oakdale Rural Fire Protection District	Danielle Demczek	denczekord@sbcglobal.net	847-6898	Oakdale	<input checked="" type="checkbox"/>		
Fire District	Salida Fire Protection District	Laurie Wester	lwester@salidafire.com	545-0365	Salida			
Fire District	Stanislaus Consolidated Fire Protection District	Steve Mayotte	smayotte@scofpd	869-7470				
Fire Dept.	Turlock Fire Dept.	Tim Lohman D.C.	Tlohman@turlock.ca.us	688-5880		YES		Judy duty, MHA
Fire District	Turlock Rural Fire Protection District	Rick Fortado	rford1@hcfmail.com	632-3953	Turlock			
Fire District	West Stanislaus Fire Protection District	James Kinneer	blawwill@ci.patterson.ca.us	892-5821	Patterson			
Fire District	West Stanislaus Fire Protection District	Steven Hall	shali@ci.patterson.ca.us	595-0636				
Fire District	Westport Fire Protection District	Gary Thompson		537-1391	Modesto			
Fire District	Woodland Avenue Volunteer Fire Protection District	Mike Passalacqua	woodlandavenue@comcast.net	524-4239	Modesto			
Fire District	Keyes Fire Protection District	Clay Vitus	clay.vitus@gmail.com	404-5051	Keyes	<input checked="" type="checkbox"/>		
Hospital District	Del Puerto Health Care District	Margo Arnold	marnold@gvni.com	892-8781	Patterson			

# STANISLAUS COUNTY MULTI-JURISDICTIONAL PARTNERS CONTACT SHEET

JURISDICTION	NAME OF BOARD	CONTACT NAME	EMAIL ADDRESS	PHONE	CITY	Participate		SIGNATURE
						YES	NO	
Hospital District	Oak Valley Hospital District	John Friel	jfriel@oxyhd.com	847-3011	Oakdale			
Hospital District	Westside Community Healthcare District	Thomas Hornen		862-2951	Newman			
Irrigation District	Central California Irrigation District	Gregg Rice	grice@ccidwater.org	826-1421	Los Banos		X	<i>Gregg Rice</i>
Irrigation District	Modesto Irrigation District	Pat Mill	Pat@mid.org	526-7360	Modesto			
Irrigation District	Modesto Irrigation District	Allen Short	Allens@mid.org	526-7360	Modesto			
Irrigation District	Oakdale Irrigation District	Lori Fitzwater-Presley	lfp@oakdaleirrigation.com	847-0341	Oakdale	X		<i>DEREK DAVIS</i>
Irrigation District	Patterson Irrigation District	John Sweigard	Patwater@evansinel.com	892-6233	Patterson			
Irrigation District	Turlock Irrigation District	Steve Boyd	seb@tid.org	883-8364	Turlock			
Irrigation District	West Stanislaus Irrigation District	Ronald Roos	Wsid@ireesh.com	894-3091	Westley			
Municipal Advisory Council	Denair Municipal Advisory Council	Kathryn Holloway	koadogbob@peoplepc.com	632-5313	Denair			
Municipal Advisory Council	Empire Municipal Advisory Council	Kathleen Allen	kallen95319@yahoo.com	524-7578	Empire			
Municipal Advisory Council	Hickman Municipal Advisory Council	Richard Walke	walke3359@sbcglobal.net	874-5404	Hickman			
Municipal Advisory Council	Keyes Municipal Advisory Council	Davis Landers	papofree@hotmail.com	664-1431	Keyes			
Municipal Advisory Council	Knights Ferry Municipal Advisory Council	Sharon Haskell	shenson@caltel.com	881-3500	Knights Ferry			
Municipal Advisory Council	Salida Municipal Advisory Council	Thomas Reeves	95369@sbcglobal.net	545-2949	Salida			
Municipal Advisory Council	South Modesto Municipal Advisory Council	Sivia Camarillo	sondestomac@yahoo.com	576-1318	Modesto			
Municipal Advisory Council	Valley Home Municipal Advisory Council	Glenn Burghardt	oakdalehistory@yahoo.com	847-5822	Oakdale			
Sanitary District	Empire Sanitary District	Don Vance	donvance@sonic.net	522-3687	Empire			
Sanitary District	Salida Sanitary District	Linda Walker	salidasanitary@mindspring.com	545-4987	Salida	X		<i>Mike Keller</i>
School	Modesto City Schools	Miguel Galvez	galvez.m@monte.k12.ca.us	576-4032	Coordinator	X		<i>Miguel Galvez</i>
School	Stanislaus County Office of Education	Don Galvi	dg@stanisco.org	238-1957	Coordinator	X		<i>Don Galvi</i>
School	Ceres Unified School District	Connie Gundlach	cgundlach@ceres.k12.ca.us	538-0141				
School	Ceres Unified School District	Walter L. Hanlre	wlanline@ceres.k12.ca.us	538-0141				
School	Ceres Unified School District	Connie Gundlach	cgundlach@ceres.k12.ca.us	538-0141		X		<i>Connie Gundlach</i>
School	Chatham Unified School District	Barbara Palmian	bpalmian@chatham.k12.ca.us	664-8505	Turlock			
School	Denair Unified School District	Betty Holmes	bholmes@duisd.k12.ca.us	632-7514	Denair			
School	Denair Unified School District	Betty Holmes	bholmes@duisd.k12.ca.us	632-7514	Denair			
School	Denair Unified School District	Edward Parraz	eparraz@duisd.k12.ca.us	632-7514	Denair			
School	Empire Union School District	Dr. Robert Price-Principal	rprice@empire.k12.ca.us	521-2800	Modesto			
School	Graton School District	Shannon M. Sanford Rice	rprice@stan-co.k12.ca.us	632-0505	Denair			



# STANISLAUS COUNTY MULTI-JURISDICTIONAL PARTNERS CONTACT SHEET

JURISDICTION	NAME OF BOARD	CONTACT NAME	EMAIL ADDRESS	PHONE	CITY	Participate		SIGNATURE
						YES	NO	
School	Hart-Ransom Union School District	Debbie Phillips	dphillips@hartransom.org	523-9996	Modesto			
School	Hughson Unified School District	Linda Young	lyoung@hughson.k12.ca.us	883-4428	Hughson			
School	Keyes Union School District	Marilyn Croft	mcroft@stan-co.k12.ca.us	669-292	Keyes			
School	Knights Ferry School District	Beverly Noe	bnoe@stan-co.k12.ca.us	881-3382	Knights Ferry			
School	Knights Ferry School District	Cheryl Griffins	cgriffins@stan-co.k12.ca.us	881-3382	Knights Ferry			
School	Knights Ferry School District	Beverly Noe	bnoe@stan-co.k12.ca.us	881-3382	Knights Ferry			<i>[Signature]</i>
School	La Grange School District	Joseph Magnu	jmagnu0107@earthlink.net	853-2132	La Grange	Y		
School	Modesto City Schools	Julie Chapin	chajin_j@modnet.k12.ca.us	576-4179	Modesto			
School	Newman-Crows Landing Unified School District	Roberto Salinas	rsalinas@nclunisd.k12.ca.us	862-2933	Newman			
School	Paradise Elementary School District	Douglas Fraser	dfraser@paradiseesd.org	524-0184	Modesto			
School	Riverbank Unified School District	Patricia Bertol	pbertol@riverbank.k12.ca.us	869-2538	Riverbank			
School	Riverbank Unified School District	Joseph A. Gallardo	gallardo@riverbank.k12.ca.us	869-2538	Riverbank			
School	Riverbank Unified School District	Patricia Bertol	pbertol@riverbank.k12.ca.us	869-2538	Riverbank			
School	Roberts Ferry Union School District	George Johnson	gjohnson@stan-co.k12.ca.us	874-2331	Waterford			
School	Salida Union School District	Tony Borba	tborba@salida.k12.ca.us	545-0339	Modesto			
School	Salida Union School District	<del>Tony Borba</del>	<del>tborba@salida.k12.ca.us</del>	<del>545-0339</del>	<del>Modesto</del>			
School	Salida Union School District	Douglas Baughn	dbaughn@salida.k12.ca.us	545-0339	Modesto	YES		<i>[Signature]</i>
School	Salida Union School District	Tony Borba	tborba@salida.k12.ca.us	545-0339	Modesto			
School	Shiion School District	Rosemary Macedo	rmacedo57@yahoo.com	522-2261	Modesto			
School	Stanislaus Office of Education	Ken Fitzgerald	kfitzgerald@stan-co.k12.ca.us	238-1381	Modesto			
School	Stanislaus Office of Education	Trudy Silveira	tsilveira@stancoe.org	238-1925	Modesto			<i>[Signature]</i>
School	Stanislaus Office of Education	Nina Palarca	npalarca@stancoe.org	238-1925	Modesto	Y		
School	Stanislaus Union School District	Mary Ann Shipman	mshipman@stanunion.k12.ca.us	529-9546	Modesto			
School	Stanislaus Union School District	Mary Ann Shipman	mshipman@stanunion.k12.ca.us	529-9546	Modesto			
School	Stanislaus Union School District	Leslie Wayne Brown	lbrown@stanunion.k12.ca.us	529-9546	Modesto			
School	Sylvan Union School District	Diane Milbauer	dmilbauer@sylvan.k12.ca.us	574-5000	Modesto			
School	Sylvan Union School District	Diane Milbauer	dmilbauer@sylvan.k12.ca.us	574-5000	Modesto			
School	Sylvan Union School District	John Halverson	jhalverson@sylvan.k12.ca.us	574-5000	Modesto			
School	Waterford Unified School District	Ysabel Rockwell	yrockwell@waterfordk12.ca.us	874-1809	Waterford			
School	YCCD Director of Campus Safety	Becky Crow	crowb@yosemite.edu	575-6260	Modesto	YES		<i>[Signature]</i>
City	City of Ceres-Mayor	Roger K. Smith	rsmith@tarlock.k12.ca.us	538-5755	Ceres			<i>[Signature]</i>
City	City of Ceres-City Manager	Anthony Cannella	acannella@ci.ceres.ca.us	538-5755	Ceres			
City	City of Ceres	Brad Kilger	brad.kilger@ci.ceres.ca.us	538-5755	Ceres			
City	City of Ceres	Brian F. Weber	brian.weber@ci.ceres.ca.us	538-5704	Ceres			

# STANISLAUS COUNTY MULTI-JURISDICTIONAL PARTNERS CONTACT SHEET

JURISDICTION	NAME OF BOARD	CONTACT NAME	EMAIL ADDRESS	PHONE	CITY	Participate		SIGNATURE
						YES	NO	
City	City of Modesto-Mayor	Jim Rideour	jriderour@modestopolov.com	571-5169	Modesto			
City	City of Modesto-City Manager	Greg Nyhoff	gnyhoff@modestopolov.com	571-5169	Modesto			
City	City of Hughson-Mayor	Ramon Bawanar	rdonabec@hughson.org	883-4054	Hughson			
City	City of Hughson-City Manager	Joseph Donabed	jdonabed@hughson.org	883-4054	Hughson			
City	Hughson PS	Janel Raasmussen	jraasmu@stanislaussheriff.com	883-4053				
City	City of Newman-Mayor	Ed Katen	edk10@sbcglobal.net	862-3725	Newman			
City	City of Newman	Adam McGill, COP	amcgill@cityofnewman.com	862-2902		X		
City	City of Newman-City Manager	Michael Holland	mholand@cityofnewman.com	862-3725	Newman			
City	City of Oakdale-Mayor	Farrell Jackson	fjackson@ci.oakdale.ca.us	847-3031	Oakdale			
City	City of Oakdale-City Manager	Steve Hallum	shallum@ci.oakdale.ca.us	847-3031	Oakdale	X		Michael Botto
City	City of Patterson-Mayor	Becky Campo	bcampo@ci.patterson.ca.us	895-8000	Patterson			
City	City of Patterson-City Manager	Cleve Morris	cmorris@ci.patterson.ca.us	895-8000	Patterson			
City	City of Riverbank-Mayor	Vacant						
City	City of Riverbank	Linda Abid-Cummings	labid@riverbank.org	863-7114	Riverbank	✓		Norma Torres-M
City	City of Riverbank-City Manager	Rich Holmer	rich@riverbank.org	869-7101	Riverbank			
City	City of Turlock-Mayor	John Lazar	jlazar@turlockhomes.com	668-5542	Turlock			
City	City of Turlock-City Manager	Roy Wasden	rwasden@turlock.ca.us	668-5540	Turlock			
City	City of Waterford-Mayor	Charlie Cooken	ccooken@cityofwaterford.org	874-2328	Waterford	✓		
City	City of Waterford-City Manager	Wally Deschene Chuch Deschene	admin@cityofwaterford.org	874-2328	Waterford			
County	Behavioral Health & Recovery Services	Jean Anderson	janderson@stancounty.com	525-6225			NO	
County	Office of Emergency Services	Bill Houk	bhouk@stances.com	552-3600		X		
County	Chief Executive Office	Marnie Ardis	Marnie.Ardis@stancounty.com	525-6632	Modesto	X		
County	General Services Agency	Julie Mefferd	jmefferd@stancounty.com	525-7640				
County	Office of Emergency Services	Chris Holmer	cholmer@stances.com	525-3600				
County	Office of Emergency Services	Dan Davis	ddavis@stances.com	525-3600				
County	Office of Emergency Services	Gary Hinshaw	ghinshaw@stances.com	552-3600	Modesto	X		
County	Office of Emergency Services	Deb Thrasher	dthrasher@stances.com	552-3857	Modesto			
County	Public Health Director	Dr. Walker	walker@schsa.org	558-8804				
County	Capital Projects	Tim Fedorchak	Tim.Fedorchak@stancounty.com	682-1649				
County	Planning and Community Development	Steve Treat	streat@stancounty.com					
County	Public Works Director	Matt Machado	machadom@stancounty.com					
County	Sheriff's Office/ OES/ SR911	Darrell Freitas	dfreitas@stanislaussheriff.com	552-3861				

# Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan



September 17, 2009



## State & Local Mitigation Planning after DMA 2000

- As you know, all local governments in California are required to have an approved local hazard mitigation plan in order to qualify for Federal mitigation funding.
- New program requires an approved plan be in place **BEFORE A DISASTER STRIKES**.

## What is Hazard Mitigation Planning?

- The things you do today to be more protected in the future.
- Reduces the risk of loss and creates a more disaster-resistant community
- Plan identifies policies, actions, activities and tools to reduce risk and potential losses.

## Multi-Jurisdictional Hazard Mitigation Plan

- Jointly prepared by multiple jurisdictions
- FEMA defines local government in broad terms to include cities, school districts, and special districts.

## What happens if you don't participate?

Not eligible for:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation Grant Program (PDM)
- Flood Mitigation Assistance Grant (FMA)
- Severe Repetitive Loss (SRL)

## Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan

- MJHMP approved by FEMA on January 12, 2006
- 120 jurisdictions invited to participate
- 49 participated with County
- 40 jurisdictions successfully completed their plan and had it adopted by the State & FEMA

## Update Plan

- Each plan must be updated every 5 years
- Demonstrate progress
- Review and update each section
- Discuss results of evaluation and monitoring of plan
- A plan update, is not an annex to the previously approved plan; it stands on its own as a complete and current plan

## Components of a MJHMP

- Planning Process
- Risk Assessment
- Mitigation Strategy
- Plan Maintenance Procedures
- Adoption of plan by local governing body

## Planning Process

- The planning process must be documented in the plan
- Plan Fact Sheet will be posted on website inviting public participation and notifying public of intent to update plan
- Survey provides the opportunity for comments from other agencies
- Incorporate existing information: plans, studies, reports and technical information

Identify and Profile Hazards	Assess Vulnerability	Set Mitigation Goals	Identify Mitigation Strategies	Prioritize and Implement Strategies	Monitor Evaluate Update
------------------------------	----------------------	----------------------	--------------------------------	-------------------------------------	-------------------------

- Previously identified as significant in 2004:
  - Earthquake
  - Landslide
  - Dam Failure
  - Flood
  - Wildfire

Identify and Profile Hazards	Assess Vulnerability	Set Mitigation Goals	Identify Mitigation Strategies	Prioritize and Implement Strategies	Monitor Evaluate Update
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- We need to determine which hazards should be included in the plan update
  - Define hazards
  - Description of location of hazards
  - Magnitude/severity of the occurrence
  - Update information on previous occurrences
  - Probability of future events

Identify and Profile Hazards	Assess Vulnerability	Set Mitigation Goals	Identify Mitigation Strategies	Prioritize and Implement Strategies	Monitor Evaluate Update
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- Assess Vulnerability
  - Description of jurisdiction's vulnerability to the hazards described
  - Identify structures—types & numbers in hazard area
  - Hazards impact on structures
  - Estimate Potential Losses
  - Analyze Development Trends

Identify and Profile Hazards	Assess Vulnerability	Set Mitigation Goals	Identify Mitigation Strategies	Prioritize and Implement Strategies	Monitor Evaluate Update
------------------------------	----------------------	----------------------	--------------------------------	-------------------------------------	-------------------------

- Description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards
  - Includes things such as strengthen and enforce codes and ordinances prohibiting development in hazard-prone areas
  - Identify ideas for new goals

Identify and Profile Hazards	Assess Vulnerability	Set Mitigation Goals	Identify Mitigation Strategies	Prioritize and Implement Strategies	Monitor Evaluate Update
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- Identify and analyze a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard
  - With emphasis on new and existing buildings and infrastructure
  - Each jurisdiction must have at least one mitigation action for FEMA to approve plan for adoption at local jurisdiction

Identify and Profile Hazards	Assess Vulnerability	Set Mitigation Goals	Identify Mitigation Strategies	Prioritize and Implement Strategies	Monitor Evaluate Update
------------------------------	----------------------	----------------------	--------------------------------	-------------------------------------	-------------------------

- Examine if there are any new ideas for mitigation strategies such as:
  - Prevention
  - Property Protection
  - Public Education and Awareness
  - Emergency Services Measures
  - Structural Projects
  - Identify the responsible jurisdiction

Identify and Profile Hazards	Assess Vulnerability	Set Mitigation Goals	Identify Mitigation Strategies	<b>Prioritize and Implement Strategies</b>	Monitor Evaluate Update
------------------------------	----------------------	----------------------	--------------------------------	--	-------------------------

- Action plan describing how actions will be prioritized, implemented, and administered by the local jurisdiction
- Special emphasis on extent to which benefits are maximized according to cost benefit review
- Use existing documents

Identify and Profile Hazards	Assess Vulnerability	Set Mitigation Goals	Identify Mitigation Strategies	Prioritize and Implement Strategies	<b>Monitor Evaluate Update</b>
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- Discussion on how the community will continue participation in the plan maintenance process

### How do you participate?

- Participate with the County as one of their multi-jurisdictional partners
- Attend meetings and document planning process
- Identify Hazards and do a Risk Assessment specific to your jurisdiction
- Have State and FEMA approve your plan
- Have your approved plan adopted by your governing body
- Revise your plan every 5 years

### Want to participate?

- Please be sure to sign in on the attendance sheet
- Please check the box “yes” or “no” that you want to participate with the County as one of their partners
- If you do, we will notify you of our planning efforts and partner with you

### Approved Jurisdictions

- Stanislaus County
- City of Ceres
- City of Hughson
- City of Newman
- City of Modesto
- City of Patterson
- City of Riverbank
- City of Turlock
- Del Puerto Health Care District
- Del Puerto Water District
- El Solyo Water District
- Empire Union School District
- Graton Unified School District
- Hart Ransom Unified School District
- Hickman Charter School District
- Hughson Unified School District
- Keyes Union School District
- Chatom Union School District
- Ceres Unified School District
- Modesto City Schools
- Newman Crows Landing USD
- Oak Flat Water District
- Paradise School District
- Riverbank Unified School District
- Roberts Ferry USD
- Rock Creek Water District
- Salida Unified School District
- Shiloh School District
- Stanislaus County Office of Education
- Knights Ferry Unified School District
- La Grange Unified School District

### Approved Jurisdictions

- Stanislaus Union School District
- Sylvan Union School District
- Turlock Irrigation District
- Turlock Unified School District
- Valley Home Joint School District
- Waterford Unified School District
- West Stanislaus County Fire District
- Yosemite Community College District

## Timeline

- Summer of 2009 begin notifying public and jurisdictions of intention to update plan
- Submit draft to State and FEMA for review prior to adoption “approval pending adoption” by May 2010
- Late 2010 get plans adopted by local governing body.

## Resources

- Gary Hinshaw, Assistant Director of Emergency Services
- Marnie Ardis, Project Manager 525-6532
- Fact Sheet
- MJHMP Newsletter
- <http://www.scoes.info/oes.shtm>
- FEMA website at: <http://www.fema.gov/>



**STANISLAUS COUNTY  
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
HAZARD IDENTIFICATION QUESTIONNAIRE**

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**HAZARD IDENTIFICATION**

Stanislaus County is in the process of updating our Multi-Jurisdictional Hazard Mitigation Plan.

The 2006 MJHMP, considered a full range of natural hazards, and identified the following five hazards as having the greatest potential to cause a negative impact on the community.

1. Earthquake
2. Landslide
3. Dam Failure
4. Flood
5. Wildfire

These hazards were identified through an extensive process that involved a thorough review of past disaster declarations in the County, and an evaluation of readily available online information from reputable sources such as Federal and State agencies. We need to evaluate whether these are still our primary hazards, include new hazards if appropriate and update the hazard profiles.

**FEEDBACK**

The hazard identification process is not complete without your feedback. Please take a moment to review the table below. Do you concur with the determination? We are also interested in anything that may come to mind regarding: (a) any unique concerns; (b) any notable events since 2004, including the date, number of injuries, and types (and or dollar amounts) of damages to buildings, utilities, infrastructure and, especially, critical facilities; and (c) any areas of the County and/or specific facilities that you feel are particularly at risk, *even if there are no historic occurrences*.

At this time we are only evaluating natural hazards.

**HOW TO FILL OUT THE QUESTIONNAIRE**

The first column shows the five hazards that were previously identified as having a significant impact to the County in 2004. If you feel those same hazards are still significant and should be addressed in the updated plan, please recheck them in the middle column. If you have any new areas of concern, please check the appropriate box in the right hand column and add comments at the bottom of the page.

Please provide feedback using the following table and return by e-mail: to [Marnie.Ardis@stancounty.com](mailto:Marnie.Ardis@stancounty.com) or fax to (209) 544-6226 or mail to MJHMP Project Manager, 1010 10<sup>th</sup> Street, Suite 6800, Modesto, CA 95354 no later than September 14, 2009. Please make sure to provide your contact information, and feel free to attach additional pages if needed.





**STANISLAUS COUNTY  
HAZARD IDENTIFICATION CHECKLIST**

= Hazard considered significant enough for evaluation and concur that they should be addressed in the Multi-Jurisdictional Hazard Mitigation Plan update.

HAZARD TYPE	PREVIOUSLY IDENTIFIED AS SIGNIFICANT IN 2004	SHOULD BE INCLUDED IN THE MJHMP PLAN UPDATE	ADDITIONAL AREAS OF CONCERN
Avalanche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam Failure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expansive Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extreme Heat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extreme Cold/Snow/Ice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hailstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tsunami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildfire	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Windstorms &Tornadoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For the previously included hazards what new/additional information should be included?

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Why should this/these new hazards be included?

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**CONTACT INFORMATION**

NAME:	LOCAL JURISDICTION REPRESENTING:
TITLE:	E-MAIL:
SIGNATURE:	DATE SIGNED:



**STANISLAUS COUNTY  
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN SURVEY**

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The mission of a Hazard Mitigation Plan is to **communicate and reduce risk** to the community. The County is in the process of updating our plan and would like to take this opportunity to seek your feedback. Please take a few moments to answer the questions. Your assessment will be used to improve the plan to make it more meaningful.

**How can we improve the plan format?**

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**How can we improve the plan content (planning process, hazard information, building data, public participation etc.)?**

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**What type of codes, zoning, and/or legislation could we implement to make our communities safer from natural hazards?**

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**What actions/projects could we do to reduce our risk from natural hazards?**

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**Other recommendations?**

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**CONTACT INFORMATION**

NAME:	LOCAL JURISDICTION REPRESENTING:
TITLE:	E-MAIL:
SIGNATURE:	DATE SIGNED:



## MULTI-JURISDICTIONAL MITIGATION PLANNING

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### Why Conduct Multi-Jurisdictional Hazard Mitigation Planning?

Multi-jurisdictional mitigation planning is a critical aspect of the Disaster Mitigation Act 2000. A multi-jurisdictional plan ideally makes sense because it:

- Offers an opportunity to cooperate on mutual concerns;
- Allows economies of scale; and
- Avoids duplication of efforts.

It is important to note that the authority and responsibility to adopt the mitigation plan will lie ultimately at the jurisdiction level. Each jurisdiction is responsible for adoption of the plan individually. Each jurisdiction has to meet certain requirements wherever the plan is expected to meet a requirement spelled out by the Rule. If a jurisdiction decides to participate in a plan but does not meet the requirements, it will be denied funding approval by FEMA, while other jurisdictions that participated in the same multi-jurisdictional plan can receive approval if they have met all the criteria. Therefore, multi-jurisdictional plans should in no way be used as a short-cut approach to avoid preparing a local hazard mitigation plan.

### Multi-Jurisdictional Planning Participation

- The County Project Manager will coordinate the meetings and be the point of contact for the plan;
- The County Project Manager will communicate with all participants informing them of due dates, and requirements;
- The County Project Manager will share resources when appropriate;
- Each participating jurisdiction will appoint a representative to attend meetings;
- The schools will appoint a lead contact who will coordinate with the schools to keep them on task;
- Each participating jurisdiction is responsible for:
  - Writing their own plan;
  - Meeting the requirements;
  - Preparing their own crosswalk; and
  - Having their local governing body adopt the plan.
- County Project Manager will collect all the plans from the participating jurisdictions and submit at same time.

### Satisfactory participation is defined as:

- Attendance at meetings or work sessions;
- Submission of requested data;
- Submission of completed questionnaires;
- Review and comment on draft materials; and
- Link local internet presence to a plan Web site.

# Stanislaus County

## Multi-Jurisdictional Hazard Mitigation Plan Facts



### For more information contact:

- Gary Hinshaw, Assistant Director of Emergency Services (209) 552-3600
- Marnie Ardis, Project Manager (209) 525-6532
- Marnie.Ardis@stancounty.com
- Visit our website at: <http://www.scoes.info/oes.shtm>
- Office of Emergency Services  
3705 Oakdale Road, Modesto, California 95357
- Natural disasters can't be prevented, but their impacts can be reduced through hazard mitigation
- The County Multi-Jurisdictional Hazard Mitigation Plan is currently being updated. If you are interested in participating, please contact the Project Manager.
- Components of a MJHMP include: prerequisites, planning process, risk assessment, mitigation strategy, and plan maintenance.
- Don't miss out—join Stanislaus County as one of our multi-jurisdictional partners!



### Protect Your Future...



### What is Hazard Mitigation?

Natural hazards have the potential to cause property damage, loss of life, economic hardship, and threats to public health and safety. Hazard mitigation measures are essential to breaking the typical disaster cycle of damage, reconstruction, and repeated damage. Hazard Mitigation measures are the things you do today to be more protected in the future. They are measures taken before a disaster happens to reduce the impact that future disasters will have on people and property in the community. Mitigation reduces the risk of loss and creates a more disaster-resistant and sustainable community.

### Purpose and Need for the Plan

Hazard mitigation plans are developed BEFORE a disaster strikes. The plans identify community policies, actions, and tools for long-term implementation to reduce risk and potential for future losses. Adopted, implemented, and maintained on an ongoing basis, these plans will lessen the impacts associated with hazard events in Stanislaus County. As of November 1, 2004 communities that do not have a FEMA approved hazard mitigation plan in place are no longer eligible for FEMA project grant monies under programs such as the Hazard Mitigation Grant Program, Flood Mitigation Assistance Program, Pre-Disaster Mitigation Grant Program, and Severe Repetitive Loss.

### Participation

Jurisdictions located within Stanislaus County who wish to be recognized by FEMA as being compliant with DMA 2000 must either: (a) participate with the County in the multi-jurisdictional plan development process and formally adopt the final plan, or (b) prepare their own hazard mitigation plan. All jurisdictions in Stanislaus County are being invited to participate in the process. Active participation in the process is the only way a jurisdiction can be seen in FEMA's eyes as a "participating jurisdiction" that has met the requirements of DMA 2000 and is therefore eligible to apply for Federal funds for hazard mitigation projects. Participation includes attending meetings, providing feedback, reaching out to the public and other key stakeholders in the community, and adopting the final plan.

# Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan Newsletter



Wildfire

This newsletter has been prepared to inform interested agencies, stakeholders, and the public about the plan update and to solicit comments.

## What is Hazard Mitigation?

Across the United States, natural disasters have increasingly caused injury, property damage, and interruption of business and government services. The toll on individuals, families, and businesses can be devastating. The time, money, and emotional effort required to respond to and recover from these disasters take public resources and attention away from other important programs and problems. The mission of Hazard Mitigation is to communicate with and reduce risk to the community.

Stanislaus County is eligible to receive grant money for mitigation programs by preparing a FEMA-approved Hazard Mitigation Plan. FEMA requires that hazard mitigation plans be updated every five years.

There are very specific Federal requirements that must be met when preparing a Hazard Mitigation Plan. The plan must document the following: planning process, hazard identification, risk assessment, mitigation goals and strategies, plan maintenance, and adoption by local governing body.

## Why do we need a Hazard Mitigation Plan?

The purpose of hazard mitigation planning is to implement projects that eliminate the risk or reduce the severity of hazards on people and property. Mitigation programs may include short and long term activities to reduce hazards, reduce exposure to hazards, or reduce the effects of hazards. Examples of mitigation activities could include developing or strengthening building codes and educating residents and building owners.

The MJHMP will identify hazards and the facilities potentially at risk and ways to mitigate hazards. The planning process will be documented as part of the project. The purpose of the project is to ensure that all cities, schools, and special districts in the County are eligible for mitigation project funding in the event of a declared disaster.

Information about the requirements may be found on the Internet at:

<http://www.fema.gov>

## Stanislaus County Office of Emergency Services

- Gary Hinshaw, Assistant Director of Emergency Services
- 3705 Oakdale Road, Modesto, California 95357
- Please direct your questions to the Project Manager at:
- Phone (209) 525-6532
- FAX (209) 544-6226
- Email your concerns to: [Marnie.Ardis@stancounty.com](mailto:Marnie.Ardis@stancounty.com)
- Mail your completed questionnaire to: MJHMP Project Manager 1010 Tenth Street, Suite 6800 Modesto, CA 95354



Visit the County website:  
<http://www.scoes.info/mjhmp.shtm>

# Hazard Identification Questionnaire

= Hazard considered significant enough for evaluation and concur that they should be addressed in the Multi-Jurisdictional Hazard Mitigation Plan update.

HAZARD TYPE	PREVIOUSLY IDENTIFIED AS SIGNIFICANT IN 2004	SHOULD BE INCLUDED IN THE MJHMP PLAN UPDATE	ADDITIONAL AREAS OF CONCERN
Avalanche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam Failure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expansive Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extreme Heat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extreme Cold/Snow/Ice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hailstorm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tsunami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildfire	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Windstorms & Tornadoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For the previously included hazards what new/additional information should be included?

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Why should this/these new hazards be included?

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How can we improve the plan format?

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How can we improve the plan content?

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What types of codes, zoning, and/or legislation could we implement to make our communities safer from natural hazards?

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What actions could we take to reduce our risk from natural hazards?

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## We need your help!

The Multi-Jurisdictional Hazard Mitigation Plan approved by FEMA on January 12, 2006 considered a full range of hazards, and identified the following five as having the greatest potential to cause a negative impact on the community: Earthquake, Landslide, Dam Failure, Flood, and Wildfire. These hazards were identified through an extensive process that involved a thorough review of past disaster declarations in the County.

If you think those same hazards are still significant and should be addressed in the updated plan, please recheck them in the middle column. If you have any new areas of concern, please check the appropriate box in the right hand column and add comments.

We encourage you to take an active part in the update of the County Multi-Jurisdictional Hazard Mitigation Plan. The purpose of this newsletter is to keep you informed and allow you every opportunity to voice your opinion regarding this important project.





**Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan  
School Districts Coordination Meeting**

Date: September 30, 2009 Location: Stanislaus County Office of Education

				<i>Participate with County Planning Process?</i>	
Name & Title	School District	Phone	Email	Yes please circle one	No please circle one
Tracy Simpson Superintendent	Rice Cation	632-0505	sdunediva@AOL	<input checked="" type="radio"/>	<input type="radio"/>
Kevin Hart Superintendent	Valley Home	847-0117	khart@vhjisd.k12.ca	<input checked="" type="radio"/>	<input type="radio"/>
Douglas Fraser Superintendent	Paradise	524-0184	dfraser@paradise.edu	<input checked="" type="radio"/>	<input type="radio"/>
Tony Barbe	Scot	652-4062	abarber@csustan.edu	<input type="radio"/>	<input type="radio"/>
Joseph Magny Superintendent	La Grange ESD	853-2132 / 620-0557	jimagnu0107@earthlink.net	<input checked="" type="radio"/>	<input type="radio"/>
Cheryl Griffiths Superintendent	Knights Ferry	881-3382	cgriffiths@sbcsd.k12.ca	<input checked="" type="radio"/>	<input type="radio"/>
Sarah Ehrler Supt / prin	Shiloh	522-2261	sehler@shiloh.k12.ca	<input checked="" type="radio"/>	<input type="radio"/>
George Johnson Supt. / Principal	Roberts Ferry	874-2331	gjohnson@stan-co.k12.ca	<input checked="" type="radio"/>	<input type="radio"/>
				<input type="radio"/>	<input type="radio"/>
				<input type="radio"/>	<input type="radio"/>
				<input type="radio"/>	<input type="radio"/>
				<input type="radio"/>	<input type="radio"/>
				<input type="radio"/>	<input type="radio"/>

**Facility Planning Meeting  
Sylvan Kitchen  
Thursday, October 22, 2009**

**AGENDA**

1. Introductions ..... All
2. Additions to the Agenda ..... All
3. County Hazard Mitigation Plan .....Miguel Galvez
4. NIMS/SEMS Training (designated positions)..... Roger Smith
5. Air Pollution Rule 9410..... Dana McGarry
6. NECA Scoreboards & Energy Solution Workshop .....Kathy Lasiter
7. OPSC Update..... John Gouveia
8. CDE Update..... Patricia Penn
9. DSA Update..... Dan Levernier
10. District Updates ..... All
11. Tentative Future Meetings – Host?
  - Feb. 11, 2010•
  - May 13, 2010•
12. Tour of Sylvan Kitchen.....Paul Speed



# Facility PLANNING MEETING

County Hazard Mitigation PLAN Mtg. Oct. 22, 2009

<u>NAME</u>	<u>JURISDICTION</u>
Mrs. GAWRZ	Modesto City School
Kathy Lasiter	Stanislaus County Of. of Ed
Dana McGarry	Modesto City Schools
Paul Speed	Sylvan Union School District
Tim Horn	Oakdale Joint Unified
Roger K. Smith	Turlock Unified School Dist.
Rick John	Riverbank Unified School District
John EPPERSON	Salida Union School District
Jim Tardy	// //
Jim Hackett	jim.hackett@dgs.ca.gov

# Multi-Jurisdictional Hazard Mitigation Plan Update

## Summary Overview

<b>What is it?</b>	<p>A hazard mitigation plan is a five-year plan that identifies agency projects that eliminate the risk or reduce the severity of hazards on people and property.</p> <p>The Plan identifies policies, actions, activities and tools to reduce risk and potential losses due to disasters.</p> <p>A multi-jurisdiction plan is a collaborative process resulting in a compilation of agency plans, which share the same public outreach process.</p>
<b>Why do it?</b>	<p>To proactively identify and address potential hazards, adopting mitigation efforts to reduce hazards, reduce exposure to hazards, reduce the effects of hazards. Local governments are eligible to received grant money for mitigation programs by preparing a FEMA-approved Hazard Mitigation Plan.</p>
<b>Who does it?</b>	<p>All local governments (cities, school districts, special districts and Counties) are required to have an approved local hazard mitigation plan in order to apply for Federal mitigation funding.</p> <p>The County's MJHMP Project Manager is Marni Ardis <a href="mailto:Marnie.Ardis@stancounty.com">Marnie.Ardis@stancounty.com</a> (209) 525-6532</p>
<b>Which hazards are evaluated?</b>	<p>The Plan will identify hazards and facilities potentially at risk and ways to mitigate hazards. If you prepared a plan in 2005, you are only required to identify one more hazard mitigation effort.</p>
<b>When does it have to be done?</b>	<p>FEMA requires that hazard mitigation plans be updated every five years. The Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan expires on January 12, 2011.</p>
<b>How is it done?</b>	<p>The Plan must document the following:</p> <ol style="list-style-type: none"><li>1) Planning process (process must be documented)<ol style="list-style-type: none"><li>a) Id and profile hazards</li><li>b) Assess Vulnerability</li><li>c) Set Mitigation Goals</li><li>d) Identify Mitigation Goals</li><li>e) Prioritize and Implement Strategies</li><li>f) Monitor and Evaluate process</li></ol></li><li>2) Adoption by local governing body</li></ol>
<b>Next Steps...</b>	<ol style="list-style-type: none"><li>I. Let the County know if you wish to collaborate</li><li>II. Review your adopted Hazard Mitigation Plan</li><li>III. Identify at least one new hazard mitigation effort/project</li><li>IV. Develop a public participation plan</li><li>V. Plan Adoption and submitted to FEMA and/or County.</li></ol>



**CHIEF EXECUTIVE OFFICE**  
**Office of Emergency Services**  
**Richard W. Robinson**  
Chief Executive Officer

**Patricia Hill Thomas**  
Assistant Executive Officer

3705 Oakdale Road, Modesto, CA 95357

Phone: 209.552.3600 Fax 209.552.3602

Thursday, October 29, 2009

TO:

FROM: Gary Hinshaw  
Fire Warden/Assistant Director of Emergency Services

SUBJECT: **MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN--INTENT TO PARTICIPATE**

Over the past several years, every County in the State of California has been declared a disaster area at least once. Therefore, each County has qualified to participate in the Hazard Mitigation Grant Program.

The rules for eligibility changed on November 1, 2004. All local governments in California are now required to have an approved Hazard Mitigation Plan in order to qualify for Federal mitigation funding. Unlike past years when a local plan was created after the disaster damage, this new program requires that an approved local plan be in place **before a disaster strikes**.

FEMA defines "local government" in broad terms to include cities, school districts, and special districts. The Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) is intended to be a collaborative process using the skills and resources from a variety of individuals and departments within our jurisdiction. We invite you to be a part of that process. **If you do not choose to participate, your entity will be on its own.** FEMA requires that your attendance be documented during this development process. They are not just interested in the completed product, but also want to see the process used to develop the integrated plan. The intent is for the mitigation plan to benefit all citizens not just the first responders.

We had our initial MJHMP kick-off meeting on September 17, 2009. During this meeting, we provided an overview of the requirements for developing a plan and outlined the process. We explained the importance of participating in the plan update that is required every five years.

The Project Manager has had meetings with several jurisdictions to further explain the requirements. Please don't hesitate to contact Marnie Ardis at (209) 525-6532 or by email at: [Marnie.Ardis@stancounty.com](mailto:Marnie.Ardis@stancounty.com) if you have any questions, concerns and/or if you need clarification on the expectations.

It is time to formally declare your intent to participate with the County. This information will be used to invite the appropriate jurisdictions to future meetings which are an integral part of the planning process.

Please FAX your response using the attached **Letter of Intent** to **(209) 544-6226** no later than **Monday, November 23, 2009**. We need to retain our eligibility for future funding and make our community disaster resistant.



**Letter of Intent  
To participate with Stanislaus County  
To develop a Multi-Jurisdictional Hazard Mitigation Plan**

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This letter serves as a formal acknowledgement of your intent to participate with Stanislaus County as one of our Multi-Jurisdictional partners. Stanislaus County will serve as the lead agency. If you are a City and your plan will cover other special districts, such as fire, police, or other fire districts, please list each jurisdiction covered.

**Name of City/Special District/Jurisdiction:** \_\_\_\_\_

**Please list any other districts included in this plan:**

- 1.
- 2.
- 3.
- 4.

The above named City/Special District/Jurisdiction, **intends to develop** and submit for State review and FEMA approval, a MJHMP, written in accordance with Section 322 of the Stafford Act. Please provide the name of the jurisdiction's MJHMP contact person in the box provided below.

The above named City/Special District/Jurisdiction **does not intend** to develop a MJHMP. The jurisdiction understands that it will not be eligible to receive mitigation project funding after November 1, 2004.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Name of Local Contact Person:  Title:  Telephone:  E-mail address:
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**Please FAX your completed Letter of Intent no later than November 23, 2009 to: Marnie Ardis, MJHMP Project Manager (209) 544-6226. If you have questions, please call: (209) 525-6532.**



**STANISLAUS COUNTY  
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
PLANNING/RISK ASSESSMENT TRAINING  
TUESDAY, JANUARY 19, 2010  
9:00 a.m. to 10:00 a.m.  
BOARD OF SUPERVISORS CHAMBERS**

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**A G E N D A**

1. Welcome
2. Please make sure you sign in!
3. Planning/Risk Assessment Training
4. Handout on MJHMP Synopsis of Key Concepts
5. Multi-Agency Participation—What are the expectations
6. Resources:
  - MJHMP County Website:  
<http://www.scoes.info/mjhmp.shtm>
  - California Emergency Management Agency Website:  
[http://hazardmitigation.calema.ca.gov/plan/local\\_hazard\\_mitigation\\_plan\\_lhmp](http://hazardmitigation.calema.ca.gov/plan/local_hazard_mitigation_plan_lhmp)
7. Next Meeting
8. Questions/Comments

*Community Services District* *DeLeonson Community District* *Toronto District* *652-1342*

**MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE PARTICIPANTS 1-19-10 MEETING**

JURISDICTION	NAME OF BOARD	CONTACT NAME	SIGNATURE	PHONE
Community Service District	Crows Landing Community Services District	Ignacio H. Lopez	<i>[Signature]</i>	652-1229
Community Service District	Denair Community Services District	Gaylon W. Wade	<i>[Signature]</i>	634-4986
Community Service District	Grayson Community Services District	Ignacio H. Lopez	<i>[Signature]</i>	652-1229
Community Service District	Keyes Community Services District	Harinder Grewal		620-2500
Cemetery District	Grayson Cemetery District	Karen Wilson		525-2727
Cemetery District	Patterson Cemetery District	Karen Wilson		525-2727
Cemetery District	Patterson Cemetery District	Bryan Bingham	<i>[Signature]</i>	892-8408
Cemetery District	Grayson Cemetery District	Bryan Bingham	<i>[Signature]</i>	892-8408
Cemetery District	Hills Ferry Cemetery District	Ken Moeller		862-0501
Fire District	Salida Fire District	Dale Skiles	<i>[Signature]</i>	545-0365
Fire District	Burbank-Paradise Fire Protection District	Lance Silva, Captain		523-1129
Fire District	Oakdale Rural Fire Protection District	Danielle Denczek		847-6898
Fire District	Ceres Fire Protection District	<i>Bob Adkinson</i> Richard Soola	<i>[Signature]</i>	538-5724/543-5890
Fire District	Industrial Fire Protection District	Mike Payton		571-5876
Fire District	Hughson Fire Protection District	Scott Berner		883-2863
Fire District	Keyes Fire Protection District	Bob Watt		634-7690
Fire Dept	Modest Fire Dept- Division Chief	Mike Payton	<i>[Signature]</i>	571-5876
Fire District	Modesto-Ceres Fire Protection Agency, a JPA	Richard Soola		538-5724/543-5890
Fire District	Mountain View Volunteer Fire Protection District	Kevin Blount		678-2207
Fire District	Stanislaus Consolidated Fire Protection District	Steve Mayotte	<i>[Signature]</i>	869-7470
Fire District	Turlock Rural Fire Protection District	Rick Fortado		632-3953
Fire District	West Stanislaus Fire Protection District	Steven Hall, Division Chief	<i>[Signature]</i>	595-0636
Hospital District	Oak Valley Hospital District	Vivian Thompson		848-4196
Hospital District	Del Puerto Health Care District	Bill Danforth	<i>[Signature]</i>	892-9100

*Fire District* *Woodward Ave Fire Protection Dist* *Mike Passaglia* *Richard Soola* *545-7457*

JURISDICTION	NAME OF BOARD	CONTACT NAME	SIGNATURE	PHONE
Hospital District	Patterson District Ambulance	Bill Danforth		892-9100
Irrigation District	Modesto Irrigation District	Jahna Colby		526-7660
Irrigation District	Oakdale Irrigation District	Derek Davis		874-0341 x 5512
Irrigation District	Turlock Irrigation District	Richard Eastman		883-8317
Water District	Oak Flat Water District	Anthea G. Hansen		892-4470
Water District	Del Puerto Water District	Anthea G. Hansen		892-4470
Sanitary District	Salida Sanitary District	Michael Gilton		545-4987 x102
School	Modesto City Schools	Miguel Galvez		576-4032
School	Stanislaus County Office of Education	Ken Fitzgerald		238-1381
School	Ceres Unified School District	Fred VanVleck		556-1560
School	Chatham Unified School District	Jack Mayer, Superintendent		664-8505
School	Granton School District	Shannon M. Sanford Rice		632-0505
School	Hart-Ransom Union School District	R. Ream Lochry		523-9996
School	Hickman Community Charter District	Rusty Wynn		874-1816
School	Hughson Unified School District	Cindy Whiteman		883-4428 x 3
School	Keyes Union School District	Jerry Hines		678-0136/669-2921x2312
School	Knights Ferry School District	Beverly Noe		881-3382
School	Knights Ferry School District	Cheryl Griffiths		881-3382
School	La Grange School District	Joseph Magnu		853-2132
School	Paradise Elementary School District	Douglas Fraser		524-0184
School	Roberts Ferry Union School District	George Johnson		874-2331
School	Salida Union School District	Douglas Baughn		545-0339
School	Shiloh School District	Seth Ehrler, Superintendent		522-2261
School	Stanislaus Office of Education	Trudy Silveira		238-1925
School	Stanislaus Office of Education	Nina Palarca		238-1925

EAST STANISLAUS RESOURCE  
 CONSENSATION DISTRICT  
 MIKE PASTORALONA  
 595-7457

JURISDICTION	NAME OF BOARD	CONTACT NAME	SIGNATURE	PHONE
School	Stanislaus Union School District	Sandy Putnam		529-9546
School	Sylvan Union School District	John Halverson		574-5000 x202
School	Turlock Unified School District	Roger K. Smith	<i>Roger K. Smith</i>	667-0645
School	Waterford Unified School District	Jose M. Aldaco	<i>Jose M. Aldaco</i>	874-1809 x9
School	Yosemite Community College District--MJC	Becky Crow	<i>Becky Crow</i>	575-6260
City	City of Ceres	Richard Scola	<i>Richard Scola</i>	538-5724/543-5890
City	City of Modesto-Police	Jolene Gonzales	<i>Jolene Gonzales</i>	652-1832
City	City of Hughson	Janet Rasmussen		883-4052
City	City of Newman	Brett Short, Sergeant	<i>Brett Short</i>	862-2902
City	City of Oakdale	Mike Botto, Fire Chief	<i>Mike Botto</i>	845-3660
City	City of Patterson	Steve Hall, Fire Div. Chief	<i>Steve Hall</i>	892-5621
City	City of Riverbank	JD Hightower		863-7124
City	City of Turlock	Tim Lohman D.C.	<i>Tim Lohman</i>	668-5580
City	City of Waterford--Public Works Director	Matthew Erickson	<i>Matthew Erickson</i>	874-4094
County	Chief Executive Office	Marnie Ardis	<i>Marnie Ardis</i>	525-6532
County	Office of Emergency Services	Chris Holmer		525-3600
County	Office of Emergency Services	Dan Davis		525-3600
County	Office of Emergency Services	Gary Hinshaw	<i>Gary Hinshaw</i>	552-3600
County	Office of Emergency Services	Deb Thrasher		552-3857
County	Capital Projects	Tim Fedorchak		652-1649
County	Planning and Community Development	Steve Treat	<i>Steve Treat</i>	525-7592
County	Public Works Director	Matt Machado	<i>Matt Machado</i>	

*Yosemite Community College Dist*  
*Marsha Calbreath* 575-6005  
*Ignacio Luper* 484-1096  
*Ignacio Luper* 484-1094  
*Community Services District*  
*Community Services District*



## Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan



January 19, 2010

### Letter of Intent

- 111 jurisdictions invited to participate
- 57 responded that they wanted to participate with the County
- Thank you and welcome to all of you!

### Update Plan

- Each plan must be updated every 5 years
- We need to review and update each section
- A plan update, is not an annex to the previously approved plan
- It stands on its own as a complete and current plan

### Components of a MJHMP

- Introduction
- Prerequisites
- Planning Process
- Risk Assessment
- Mitigation Strategy
- Plan Maintenance
- Appendix--Crosswalk

### Introduction

- Briefly describe mitigation planning
- Plan update—complete review
- Plan components—how your plan is organized

### Prerequisites

- Each jurisdiction submits plan to Cal EMA
- State approves/forwards to FEMA
- If plan passes, we receive "Approval Pending Adoption"
- Each jurisdiction then takes it to their governing body
- Send Resolution showing adoption to FEMA
- FEMA sends us signed letter that it is approved

## Scoring Criteria

- **N** – Needs Improvement
  - **S** – Satisfactory
- A local hazard mitigation plan must receive a **satisfactory** scoring on all required criteria for the plan to obtain FEMA approval.

## Plan Approval Determinations

- **Approved**  
Plan meets the criteria including local plan adoption.
- **Not Approved - Criteria Met / Plan not Adopted**
  - **Criteria Met**
  - **Plan Not Adopted**  
Plan meets the criteria, except for adoption. Upon documentation of adoption, FEMA will approve plan.
- **Not Approved - Criteria Not Met**
  - **Criteria Not Met**
  - **Plan Adopted or Not Adopted**  
Plan does not meet the content criteria. All criteria must receive a satisfactory rating before FEMA will approve.

## FEMA Plan Review Process

- **State “review and coordinate”**
  - “Plans must be submitted to the State Hazard Mitigation Officer for initial review and coordination.”
- **FEMA “review and approval”**
  - “The state will then send the plan to the appropriate FEMA Regional Office for formal review and approval.”
  - “Regional review will be completed within 45 days after receipt from the state, whenever possible.”

## Planning Process

- The planning process must be documented in the plan
- The planning process is as important as the plan itself!
- Narrative description of the process used to develop the plan
- Identifies the planning team members, meetings held, and meetings attended
- Documents outreach efforts to the public (website)
- Identifies what existing plans, studies, and reports were incorporated into the plan

## Risk Assessment

- Identify Hazards:
  - Earthquake
  - Landslide
  - Dam Failure
  - Flood
  - Wildfire

## Risk Assessment

- Profile Hazard (for each identified hazard)
  - Location
  - Extent—magnitude/severity of hazard
  - Previous occurrences
  - Probability of future events
  - New occurrences

## Risk Assessment

- Assess Vulnerability/Overview
  - Overall summary of vulnerability and impact of hazard on the jurisdiction
  - Description of type of structures affected such as buildings, infrastructure, critical facilities

## Risk Assessment

- Assess Vulnerability/Addressing Repetitive Loss Properties
  - As of October 2008, must address National Flood Insurance Program insured structures that have been repetitively damaged by floods.
  - Estimate number of repetitive loss properties located in flood hazard areas.

## Risk Assessment

- Assess Vulnerability/Identifying Structures
  - Based on an inventory of existing and proposed buildings, infrastructure, and critical facilities within the identified hazard area.

## Risk Assessment

- Assess Vulnerability/Estimating Potential Losses
  - Vulnerability in terms of dollar losses
  - Mention reviewed/updated plan
  - Reflect changes in development
  - Update inventory of structures
  - Include an estimate of monetary losses for the identified vulnerable structures

## Risk Assessment

- Assess Vulnerability/Analyzing Development Trends
  - Overview of existing & future land uses
  - Types of development occurring in this hazard area.

## Crosswalk

- Identifies each criteria contained in the regulation
- Identifies the various elements of each criteria
- Worksheet may be used by a local community to “self-check” their plan during development and/or prior to submitting plan to State/FEMA for review

## Next Meeting

- Mitigation Strategy
- Plan Maintenance
- Completing the Crosswalk
- Plan Submission

## Timeline

- Submit draft to State and FEMA for review prior to adoption “approval pending adoption” by May 2010
- Late 2010 get plans adopted by local governing body.

## Resources

- Gary Hinshaw, Assistant Director of Emergency Services
- Marnie Ardis, Project Manager 209- 525-6532
- [http://hazardmitigation.calema.ca.gov/plan/local\\_hazard\\_mitigation\\_plan\\_lhmp](http://hazardmitigation.calema.ca.gov/plan/local_hazard_mitigation_plan_lhmp)
- <http://www.scoes.info/oes.shtm>
- FEMA website at: <http://www.fema.gov/>

Questions?



## MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN (MJHMP)

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### Synopsis of key concepts:

- The MJHMP is considered the representation of the jurisdiction's commitment to reduce risks from natural disasters. It serves as a guide for decision-makers to commit resources to reduce these risks. Local plans will also serve as the basis for the California Emergency Management Agency (Cal EMA) to provide technical assistance and to prioritize project funding.
- According to FEMA, local mitigation plans that avoid a detailed and documented planning process and risk assessment will not be approved.
- Local jurisdictions are strongly encouraged to submit a final draft to Cal EMA and FEMA for review before seeking formal adoption of the plan by the appropriate officials, agencies, or organizations. If the plan meets all the requirements (except the formal adoption), they can then proceed with the adoption process, knowing the plan will be approved. If there are deficiencies in the plan, the responsible parties will be able to address them before taking the plan through adoption, and avoid the potentially awkward situation of having an adopted plan rejected.
- Upon receiving a hard copy of a MJHMP, Cal EMA will date-stamp the submission, and start the clock on the Cal EMA goal of a **21-day review/comment period**.
- Following California Emergency Management Agency review, FEMA will date-stamp the Cal EMA reviewed submission. The FEMA Regional Office will complete the review within **45 days** from the day it is received.
- The Regional Office will provide comments on areas that need improvement.
- Cal EMA and FEMA reviews are not concurrent, but separate reviews with separate review periods.
- Both Cal EMA and FEMA will be using the Local Hazard Mitigation Plan Review Crosswalk as the primary review document.
- California Emergency Management Agency (Cal EMA) requires each participating jurisdiction to complete his/her own crosswalk.
- Comments, recommendations, and scores will be documented on a copy of the locally attached crosswalk and returned to the local government.
- Scoring System—The following "Scoring System" will be utilized by both Cal EMA, to provide guidance and assistance, and by FEMA to determine if the plan will receive final approval.
- According to FEMA, local mitigation plans must meet all the applicable prerequisites and receive a score of at least "Satisfactory" for each "element" of a requirement, in order for the requirement to be satisfactorily fulfilled. In the event that the plan is not approved, FEMA will provide comments on the specific requirements and elements of the local plan that are in need of improvement.
- A MJHMP cannot receive final approval from FEMA if the Local Governing Body has not formally adopted the plan. FEMA has said that, if all other requirements have been met, they will issue approval letters "pending" final adoption by the Local Governing Body such as the Board of Supervisors, City Council, or Board of Trustees.

# Stanislaus County's 8th Community Conference

Multi-Jurisdictional Hazard Mitigation  
Plan and Emergency Notification  
System

By

Office of Emergency Services  
Fire Warden



# Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan





## State & Local Mitigation Planning after DMA 2000

After November 1, 2004, all local governments in California are required to have an approved local hazard mitigation plan in order to qualify for Federal mitigation funding.

New program requires an approved plan be in place **BEFORE A DISASTER STRIKES.**



## Multi-Jurisdictional Hazard Mitigation Plan

Jointly prepared by multiple jurisdictions  
Jurisdiction=Local Government

Definition is: any **county, municipality, city, town, township, public authority, school district, special district**, intrastate district, council of governments, regional or interstate government entity, or **agency or instrumentality of a local government**; and any **rural community**, unincorporated town or village, or **other public entity.**



## What happens if you don't participate?

Not eligible for:

- Flood Mitigation Assistance Grant
- Hazard Mitigation Grant Program
- Pre-Disaster Mitigation Grant Program
- Severe Repetitive Loss



## Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan

- MJHMP drafted & approved on 1/12/06
- 111 jurisdictions invited to participate
- 49 participated with County
- 39 jurisdictions successfully completed their plan and had it adopted by the State & FEMA



## Update Plan

- Each plan must be updated every 5 years
- Demonstrate progress
- Review and update each section
- Discuss results of evaluation and monitoring of plan
- Each plan must stand alone



## Plan Components

- Identify and Profile Hazards
- Assess Vulnerability
- Set Mitigation Goals
- Identify Mitigation Strategies
- Prioritize & Implement Strategies
- Monitor, Evaluate, Update



## How do you participate?

- Participate with a District that serves your community.
  - Lighting District
  - Water District
  - Fire District
- Attend meetings and document planning process
- Identify Hazards and do a Risk Assessment specific to your jurisdiction
- Revise your plan every 5 years



Stanislaus County  
Emergency Notification for First  
Responders and  
Citizen Populations



## Emergency Notification System

- Purchased by Stanislaus County with Homeland Security funds and General fund monies.
- System is Web Based
- Accessible by computer with High Speed Connection



## System Design (Internal and External)

- Internal System;
  - Paging using;
    - Alpha Numeric Pagers
    - Cell Phones
    - Email
    - Blackberry
    - Any type of communication device
  - Stanislaus County has purchased licenses for all first responders for Fire & Law Enforcement.



## Internal Continued.....

- Message format can be;
  - Voice, Text, Text to voice, paging
  - Voice can be in multiple languages
  - Page individuals, groups, ad-hock groups, pre determined groups
- Each agency will be responsible to maintain there data current, may be done by each individual in the system.





## External System

- Reverse 9-1-1 Notification Function
- Data collected monthly from AT&T covering all land lines in Stanislaus County.
- Can deliver 5000 ( 30 second voice messages ) an hour.
- Geographical Based.
- Will deliver voice message by either
  - Recorded message
  - Text to Voice Message
- Self Registration



## Public Notification



## System Activations

- New Melones functional exercise
  - Knights Ferry
  - Cities of Oakdale and Riverbank
  - Stanislaus County
- Notification System has been activated six times in communities within Stanislaus County over the last 18 months.



## Self Registration

- Citizens can sign up for notifications on up to five addresses. Any message being sent for that location can call up to 2 telephone numbers to deliver the message.
- Can be used for relatives, work, school, etc.
- Citizens will be responsible to keep data current and will receive an email asking for updated information every six months. If the update is not kept current, they will be dropped from the system.



## Self Registration Form

OFFICE OF EMERGENCY SERVICES  
Emergency Notification Self Registration

Welcome to the Self Registration [Info]

Email Address:

Password:

**New User**  
To open an account click Register

If you need assistance please contact [EmergencyNotification@stancoes.com](mailto:EmergencyNotification@stancoes.com)  
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## CONTACT INFORMATION

### Stanislaus County Office of Emergency Services

Chief Gary Hinshaw  
Assist. Director of Emergency Services/  
Fire Warden

3705 Oakdale Road  
Modesto, CA 95357

(209) 552-3600  
[ghinshaw@stanoes.com](mailto:ghinshaw@stanoes.com)



**Agenda**  
**Stanislaus County Fire Chiefs' Association**  
**Regional Fire Training Center**  
**February 4, 2010**  
**\*To follow RFA mtg.\***

**PLEDGE OF ALLEGIANCE**

**ROLL CALL**

**INTRODUCTION OF GUESTS**

**DISTRIBUTION OF THE – January 2010 MINUTES**

**TREASURER'S REPORT**

**COMMUNICATIONS –**

**NEW BUSINESS**

1. Phillips AED – Julianne Brawner
2. Local Multi-Hazard Mitigation Planning – Marnie Ardis
3. Regional Fire Concept – Hinshaw, Mayotte, Miguel, Skiles
4. Haz-Mat/Confined Space/Tech. Rescue – Hinshaw, Mayotte, Miguel, Skiles

**UNFINISHED BUSINESS**

1. Committee Reports

**EMERGENCY ITEMS**

**NEXT MEETING**

The next meeting will be March 4, 2010.

**ADJOURNMENT**

Stanislaus County  
Fire Chiefs Association

Feb. 4, 2010

Name	Agency	E-Mail
1 Marnie Arais	UCD	MARNIE.ARAIS@YAHOO.COM
2 GARY HANSHAW	STANISLAUS CO FV/DES	GUNSHAW@STANISLAUS.CO
3 MICHAEL LILLIE	CERES FIRE	Michael.Lillie@ci.ceres.ca.us
4 John Barindelli	Westport	J.Barindelli@CV-access.com
5 DALE SKILES	SALIDA	DSKILES@SALIDAFIRE.COM
6 BILL KUNDIGAN	DATISSON/WEST STANISLAUS	bkinneer@ci.patterson.ca.us
7 Brian Weber	Ceres Fire	Brian.Weber@ci.ceres.ca.us
8 STEVE BARRETT	CALIFIRE/SCU	stevebarrett@fire.ca.gov
9 Michael Betto	Dukevale Fire	mbetto@ci.dukevale.ca.us
10 Onana Jones	CALFIRE/SCU	shana.jones@fire.ca.gov
11 Marilyn Smith	MOYEMSA	msmith@muenasa.com
12 Alicia Hinchaw	Modesto Fire	alinhaw@modestofire.com
13 MIKE KRAUS	MODESTO FIRE	m Kraus@modestoFire.com
14 Lee Dinton	DAKOTA FIRE PATRICE	wintanor@sbeglobal.net
15 RALPH CURNAN	DANAIC FIRE	Danaic.Chief@netol.com
16 Jim Mibue	MODESTO FIRE	JMIBUE@MODESTOFIRE.COM
17 Rick Ornelas	Amie	r.ick-ornelas@emsc.net
18 Tim Lohman	Turlock City Fire	TLOHMAN@TURLOCK.CA.US
19 Bob Calatt	Keyes Fire	
20 RAY JACKSON	STAN CO FV	rdjackson@stanislaus.com

Mike Hanthwa  
Ken Simon  
Mimi Simon  
Steve Wajotte

WUAFD  
Stan Co FV FFB  
Stan. County Fire Warden Off.  
SCFAD.

KSLAMON@STANISLAUS.CO  
MDEXMON@STANISLAUS.CO  
swayotte@SCFAD.O.S.



**Stanislaus County  
Multi-Jurisdictional Hazard Mitigation Plan  
Mitigation Strategy & Plan Maintenance Training  
Tuesday, APRIL 20, 2010  
9:00 a.m. to 10:00 a.m.  
County Center III—917 Oakdale Road**

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## **A G E N D A**

1. Welcome
2. Please make sure you sign in!
3. Mitigation Strategy & Plan Maintenance Training
4. Handouts:
  - Sample Outline
  - Sample Goals, Objectives, and Actions
  - Sample Mitigation Strategy
  - Instructions for Submitting your MJHMP Plan on June 14, 2010 at 5:00 p.m.
5. Multi-Jurisdiction Participation— All Plan Updates Need One New Action
6. Resources:
  - 2010 GIS Hazard Maps
  - Repetitive Flood Loss Areas are now on the County website at:  
<http://www.stanoes.com/mjhmp.shtm>
7. Questions/Comments

## Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan



April 20, 2010

## Components of a MJHMP

- Introduction
- Prerequisites
- Planning Process
- Risk Assessment
- Mitigation Strategy
- Plan Maintenance
- Appendix--Crosswalk

## Mitigation Strategy

Includes:

- Develop mitigation goals
- Identify mitigation actions
- Evaluate mitigation actions
- Implement mitigation action plans

## Why do we need a mitigation strategy?

- It costs too much money to only address the effects of a disaster after it occurs
- Damage from hazards can often be prevented if you take the time to anticipate where and how disasters will occur
- By developing a strategy we can lessen the impact of disasters and speed the recovery process
- We have a responsibility to our citizens to plan and recognize the potential for hazards

## Mitigation Efforts Include...

- Amending zoning ordinances, building codes, and enforcement codes
- Integrating mitigation efforts into General Plan update
- Improving the understanding of the vulnerability of building types
- Ensuring that all development in high-risk areas is protected by mitigation measures that provide for safety

## Mitigation Efforts Include...

- Emphasizing public education and awareness
- Assessing and altering land use planning
- Establishing partnerships between local government and the business community to protect property and lives

## Mitigation Strategy

- Need a mitigation strategy for each identified hazard:
  - Earthquake
  - Landslide
  - Dam Failure
  - Flood
  - Wildfire

## Earthquake

- Mitigation Goals
- Objective
- Identification and Analysis of Mitigation Actions
- Implementation of Mitigation Actions

## Earthquake Example

- Goal 1: Protect life
- Objective: Strengthen building code enforcement
  - Action: Update seismic building codes

## Earthquake Example

- Goal 2: Promote sustainable economy
- Objective: Continue critical business operations
  - Action: Develop, adopt, maintain, and update a Continuity of Operations Plan. Provide disaster management to assist and support County departments to maintain their critical functions.
- Develop and Adopt COOP Completed

## Earthquake Example

- Action— Applications for development in areas with geological faults shall include measures to mitigate the impacts based on the Seismic Design Category.
- Responsible Agency—Planning Department
- Funding Source—Application Fees
- Timeframe—Continuous Implementation

## Planning Department

- Involve your Planning Department in your Mitigation Strategy and Actions.
- Get input on what actions would help to mitigate future hazard events.
- Choose mitigation actions that you might be able to accomplish.

## Flood--Repetitive Loss Action

- As of October 1, 2008, all mitigation plans must also address National Flood Insurance Program insured structures that have been repetitively damaged by floods.
- Repetitive Loss Properties (RLP) are those for which two or more losses of at least \$1,000 each have been paid under the National Flood Insurance Program (NFIP) within any 10 year period since 1978.
- The County has plotted Repetitive Loss Property Areas on a GIS map and posted it on our website.

## Flood--Repetitive Loss Action

- Action:** "elevate existing homes out of the flood plain due to repetitive loss."
- FEMA has a grant program that provides funds for repetitive loss homes.
- Regardless of the ordinance that your jurisdiction has adopted, your entity is still be able to receive grant money for this purpose, **if you have the action in your plan.**

## Plan Maintenance

**MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**PLANNING AND REVIEW CHECKLIST**

**PURPOSE:**  
 The purpose of this Plan Maintenance Checklist is to ensure that all jurisdictions participating in the plan have completed the necessary steps to maintain the plan's accuracy and effectiveness. The checklist is designed to be used by the jurisdictions participating in the plan to ensure that the plan remains current and effective.

**Checklist:**

Item	Completed	Not Completed
1. Have you reviewed the plan since the last meeting?	<input type="checkbox"/>	<input type="checkbox"/>
2. Has anyone been the public comment on the plan during the meeting period? If not, did someone?	<input type="checkbox"/>	<input type="checkbox"/>
3. Do the plan and documents address current and potential conditions? If not, update the plan.	<input type="checkbox"/>	<input type="checkbox"/>
4. Have you completed updates to the plan? If not, complete the updates.	<input type="checkbox"/>	<input type="checkbox"/>
5. What comments, questions, or issues did you receive or pending mitigation plan comments? If not, how were they addressed?	<input type="checkbox"/>	<input type="checkbox"/>
6. Are the current documents accurate for the meeting period?	<input type="checkbox"/>	<input type="checkbox"/>

## Crosswalk

- The Crosswalk **must** be in an **editable format**.
- Microsoft Word is editable, Adobe Acrobat is not editable.
- Both CalEMA and FEMA will make comments and score the plan directly on the editable crosswalk.
- Due to editing during the review process, the crosswalk should be an appendix at the end of your plan. Do not number it as part of your plan

## Timeline

- Turn 4 hard copies to Marnie Ardis at 1010 10<sup>th</sup> Street Place, Second Floor
- Deadline is Monday, June 14<sup>th</sup> by 5:00 p.m.
- Turn in 2 separate DVDs.
- Each DVD should be burned to contain a copy of your plan and the crosswalk in **Word**.
- Please label the DVD with the name of your entity

## Review Timelines

- CalEMA has a **goal** of a **21-day** review/comment period.
- FEMA has a goal of **45 days** from initial receipt from CalEMA



## Resources

- Gary Hinshaw, Assistant Director of Emergency Services
- Marnie Ardis, Project Manager 209- 525-6532
- [http://hazardmitigation.calema.ca.gov/plan/local\\_hazard\\_mitigation\\_plan\\_lhmp](http://hazardmitigation.calema.ca.gov/plan/local_hazard_mitigation_plan_lhmp)
- <http://www.scoes.info/oes.shtm>
- FEMA website at: <http://www.fema.gov/>

Questions?



## INSTRUCTIONS FOR MJHMP SUBMITTAL

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**When submitting a MJHMP for review and approval, CalEMA and FEMA require a submission package that includes the following items:**

1. Turn in **4** hard copies of your MJHMP to Marnie Ardis at 1010 10<sup>th</sup> Street, Suite 2300, Modesto, CA.
2. Turn in 2 separate CDs burned with entire plan and Crosswalk to Marnie.
3. Crosswalk must be in Word format NOT PDF.
4. Cover letter describing what is being submitted and that final review action is being requested. Write that upon CalEMA review, please forward submission to the Federal Emergency Management Agency (FEMA) for their review.

Address cover letter to:

Mr. Ken Worman  
State Hazard Mitigation Officer  
California Emergency Management Agency  
Hazard Mitigation Section  
3650 Schriever Avenue  
Mather, California 95655

5. Letter of Commitment should come before the Table of Contents.
6. **COMPLETING THE CROSSWALK:** Both FEMA and CalEMA will only review mitigation plans submitted with a properly completed, editable crosswalk, attached. If a crosswalk is not attached, or not properly filled out, one will be requested before the CalEMA review begins. On the crosswalk, please allow the reviewer to complete the "Comments" portion as well as the Not Met/Met, **[NM]/[M]** & Needs Improvement/Satisfactory **[N]/[S]** sections.
7. Do complete the "Location in the Plan" section of the crosswalk with specific page number(s). For location, do not state, "Page 1 through 179" or "from page 12 and following." Be as Page, Section, Table or Figure specific as possible.
8. The Crosswalk **must** be in an **editable format**. Microsoft Word is editable, Adobe Acrobat is not editable. Both CalEMA and FEMA will make comments and score the plan directly on the editable crosswalk. Due to editing during the review process, the crosswalk should be an appendix at the end of your plan. Do not number it as part of your plan
9. The Interim Final Rule requires that Multi-Jurisdictional Plans be submitted through the State Hazard Mitigation Officer at CalEMA, for initial review, before submittal to FEMA.
10. CalEMA will check the submission for completeness and a letter acknowledging receipt of the MJHMP will be sent. The date of the acknowledgement letter will start the clock on the CalEMA **goal** of a **21-day** review/comment period. CalEMA will perform an initial review of the plan, make comments, and forward the mitigation plan "package" to FEMA for their courtesy review or for final review and approval.
11. FEMA will communicate directly with the local government or "lead agency" of a MJHMP, concerning required and recommended changes to the mitigation plan until final approval is achieved. FEMA has established a goal, when possible, of **45 days** from initial receipt from CalEMA to initial feedback (completion of initial review).

12. **PLAN SCORING SYSTEM:** The following "Scoring System" will be utilized by CalEMA to provide guidance and assistance, and by FEMA to determine if the plan will receive final approval:

- According to FEMA, local mitigation plans must meet all the applicable prerequisites and receive a score of at least "Satisfactory" for **each** required "element" of a requirement, in order for the requirement to be satisfactorily fulfilled. In the event that the plan is not approved, FEMA will provide comments on the specific requirements and elements of the local plan that are in need of improvement.
- A plan cannot receive **final** approval from FEMA if the plan has not been formally adopted by the Local Governing Body. FEMA has said that, if all other requirements have been met, they will issue approval letters "pending" final adoption by the Local Governing Body (Board of Supervisors, City Council, etc.).

13. **SCORING SYSTEM FOR PREREQUISITES:**

<p><b>NOT MET:</b> This Prerequisite requirement has not been met, or is not documented in the plan.</p>	<p><b>MET:</b> This Prerequisite requirement has been met, and is documented in the plan.</p>
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14. **SCORING SYSTEM FOR REQUIREMENTS & ELEMENTS:**

<p><b>N (Needs Improvement):</b> The plan addresses the criteria, but needs significant improvement. – <b>Reviewer's comments must be provided.</b></p>	<p><b>S (Satisfactory):</b> The plan meets the minimum criteria. – <b>Reviewer's comments are encouraged, but not required.</b></p>
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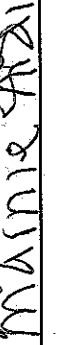


**MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE PARTICIPANTS**

**Sign-In Sheet for April 20, 2010 Mitigation Strategy Training Meeting**




Jurisdiction	Name of Board	Contact Name	Signature
School	Modesto City Schools	Miguel Galvez	
School	Stanislaus County Office of Education	Ken Fitzgerald	
School	Ceres Unified School District	Fred VanVleck	
School	Chatham Unified School District	Jim Henry	
School	Gratton School District	Shannon M. Sanford Rice	
School	Hart-Ransom Union School District	R. Ream Lochry	
School	Hickman Community Charter District	Rusty Wynn	
School	Hughson Unified School District	Cindy Whiteman	
School	Keyes Union School District	Jerry Hines	
School	Knights Ferry School District	Beverly Noe	
School	Knights Ferry School District	Cheryl Griffiths	
School	Empire Union School District	Pamela Wall	
School	La Grange School District	Joseph Magnu	
School	Paradise Elementary School District	Douglas Fraser	
School	Roberts Ferry Union School District	George Johnson	
School	Salida Union School District	Douglas Baughn	
School	Shiloh School District	Seth Ehrler, Superintendent	
School	Stanislaus Office of Education	Trudy Silveira	
School	Stanislaus Office of Education	Nina Palarca	
School	Stanislaus Union School District	Sandy Putnam	
School	California State University, Stanislaus	Tony Borba	
School	Sylvan Union School District	John Halverson	
School	Turlock Unified School District	Roger K. Smith	
School	Waterford Unified School District	Jose M. Aldaco	
School	Yosemite Community College District--MJC	Becky Crow	
City	City of Ceres	Richard Scola	
City	City of Modesto-Police	Jolene Gonzales	
City	City of Hughson	Janet Rasmussen	
School	Yosemite Community College	MARSHA CAMPBELL	

**MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE PARTICIPANTS**

**Sign-In Sheet for April 20, 2010 Mitigation Strategy Training Meeting**

Jurisdiction	Name of Board	Contact Name	Signature
City	City of Newman	Brett Short, Sergeant	
City	City of Oakdale	Mike Botto, Fire Chief	
City	City of Patterson	Steve Hall, Fire Div. Chief	
City	City of Riverbank	JD Hightower	
City	City of Turlock	Tim Lohman D.C.	
City	City of Waterford--Public Works Director	Matthew Erickson	
County	Chief Executive Office	Marnie Ardis	
County	Office of Emergency Services	Chris Holmer	
County	Office of Emergency Services	Gary Hinshaw	
County	Office of Emergency Services	Deb Thrasher	
County	Capital Projects	Tim Fedorchak	
County	Planning and Community Development	Kirk Ford	
County	Planning and Community Development	Steve Treat	
County	Public Works Director	Matt Machado	

City of Turlock  
Ceres School  
CITY OF HUGHSON

Debra Whitmore  
Ken Himes  
FIDEL ALONZO  
  
  


# Stanislaus County



Striving to be the Best



Risk Assessment

# RISK ASSESSMENT

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Stanislaus County has identified several hazards that are addressed in the County's Multi-Jurisdictional Hazard Mitigation Plan update. These hazards were identified through a process that utilized input from the various multi-jurisdictional partners, Work Groups, Stanislaus County Emergency Operations Plan, the Safety Element of the General Plan, input from the Planning Director, Public Works Director, Public Health Director, Assistant Director of Emergency Services, City governments, researching past disaster declarations in the County and public input. Hazards that are unlikely to occur, or for which the risk of damage is accepted as being very low, were eliminated from consideration after review by the Planning Team.

The County's Public Work's Department developed a Geographical Information System (GIS) database that will map the County's infrastructure, critical facilities, and land uses. Initial data from this study was also used to determine those hazards that present the greatest risk. While, the County is also susceptible to agricultural emergencies resulting from weather related issues such as drought, severe winter storms, and high winds, these natural hazards are not referenced in the County Emergency Operations Plan or the Safety Element of the General Plan. Therefore, the County has chosen to concentrate on the following five hazards because they have the greatest potential to cause a negative impact on the community. They are:

- Earthquake
- Landslide
- Dam Failure
- Flood
- Wildfire

The Risk Assessment component includes the following subsections for each of the five hazards:

**Identifying Hazards**—includes a description of the types of all natural hazards;

**Profiling Hazard Events**—identifies the location, extent, previous occurrences, and probability of future events;

**Assessing Vulnerability/Overview**—identifies an overall summary description of vulnerability to each hazard and the impact of each hazard on the jurisdiction;

**Assessing Vulnerability/Addressing Repetitive Loss Properties**—plans approved after of October 1, 2008, must also address National Flood Insurance Program insured structures that have been repetitively damaged by floods;

**Assessing Vulnerability/Identifying Structures**—includes the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas;

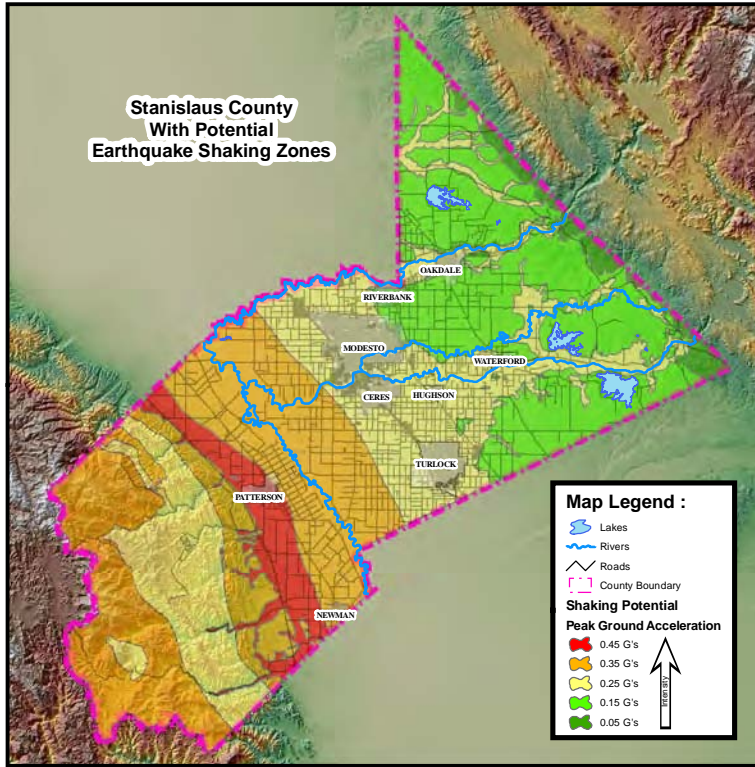
**Assessing Vulnerability/Estimating Potential Losses**—includes estimates of potential dollar losses to vulnerable structures and describes the methodology used to prepare the estimate;

**Assessing Vulnerability/Analyzing Development Trends**—includes the land uses and development trends; and

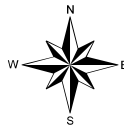
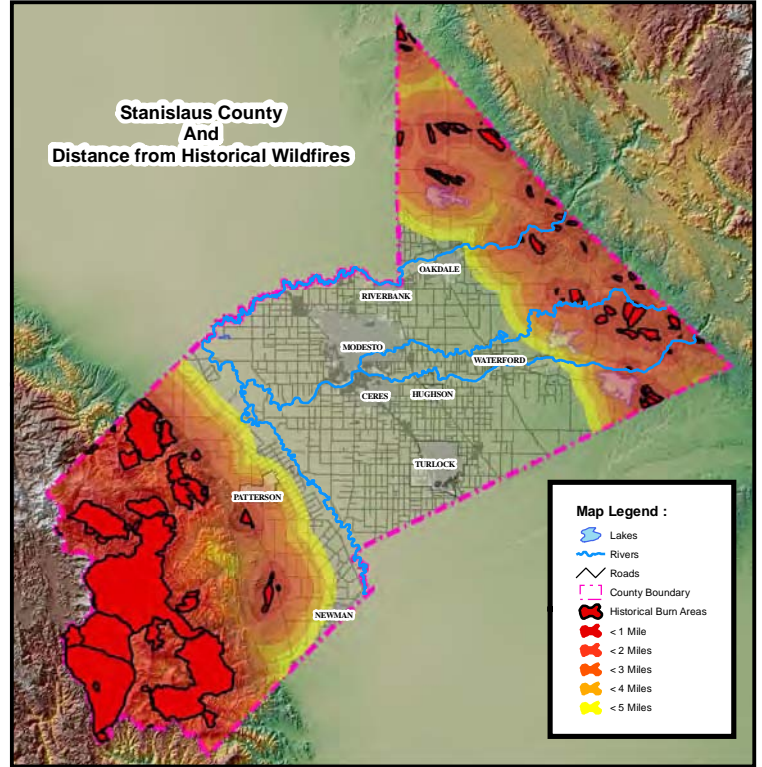
**Multi-Jurisdictional Risk Assessment**—each participating jurisdiction has included their varied and unique risks if different from the County's.



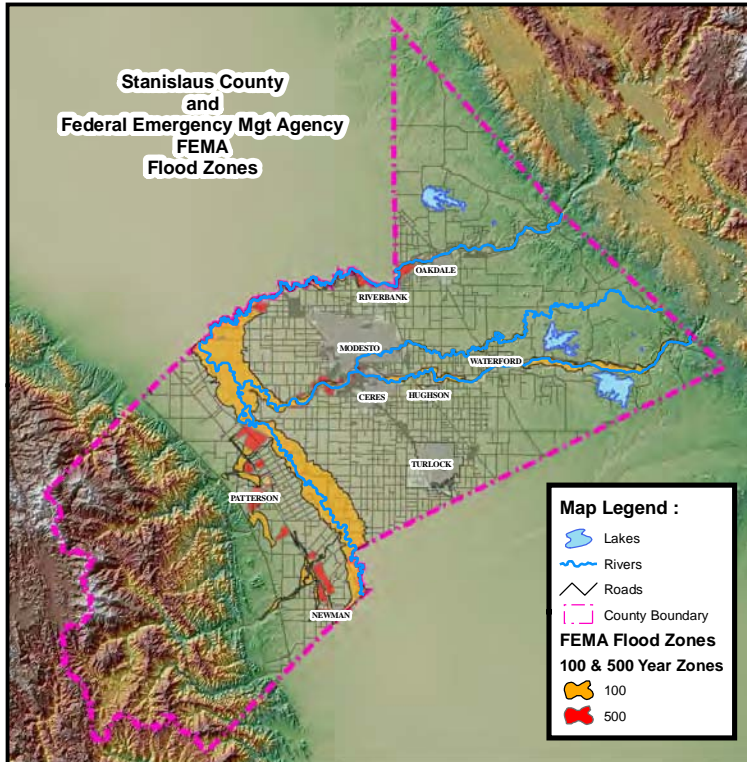
## EARTHQUAKE HAZARD



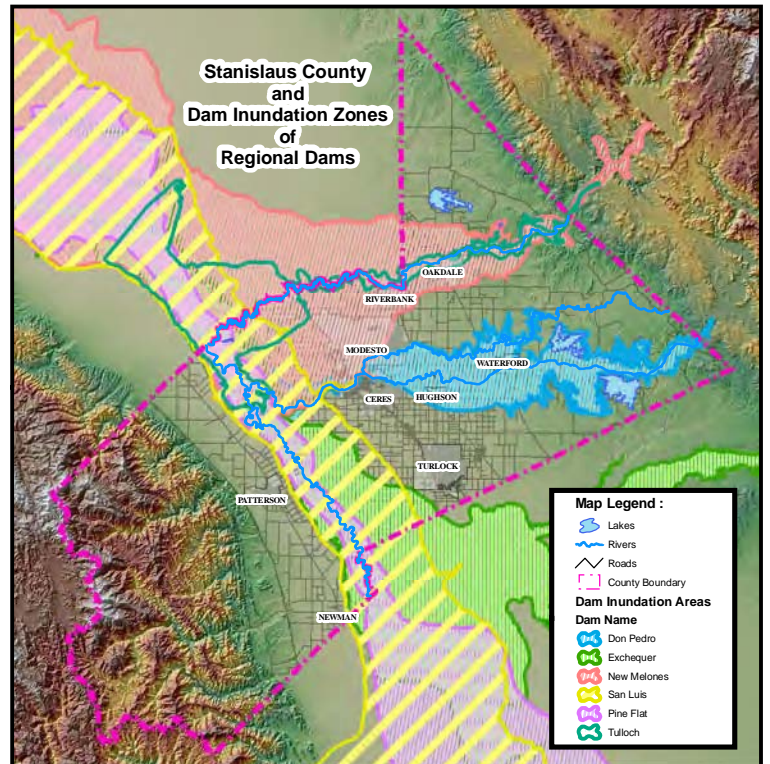
## WILDFIRE HAZARD



## FLOOD HAZARD



## DAM INUNDATION HAZARD



# RISK ASSESSMENT—Plan Update



Earthquake

# RISK ASSESSMENT/EARTHQUAKE

## EARTHQUAKE DESCRIPTION

An earthquake is a sudden motion or trembling of the earth produced by the rupture of rocks due to stresses beyond the rocks' elastic limits. The point inside the Earth where the rupture takes place is termed the hypocenter. The point on the planet's surface directly above the hypocenter is the epicenter. The effects of an earthquake can be felt far beyond the site of its occurrence. Earthquakes usually occur without warning and, after just a few seconds, can cause massive damage and extensive casualties. The most common effect of earthquakes is ground motion, usually felt as shaking and vibrations. The severity of ground motion generally increases with the amount of energy released and decreases with distance from the fault or epicenter of the earthquake.



Earthquakes are usually measured in terms of magnitude and intensity. Magnitude is related to the amount of energy released during an event, while intensity refers to the effects on people and structures at a particular place. Small to moderate earthquake magnitude is usually reported according to the standard Richter scale. Larger earthquakes are reported according to the moment-magnitude scale because the standard Richter scale does not adequately represent the energy released by these large events. Intensity is usually reported using the Modified Mercalli Intensity Scale. This scale has 12 categories ranging from "not felt" to "total destruction." Different values can be recorded at different locations for the same event depending on local circumstances such as distance from the epicenter or building construction practices.

## PROFILING HAZARDS

NATURAL HAZARD	HOW IDENTIFIED	WHY IDENTIFIED
<b>EARTHQUAKE</b>	<ul style="list-style-type: none"> <li>• County General Plan Safety Element</li> <li>• County Emergency Operations Plan</li> <li>• Input from Planning Director</li> <li>• Input from Public Works Director</li> <li>• Input from MJHMP Planning Team</li> <li>• Risk Assessments</li> <li>• Feedback from MJHMP partners through submittal of the Hazard Identification Questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>• Previous occurrences</li> <li>• Potential to cause harm</li> </ul>

## LOCATION

There are several faults known to exist within Stanislaus County. In the extreme eastern parts of the County, the Bear Mountain and Melones faults are found, though believed to have been inactive for the past 150 million years. No faults are currently known to exist within the valley portion of the County. Within the Diablo Range, the most recent movements were along the Tesla-Ortogonalita fault approximately five million years ago, although earthquake activity without surface fracturing or faulting is still common.

## **EXTENT**

Since 1930, one earthquake epicenter of a magnitude greater than 4.0 on the Richter Scale was recorded in Stanislaus County. On June 27, 1986, an earthquake with a magnitude of 3.7 on the Richter Scale occurred with an epicenter several miles west of Crows Landing. Future earthquakes of similar or greater magnitudes can be expected.

Numerous earthquakes occur each year along California's major faults which are the San Andreas, Calaveras, Hayward and the Nacimiento faults. Information furnished by the State Department of Mines and Geology and the California Emergency Management Agency indicate that ground shaking along these faults can produce damage within the County to reach varying intensities rated on the Modified Mercalli Intensity Scale of 1931. The eastern half of the County can be expected to have shaking to an intensity of VI or VII, producing minor to moderate damage. The western half of the County can expect to receive shaking to an intensity of VII to VIII Mercalli, which can cause considerable damage to ordinary structures. The area around the City of Newman may have shaking intensity of IX or X. This may be considered a major hazard area.

## **PROBABILITY OF FUTURE EVENTS**

Although Stanislaus County is not known for its seismic activity, it is imperative that we plan for a potential earthquake disaster. While there are no major faults in the valley portion of Stanislaus County, some faults do exist in the foothills on the eastern and western edges of the County. Earthquakes could occur that would cause severe damage in portions of the County. We do not anticipate major epicenters, but major damage could occur as a result of shaking and aftershocks from other areas. Structures built prior to 1976 will have a greater risk of damage during earthquake activity due to building designs and seismic requirements being less stringent. However, west of Interstate 5, the building codes are more restrictive due to seismic requirements.

In any earthquake, the primary consideration is saving lives. Time and effort must also be given to providing for people's mental health by reuniting families, providing shelter to the displaced persons, and restoring basic needs and services. A major effort will be needed to remove debris and clear roadways, demolish unsafe structures, assist in reestablishing public services and utilities, and provide continuing care and temporary housing for affected citizens.

## **NEW OCCURRENCES**

There have been no new occurrences since the County's original MJHMP plan was adopted on January 12, 2006.

## **ASSESSING VULNERABILITY: OVERVIEW**

Aside from structural damage, earthquake activity can produce three other types of adverse effects. The first is ground failure. Virtually the entire area located west of Interstate 5 is composed of geological formations that, due to structure, slope, runoff, lack of vegetation, earthquake and human activity, are considered extremely susceptible to failure and sliding. On a California Division of Mines and Geology scale used to rate land sliding potential, this area is rated at five, the next to highest rating on a scale of six. The remainder of the area is rated at six. The prime reason is the generally unstable formation comprising the underlying geologic structure of the Diablo Range. In the winter of 1982-1983, saturation of the soil in this area resulted in a considerable amount of damage to Del Puerto Canyon Road. There is a history of a number of slides throughout the Diablo Range in Stanislaus County. It is evident that the steep slopes and undesirable geology of the area on the west side of the County, even without considering the very real possibility of an earthquake, present substantial risks in certain conditions.

The second adverse effect would be from a seiche (an earthquake-induced wave in a lake or reservoir). Stanislaus County has three reservoirs of considerable size; Modesto, Woodward and Turlock. An

earthquake of sufficient magnitude could cause a seiche in one or more of these reservoirs. The most severe hazard would exist if a seiche occurred while many people were using the reservoir for recreation.

The third effect would be caused by damage to a dam that results in dam failure. There are a number of dams, both in and out of the County on the east and west sides including Don Pedro and New Melones Dams, which could produce flooding should they fail. Modesto Reservoir also supplies drinking water to the City of Modesto and surrounding areas.

Stanislaus County took into account the following when updating our vulnerability assessment:

- Updates to inventories of existing structures in hazard areas, including new development, and redeveloped areas or structures;
- Potential impacts of future land development, including areas that may be annexed in the future;
- New buildings; and
- Completed mitigation actions that reduced overall vulnerability.

### **ASSESSING VULNERABILITY: IDENTIFYING STRUCTURES**

This section is based on an inventory of existing and future buildings, infrastructure, and critical facilities located within the identified earthquake hazard area boundaries.

**For the earthquake hazard, there are five (5) GIS maps as follows:**

- Two GIS maps of Stanislaus County with the shaking potential color coded by peak ground acceleration;
- GIS map showing the placement and value of all County facilities located in the northern portion;
- GIS map showing the placement and value of all County facilities located in the southern portion; and
- GIS map showing the placement of the planned future facilities in the County and their relation to earthquake shaking zones.

**For the earthquake hazard there are also eight (8) separate data reports as follows:**

- Populations and Housing Units by jurisdiction and by percent of peak ground acceleration;
- Total Property Value by jurisdiction and by percent of peak ground acceleration;
- Existing County facilities by percent of peak ground acceleration;
- Future County Facilities by percent of peak ground acceleration;
- Infrastructure-County Bridges by percent of peak ground acceleration;
- County Drainage Districts by percent of peak ground acceleration;
- County Lighting Districts by percent of peak ground acceleration; and
- County Traffic Signals by percent of peak ground acceleration.

The vast majority of the County occupied space is within the highest population density along the State Route 99 corridor in Salida, Modesto, Ceres and Turlock. This area is located within a shaking intensity zone of 21-30% gravity spectral acceleration (one-second period). Of most critical concern is County operated facilities located in the area of greatest probabilistic shaking potential (41-50% gravity), located in Patterson and west of Crows Landing. Of the facilities located in Patterson, the County Library and Public Works Patterson Yard are owned, and the Women Infants and Children (WIC) office is leased. Frank Raines Regional Park contains only restroom and passive recreation structures and non-critical infrastructure. The Library is collocated with the Patterson City Council Chambers in a County-owned space at 46 West Salido and could provide interim emergency use as a coordination or assistance center. The Public Works Yard at 301 South First Street is a field office and shop location for Road Maintenance functions.

The County's Fink Road Landfill is also located in the area of greatest probabilistic shaking potential (41-50% gravity) west of Crows Landing and Interstate 5. The landfill is collocated with a waste-to-energy facility, and could be of critical use in situations where safe disposal is required after emergency events. Other than non-critical scales and miscellaneous out buildings, the landfill itself is unlikely to be physically compromised in a seismic event.

The GIS maps graphically illustrate the probabilistic ground shaking intensity in terms of ground acceleration in a one-second period as a percentage of the force of gravity. There is also a map showing the placement of County operated facilities by seismic risk zone, and another that identifies the location of existing County occupied facilities (owned and leased) generally in the northern portion of the County, including Oakdale, Riverbank, Modesto, Ceres and the surrounding areas. The color-keyed zones listed in the legend are also keyed to the colored zones in each of the other earthquake risk maps. There is also graphical reference to existing County occupied facilities in the southern portion of the County, including Turlock, Waterford, Patterson, Crows Landing, and Newman.

Future planned County facilities are noted in one of the data tables by estimated total value. These projects were included in the County's Final Capital Improvements Plan for Fiscal Year 2009-2010 where such facilities have a specifically identified site. Many other capital projects are included in the CIP document, but specific sites have not yet been selected. The site selection process for all future County projects currently does, and always will, include consideration of local hazard risk mitigation as a criterion.

#### **ASSESSING VULNERABILITY: ESTIMATING POTENTIAL LOSSES**

This section describes the vulnerability in terms of dollar losses and provides the community and the State of California with a common framework in which to measure the effects of hazards on vulnerable structures. The County has reviewed and revised this new plan to reflect changes in development and updated the inventory of structures.

All property within Stanislaus County is subject to the effect of seismic activity. Hazard maps provided by the State show the probabilistic shaking potential of populated lands within Stanislaus County at a spectral acceleration one second period of up to 50% the force of gravity. The maps delineate five zones in ten percent increments of shaking intensity, with the greatest intensity along the western-most edge of the valley floor near the Interstate 5 corridor. Probabilistic ground shaking intensity is shown on each map by colored zone, keyed to the legend.

#### **Population and Housing Units by Jurisdiction**

All of Stanislaus County's estimated 446,997 population and 150,807 housing units are located within a seismic risk area designated as having a probabilistic shaking intensity between 1% and 50% gravity according to the State provided seismic risk map. The data report provides a detailed identification of the number of housing units and population within each seismic risk increment by jurisdiction for unincorporated Stanislaus County and the nine incorporated cities within the County.

The Public Works Department, who prepared the maps, wanted it noted that they used 2000 Census data to prepare the report since that was the only data they could obtain by census block. The State Department of Finance website shows an increase of almost 18% in both population and housing. The data report did not increase the County's numbers by 18% because there was no way of projecting how that growth would be distributed across the County census blocks.

<b>Probilistic Shaking Potential*</b>	<b>Number of Housing Units</b>	<b>Population</b>
1-10% Gravity	13	31
11-20% Gravity	3,475	9,957
21-30% Gravity	25,957	81,439
31-40% Gravity	3,889	12,175
41-50% Gravity	388	1,146
<b>Total - County</b>	<b>33,722</b>	<b>104,748</b>

\*Spectral Acceleration: 1 second period

### **Interactive Resources**

Stanislaus County has incorporated risk data supplied from the State of California Office of Emergency Services, property valuation and land use data, and County facilities data into layers within a secured geographic information system (GIS) database to provide specific risk and value data pertinent to a specific seismic event. The GIS system allows authorized users to define a specific area within the County and to rapidly identify land use, ownership, population, and housing and valuation data for all included properties. Specific County-operated facilities and infrastructure are also layered into the GIS system. Property valuation and land use data is updated live as the County Assessor conducts property appraisals as the system is linked directly to the Assessor's database. County facilities and infrastructure are updated periodically as changes occur. The County is working to add layers to the GIS system to identify potential resources such as location and capacity of possible shelters and medical care facilities in the near future.

### **Total Property Value by Jurisdiction**

The table on the following page summarizes the number and total value of parcels within each of the increments of shaking intensity. General land use designations are identified for properties within each zone. The total value of parcels indicates the sum of the value of the land, fixed improvements, growing improvements (for agricultural producing lands), structural improvements, personal property (for commercial enterprises) and mobile homes. The actual value of the property at risk may be dependent on the specific hazard event, since it is unlikely that the total value of all land and property would be lost in any given event. For example, land values could be unaffected while structural improvements could be lost in a specific seismic event. In another case, agricultural production could be lost for a growing season due to uprooted orchard property and loss of irrigation capability.

TOTAL PROPERTY VALUE BY JURISDICTION--COUNTY		
HAZARD: EARTHQUAKE		
Jurisdiction County: Percent Peak Ground Acceleration=5		
Land Use	# of Parcels	TOTAL VALUE
Commercial	10	\$1,691,115
Industrial	0	\$0
Non-Assessable	22	\$27,173
Residential	14	\$1,030,719
Residential-Income	0	\$0
Rural, Farm, Agricultural	99	\$11,086,766
Vacant Commercial	0	\$0
Vacant Residential	7	\$57,398
<b>TOTAL COUNTY PGA =5</b>	<b>152</b>	<b>\$13,893,171</b>

TOTAL PROPERTY VALUE BY JURISDICTION--COUNTY		
HAZARD: EARTHQUAKE		
Jurisdiction County: Percent Peak Ground Acceleration=15		
Land Use	# of Parcels	TOTAL VALUE
Commercial	32	\$18,395,254
Industrial	15	\$8,044,095
Non-Assessable	193	\$991,081
Residential	661	\$194,301,053
Residential-Income	22	\$11,581,603
Rural, Farm, Agricultural	3968	\$1,292,057,940
Vacant Commercial	7	\$3,417,836
Vacant Residential	30	\$3,028,471
<b>TOTAL COUNTY PGA =15</b>	<b>4928</b>	<b>\$1,531,817,333</b>

TOTAL PROPERTY VALUE BY JURISDICTION--COUNTY		
HAZARD: EARTHQUAKE		
Jurisdiction County: Percent Peak Ground Acceleration=25		
Land Use	# of Parcels	TOTAL VALUE
Commercial	774	\$665,565,639
Industrial	829	\$1,828,802,322
Non-Assessable	539	\$8,959,076
Residential	15,883	\$2,166,827,805
Residential-Income	799	\$153,900,293
Rural, Farm, Agricultural	7,216	\$2,049,950,621
Vacant Commercial	336	\$126,514,477
Vacant Residential	1,031	\$88,629,392
<b>TOTAL COUNTY PGA =25</b>	<b>27,407</b>	<b>\$7,089,149,625</b>

TOTAL PROPERTY VALUE BY JURISDICTION--COUNTY		
HAZARD: EARTHQUAKE		
Jurisdiction County: Percent Peak Ground Acceleration=35		
Land Use	# of Parcels	TOTAL VALUE
Commercial	84	\$19,247,345
Industrial	34	\$19,205,090
Non-Assessable	223	\$11,723,175
Residential	587	\$52,849,093
Residential-Income	29	\$7,120,777
Rural, Farm, Agricultural	3,721	\$1,056,144,187
Vacant Commercial	22	\$3,274,226
Vacant Residential	78	\$12,312,034
<b>TOTAL COUNTY PGA =35</b>	<b>4,778</b>	<b>\$1,181,875,927</b>

TOTAL PROPERTY VALUE BY JURISDICTION--COUNTY		
HAZARD: EARTHQUAKE		
Jurisdiction County: Percent Peak Ground Acceleration=45		
Land Use	# of Parcels	TOTAL VALUE
Commercial	15	\$23,740,380
Industrial	4	\$958,446
Non-Assessable	57	\$53,421,740
Residential	22	\$3,541,679
Residential-Income	10	\$2,443,385
Rural, Farm, Agricultural	794	\$259,989,022
Vacant Commercial	9	\$1,769,647
Vacant Residential	14	\$16,917,340
<b>TOTAL COUNTY PGA =45</b>	<b>925</b>	<b>\$362,781,639</b>



### Existing County Facilities

Stanislaus County currently has existing facilities with a property value of \$467,442,876. Including the value of building contents and rent value, the total value of all County existing facilities that could be impacted negatively in an earthquake hazard is an estimated \$612,193,243. The data table below breaks out the existing facilities further by percent of peak ground acceleration.

<b>EXISTING COUNTY FACILITIES</b>	
<b>HAZARD: EARTHQUAKE</b>	
<b>PERCENT OF PEAK GROUND ACCELERATION</b>	<b>TOTAL VALUE</b>
Total County PGA=15	\$2,671,914
Total County PGA=25	\$597,767,261
Total County PGA=35	\$8,758,659
Total County PGA=45	\$2,995,409
<b>GRAND TOTAL EXISTING COUNTY FACILITIES</b>	<b>\$612,193,243</b>

### Future County Facilities

The data table reflects that in the 25% peak ground acceleration there are six future County facilities identified for a total value of \$212,700,000 and for the 35% peak ground acceleration there are two future facilities for a total value of \$2,365,000. The Grand Total for all County future facilities is \$215,065,000.

<b>FUTURE COUNTY FACILITIES</b>	
<b>HAZARD: EARTHQUAKE</b>	
<b>PERCENT OF PEAK GROUND ACCELERATION</b>	<b>TOTAL VALUE</b>
Total County PGA=25	\$212,700,000
Total County PGA=35	\$2,365,000
<b>GRAND TOTAL FUTURE COUNTY FACILITIES</b>	<b>\$215,065,000</b>

### County Bridges

The data table below reflects the value of County Bridges in the event of an earthquake hazard:

<b>COUNTY BRIDGES</b>	
<b>HAZARD: EARTHQUAKE</b>	
<b>PERCENT OF PEAK GROUND ACCELERATION</b>	<b>COST</b>
Total County PGA=5	\$3,729,446
Total County PGA=15	\$36,728,613
Total County PGA=25	\$205,360,448
Total County PGA=35	\$36,594,553
Total County PGA=45	\$24,458,264
<b>GRAND TOTAL COUNTY BRIDGES</b>	<b>\$306,871,324</b>

### County Drainage Districts

The data table below reflects the value of County Drainage Districts in the event of an earthquake hazard:

<b>COUNTY DRAINAGE DISTRICTS</b>	
<b>HAZARD: EARTHQUAKE</b>	
<b>PERCENT OF PEAK GROUND ACCELERATION</b>	<b>COST</b>
Total County PGA=15	\$2,016,315
Total County PGA=25	\$20,797,587
<b>GRAND TOTAL COUNTY DRAINAGE DISTRICTS</b>	<b>\$22,813,902</b>

### County Lighting Districts

The data table below reflects the value of County Lighting Districts in the event of an earthquake hazard:

<b>COUNTY LIGHTING DISTRICTS</b>	
<b>HAZARD: EARTHQUAKE</b>	
<b>PERCENT OF PEAK GROUND ACCELERATION</b>	<b>COST</b>
Total County PGA=15	\$987,000
Total County PGA=25	\$8,309,000
Total County PGA=35	\$154,000
Total County PGA=45	\$7,000
<b>GRAND TOTAL COUNTY LIGHTING DISTRICTS</b>	<b>\$9,457,000</b>

### County Traffic Signals

The data table below reflects the value of County Traffic Signals in the event of an earthquake hazard:

<b>COUNTY TRAFFIC SIGNALS</b>	
<b>HAZARD: EARTHQUAKE</b>	
<b>PERCENT OF PEAK GROUND ACCELERATION</b>	<b>COST</b>
Total County PGA=15	\$1,000,000
Total County PGA=25	\$7,750,000
<b>GRAND TOTAL TRAFFIC SIGNALS</b>	<b>\$8,750,000</b>

### ASSESSING VULNERABILITY: ANALYZING DEVELOPMENT TRENDS

Most development is occurring on the valley floor within cities or within spheres of influence in cities. Very little development is taking place in agricultural areas. West of Interstate 5, there is very little development except the Diablo Grande project which must comply with new building codes and regulations.

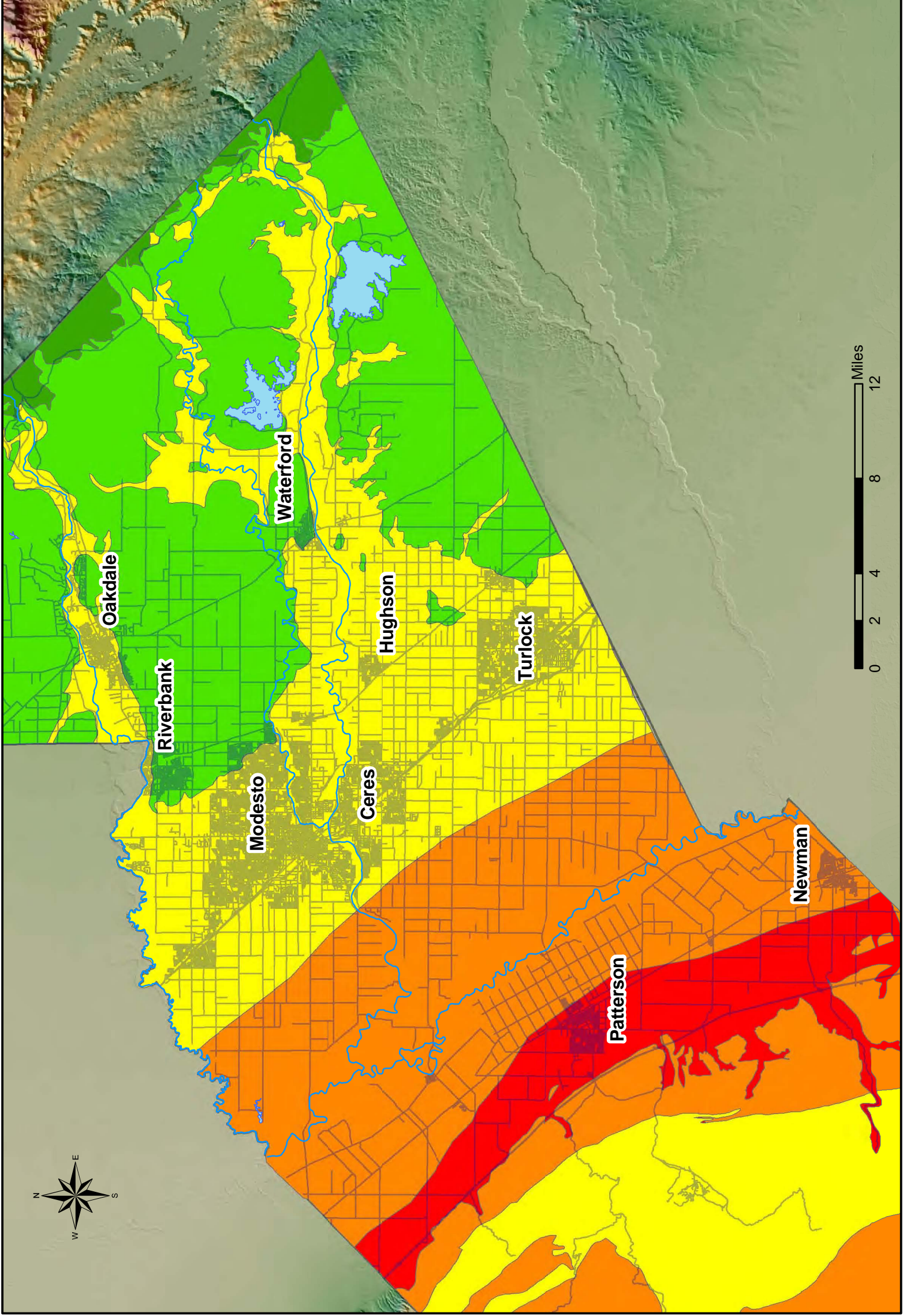
The General Plan provides for diverse land use needs by designating patterns that are responsive to the physical characteristics of the land. The Planning and Community Development Department has a policy that urban development shall be prohibited in geological fault areas unless measures to mitigate the problem are included as part of the development application. The County enforces the provisions of the Alquist-Priolo Earthquake Fault Zoning Act that limits development in areas identified as having special seismic hazards. Construction is prohibited without a geologic study.

New buildings in Stanislaus County are constructed to prevent loss of life as a result of an earthquake. Older buildings, however, especially non-reinforced masonry buildings, could collapse causing injury and loss of life. In order to eliminate these problems, it is necessary to require reconstruction to at least provide for the adequacy of: (a) non-reinforced masonry bearing walls, (b) the anchorage of exterior parapets and ornamentation, (c) the anchorage of non-reinforced bearing walls to the floors and roof, (d) floor and roof diaphragms, and (e) the development of a complete bracing system to resist horizontal wind and earthquake forces.

### **MULTI-JURISDICTIONAL RISK ASSESSMENT**

Each participating jurisdiction has reviewed, updated, and prepared their own risk assessment to identify where their risks vary from the risks facing the entire planning area of the County. See Volumes Two and Three for assessments from participating multi-jurisdictional partners.

# 2010 Stanislaus County -- Earthquake Hazard



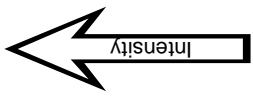
**Map Legend:**

- Rivers
- Lakes
- Roads

**Shaking Potential**

**Peak Ground Acceleration**

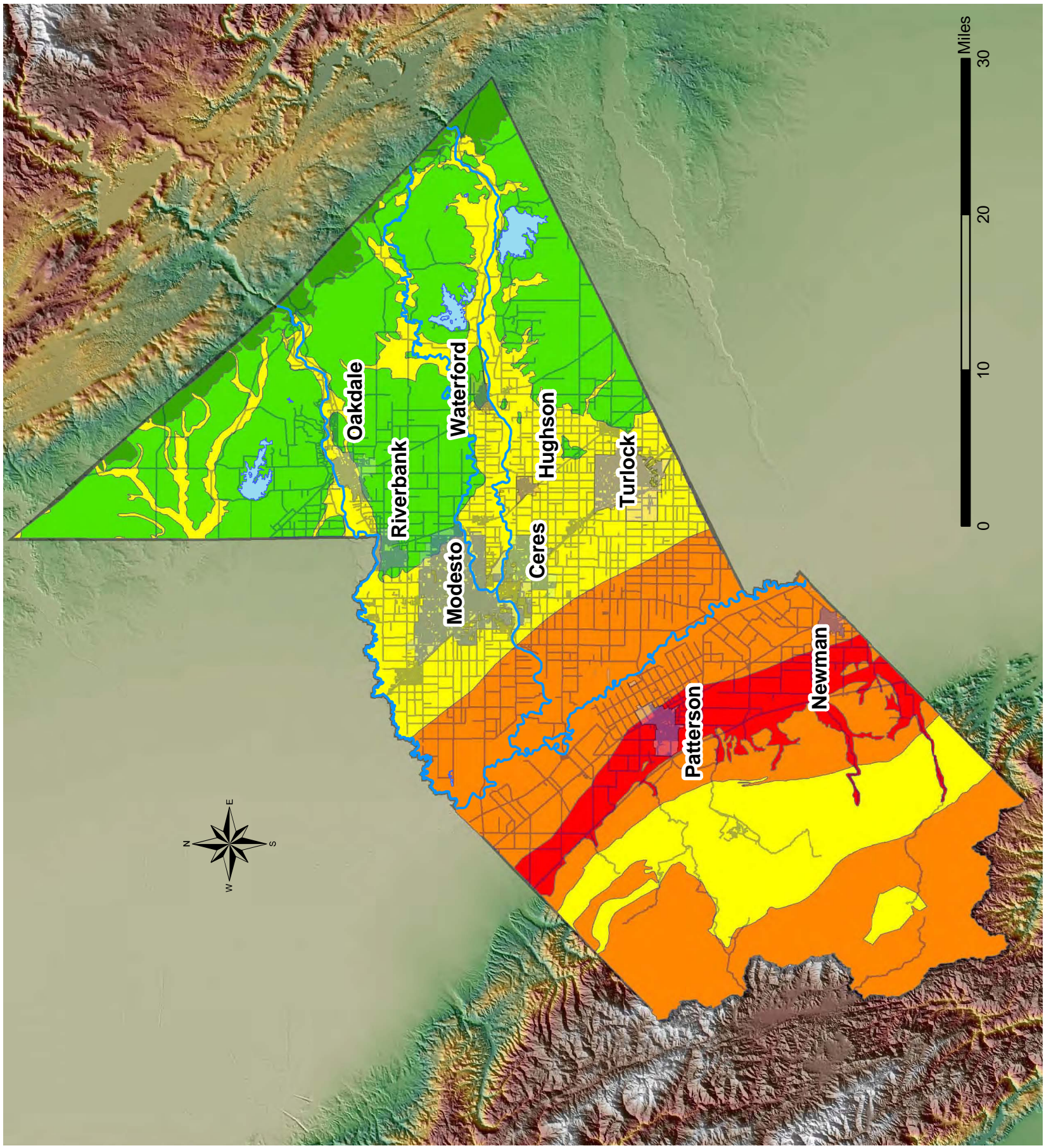
- 0.45 G's
- 0.35 G's
- 0.25 G's
- 0.15 G's
- 0.05 G's



Map displays Stanislaus County with Earthquake Shaking Zones at PGA.  
(Peak Ground Acceleration)

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

# 2010 Stanislaus County -- Earthquake Hazard



**Map Legend:**

- Rivers
- Lakes
- Roads

**Shaking**

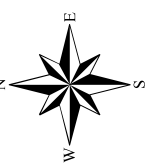
**Peak Ground Acceleration**

	0.45 G's
	0.35 G's
	0.25 G's
	0.15 G's
	0.05 G's

Intensity

Map displays Stanislaus County with Earthquake Shaking Zones at PGA.  
(Peak Ground Acceleration)

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

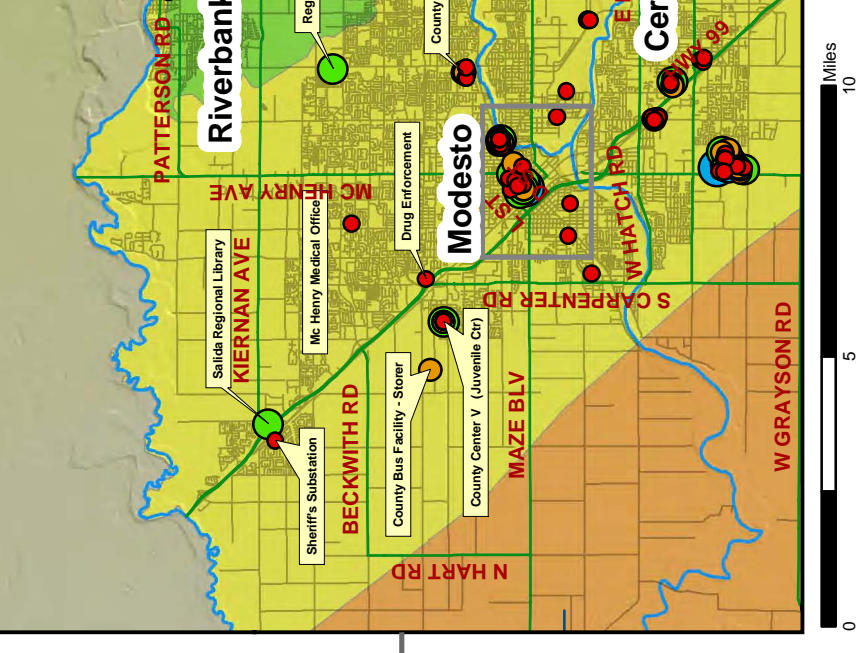
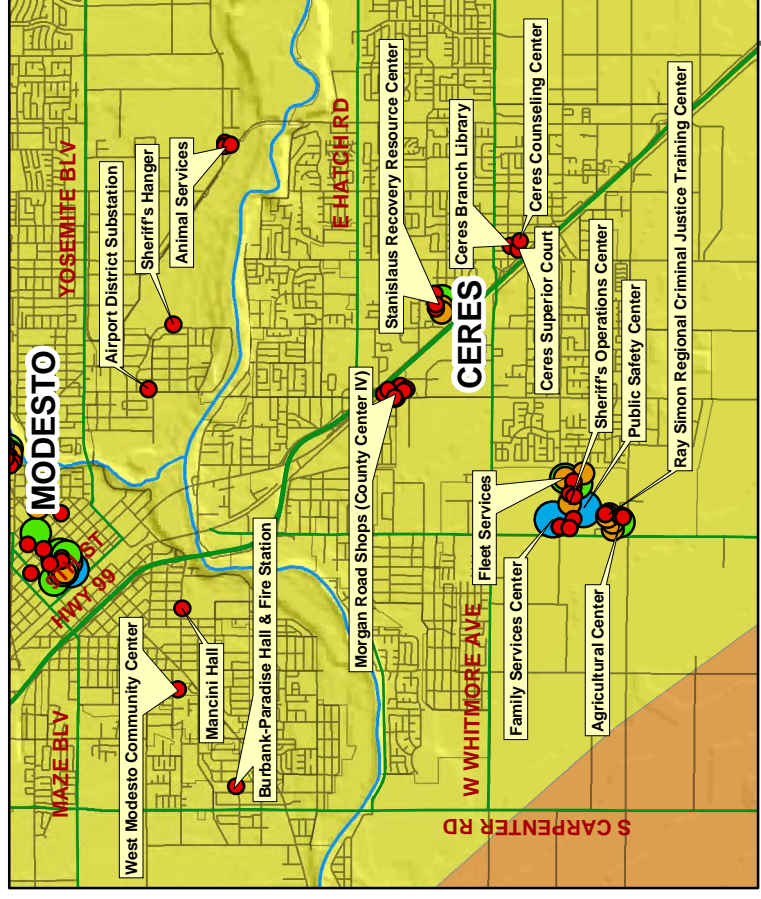
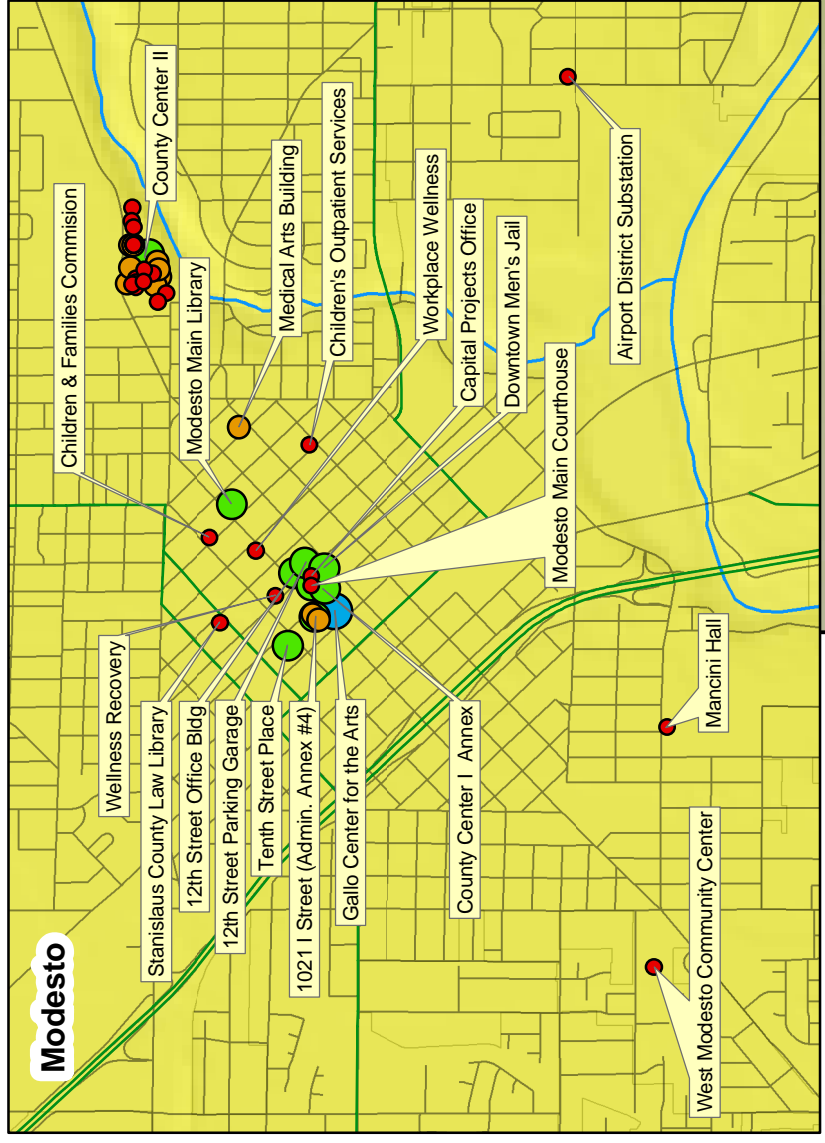


# 2010 Stanislaus County (North) Facilities Map -- Earthquake Hazard



Map displays Stanislaus County Assets in Northern portion of county in relation to Earthquake Shaking Zones at PGA Peak Ground Acceleration

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009



**Map Legend:**

- Lakes
- Rivers
- Roads
- County Facilities
- Total Facility Value
- Shaking Potential

**Total Facility Value**

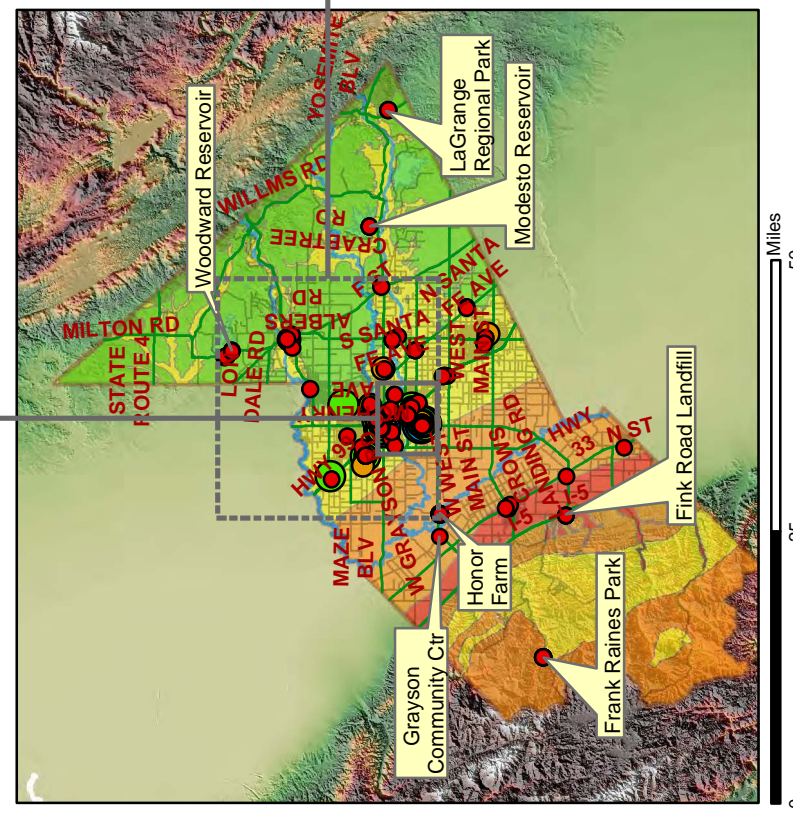
- < \$2,000,000
- \$2,000,000 - \$10,000,000
- \$10,000,000 - \$30,000,000
- > \$30,000,000

**Shaking Potential**

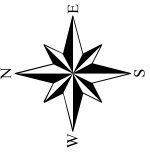
Peak Ground Acceleration

- 0.45 G's
- 0.35 G's
- 0.25 G's
- 0.15 G's
- 0.05 G's

Intensity

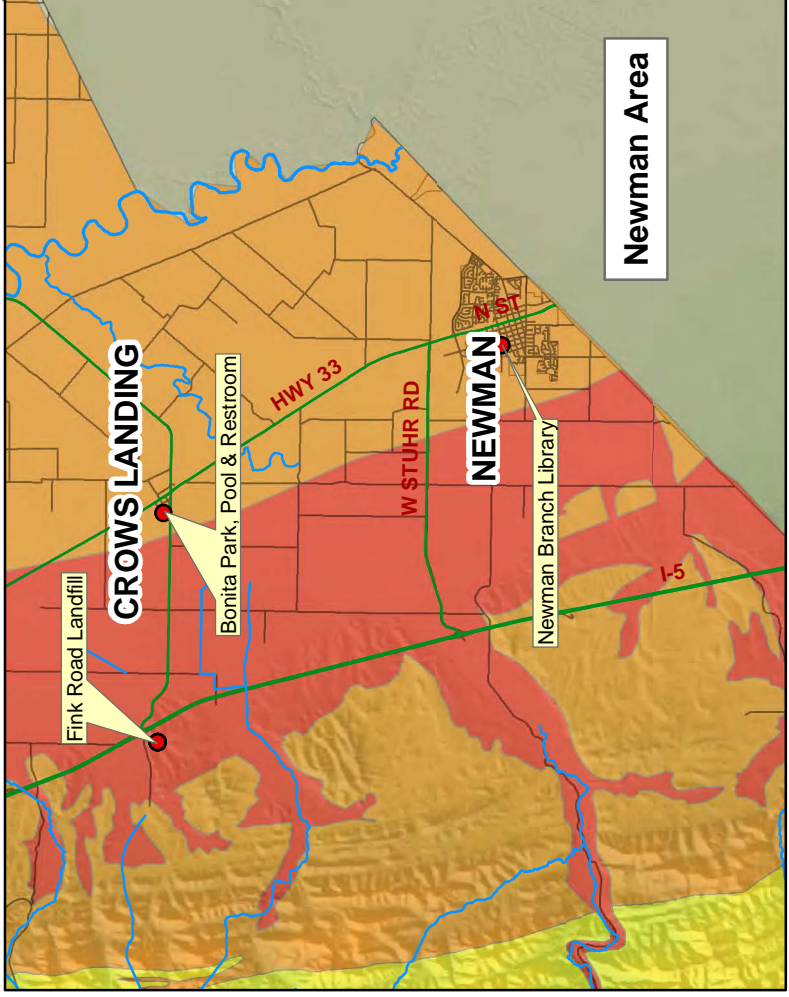
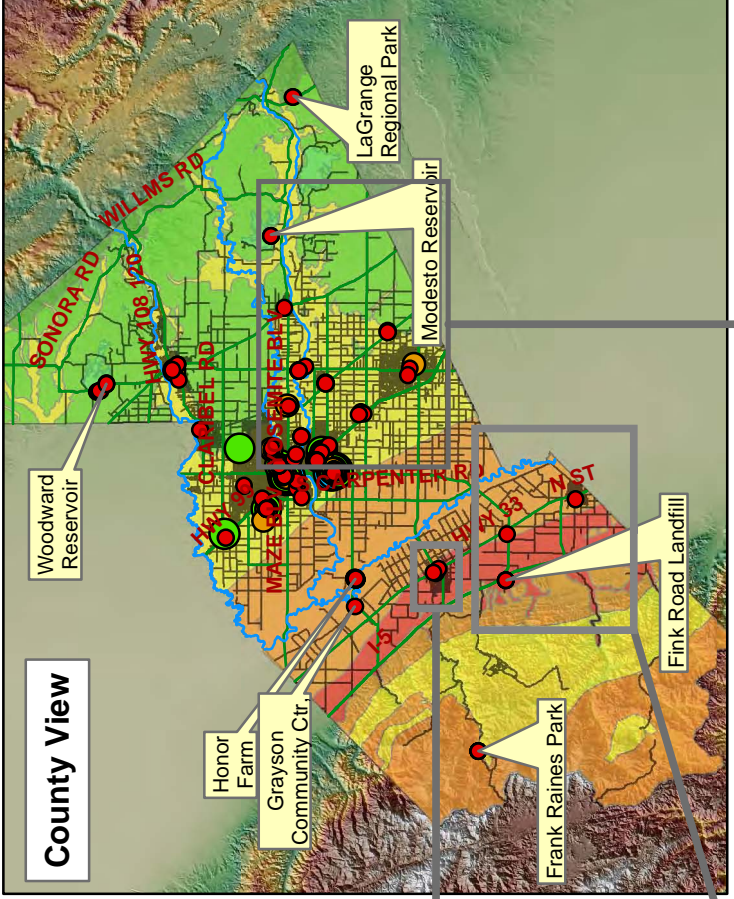
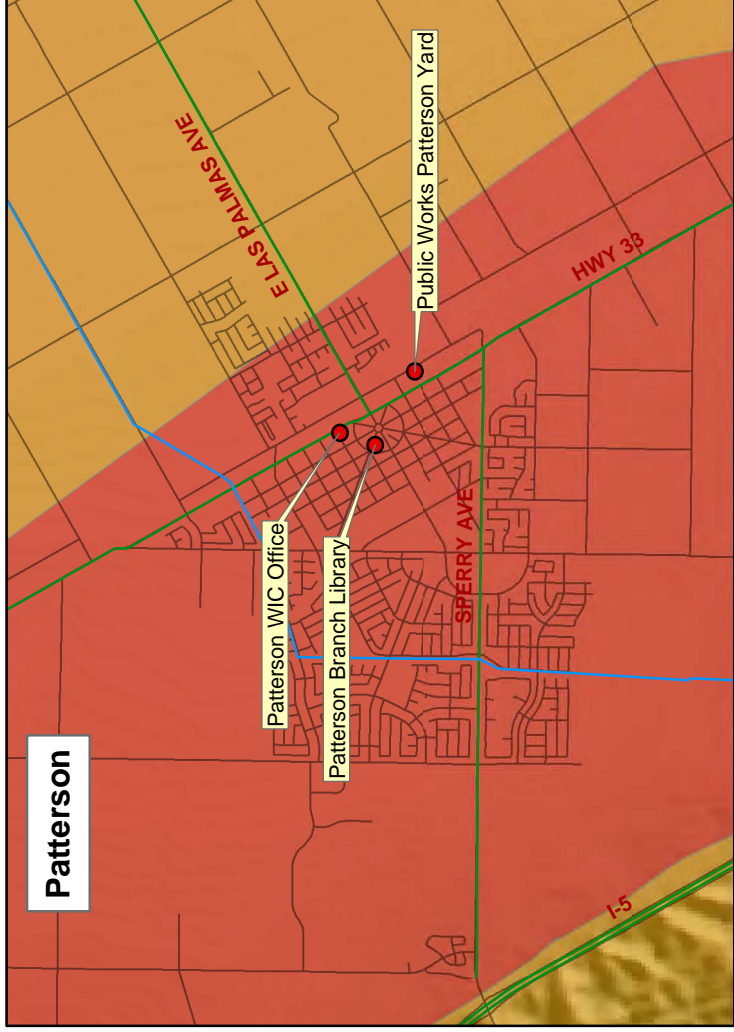


# 2010 Stanislaus County (South) Facilities Map -- Earthquake Hazard



Map of Stanislaus County Assets in relation to Earthquake Shaking Zones at Peak Ground Acceleration

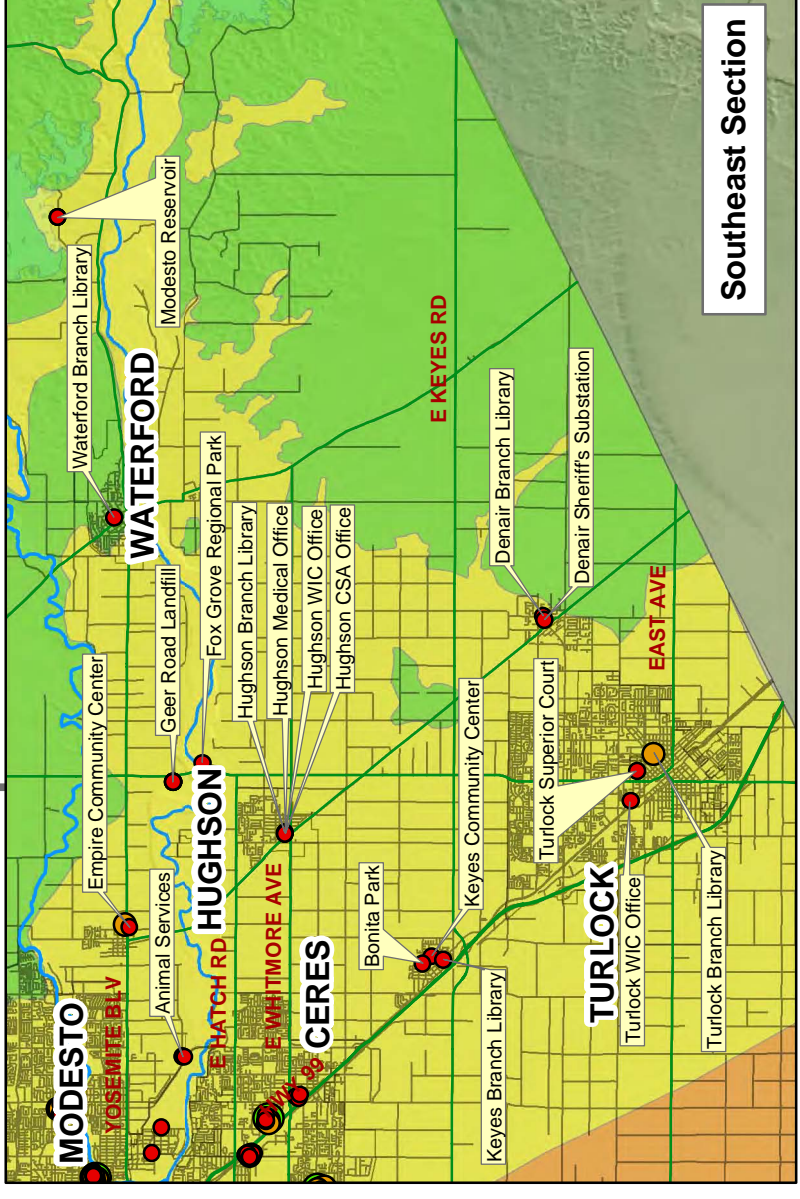
Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009



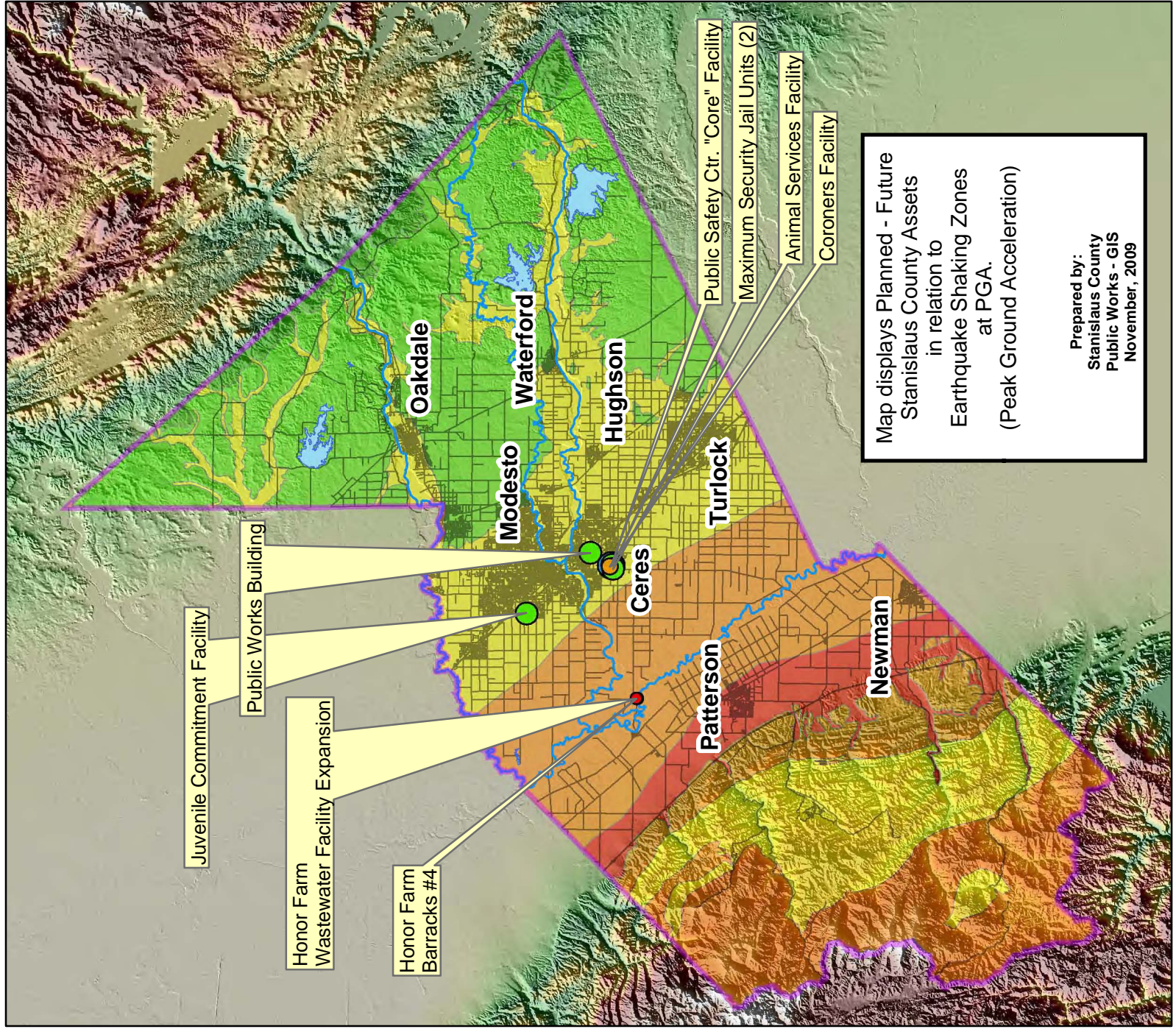
**Map Legend:**

- Lakes
- Rivers
- Roads
- County Facilities
- Total Facility Value
  - < \$2,000,000
  - \$2,000,000 - \$10,000,000
  - \$10,000,000 - \$30,000,000
  - > \$30,000,000
- Shaking Potential
  - Peak Ground Acceleration
    - 0.45 G's
    - 0.35 G's
    - 0.25 G's
    - 0.15 G's
    - 0.05 G's

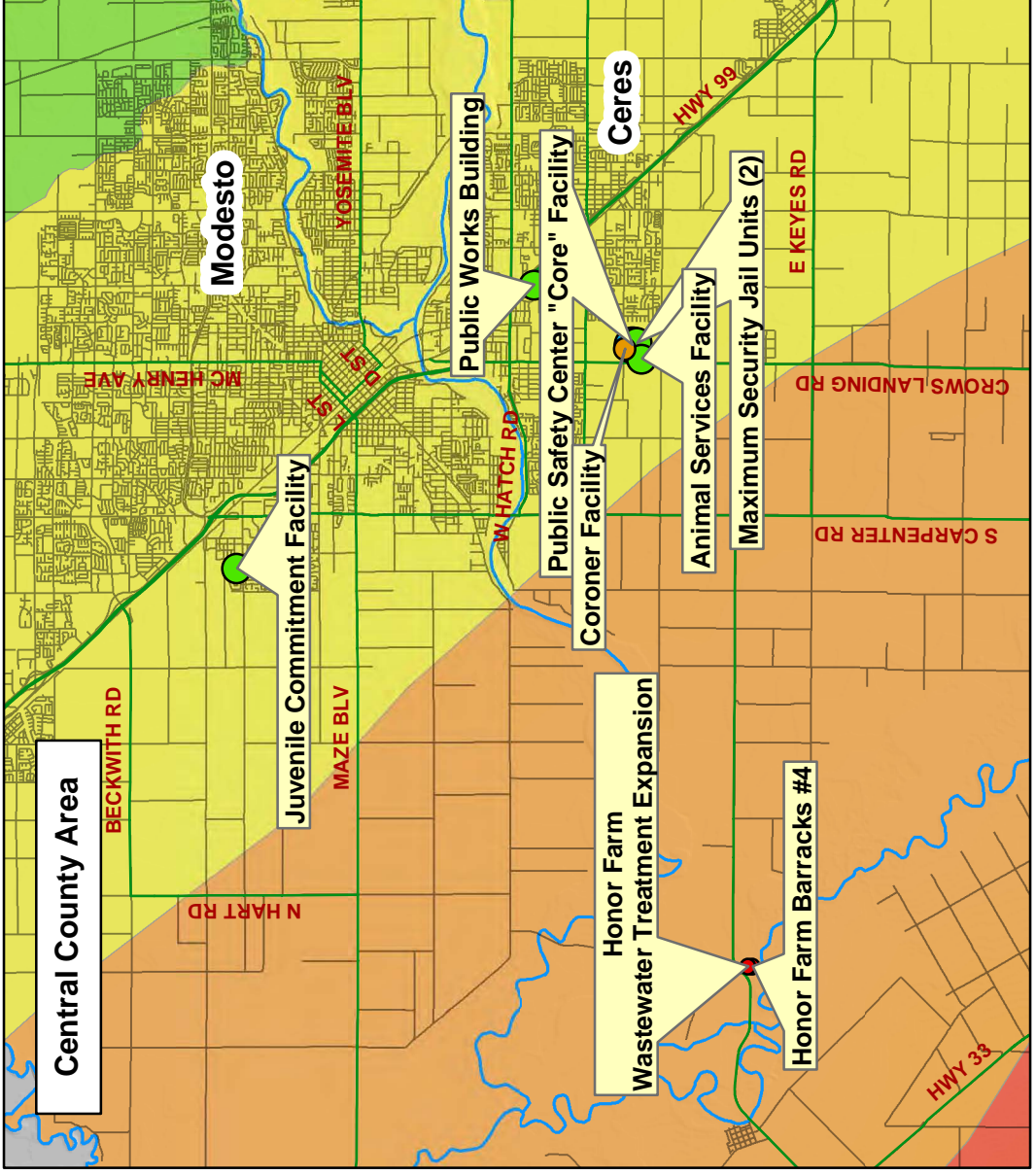
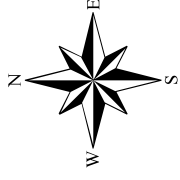
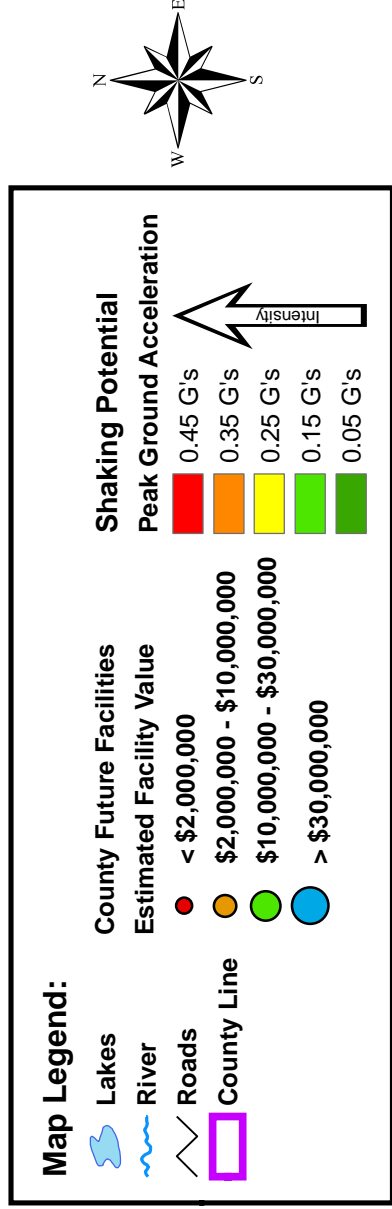
Intensity



# 2010 Future Stanislaus County Facilities -- Earthquake Hazard



0 10 20 30 Miles



0 3 6 9 Miles



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: EARTHQUAKE**

Jurisdiction	Peak Ground Accel(Gs)	Total #	POPULATION	% of County	Total #	HOUSEHOLDS	% of County
County	<b>PGA = .05G</b>	31		0.01%	13		0.01%
County	<b>PGA = .15G</b>	9957		2.23%	3475		2.30%
Modesto		3490		0.78%	1360		0.90%
Oakdale		928		0.21%	350		0.23%
Riverbank		13126		2.94%	3827		2.54%
Waterford		5243		1.17%	1552		1.03%
County	<b>PGA = .25G</b>	34416		7.70%	10691		7.09%
County		81439		18.22%	25957		17.21%
Hughson		4116		0.92%	1302		0.86%
Modesto		185711		41.55%	65919		43.71%
Oakdale		15173		3.39%	5724		3.80%
Riverbank		2801		0.63%	933		0.62%
Turlock		56481		12.64%	19328		12.82%
Waterford		1741		0.39%	547		0.36%
County	<b>PGA = .35G</b>	12175		2.72%	3889		2.58%
Newman		7222		1.62%	2226		1.48%
Patterson		1179		0.26%	310		0.21%
County	<b>PGA = .45G</b>	1146		0.26%	388		0.26%
Patterson		10622		2.38%	3016		2.00%
<b>GRAND TOTAL</b>		<b>446997</b>			<b>150807</b>		

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.05G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$674,898	10	\$6,230	\$0	\$990,357	\$19,630	\$0	\$1,691,115
NON-ASSESSABLE	\$27,173	22	\$0	\$0	\$0	\$0	\$0	\$27,173
RESIDENTIAL	\$497,506	14	\$0	\$0	\$533,213	\$0	\$0	\$1,030,719
RURAL, FARM, AGRICULTURE	\$9,296,677	99	\$0	\$0	\$1,780,989	\$9,100	\$0	\$11,086,766
VACANT RESIDENTIAL	\$50,441	7	\$0	\$0	\$6,957	\$0	\$0	\$57,398
<b>Total PGA = .05G</b>	<b>\$10,546,695</b>	<b>152</b>	<b>\$6,230</b>	<b>\$0</b>	<b>\$3,311,516</b>	<b>\$28,730</b>	<b>\$0</b>	<b>\$13,893,171</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.15G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$6,329,729	32	\$67,149	\$0	\$11,951,584	\$46,792	\$0	\$18,395,254
INDUSTRIAL	\$2,458,993	15	\$20,070	\$0	\$5,300,619	\$264,413	\$0	\$8,044,095
NON-ASSESSABLE	\$991,081	193	\$0	\$0	\$0	\$0	\$0	\$991,081
RESIDENTIAL	\$69,671,479	661	\$0	\$0	\$124,629,574	\$0	\$0	\$194,301,053
RESIDENTIAL-INCOME	\$9,384,128	22	\$0	\$26,010	\$2,171,465	\$0	\$0	\$11,581,603
RURAL, FARM, AGRICULTURE	\$576,281,252	3968	\$31,321,798	\$53,239,272	\$604,945,965	\$26,165,206	\$104,447	\$1,292,057,940
VACANT COMMERCIAL	\$3,417,836	7	\$0	\$0	\$0	\$0	\$0	\$3,417,836
VACANT RESIDENTIAL	\$2,951,204	30	\$0	\$0	\$77,267	\$0	\$0	\$3,028,471
<b>Total PGA = .15G</b>	<b>\$671,485,702</b>	<b>4928</b>	<b>\$31,409,017</b>	<b>\$53,265,282</b>	<b>\$749,076,474</b>	<b>\$26,476,411</b>	<b>\$104,447</b>	<b>\$1,531,817,333</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Modesto**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.15G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$11,683,284	13	\$171,850	\$0	\$20,166,480	\$365,620	\$0	\$32,387,234

INDUSTRIAL	\$3,447,673	6	\$879,870	\$0	\$2,519,808	\$107,240	\$0	\$6,954,591
NON-ASSESSABLE	\$0	115	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$144,641,669	2729	\$0	\$0	\$466,417,853	\$0	\$0	\$611,059,522
RESIDENTIAL-INCOME	\$6,753,400	38	\$0	\$0	\$11,147,968	\$90,000	\$0	\$17,991,368
RURAL, FARM, AGRICULTURE	\$4,030,132	15	\$6,180	\$0	\$1,386,803	\$8,300	\$0	\$5,431,415
VACANT COMMERCIAL	\$1,646,409	4	\$0	\$0	\$1,164,727	\$0	\$0	\$2,811,136
VACANT RESIDENTIAL	\$19,285,317	376	\$0	\$0	\$2,212,826	\$0	\$0	\$21,498,143
<b>Total PGA = .15G</b>	<b>\$191,487,884</b>	<b>3296</b>	<b>\$1,057,900</b>	<b>\$0</b>	<b>\$505,016,465</b>	<b>\$571,160</b>	<b>\$0</b>	<b>\$698,133,409</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Oakdale**  
HAZARD: EARTHQUAKE  
Jurisdiction County: Percent Peak Ground Acceleration=.15G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$1,780,613	12	\$517,170	\$0	\$3,647,109	\$513,150	\$0	\$6,458,042
INDUSTRIAL	\$22,877,331	137	\$260,230	\$0	\$66,255,166	\$742,665	\$0	\$90,135,392
NON-ASSESSABLE	\$0	34	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$54,047,633	955	\$0	\$0	\$165,862,371	\$0	\$0	\$219,910,004
RESIDENTIAL-INCOME	\$560,000	3	\$0	\$0	\$500,500	\$0	\$0	\$1,060,500
RURAL, FARM, AGRICULTURE	\$2,354,828	15	\$104,110	\$0	\$3,411,866	\$27,250	\$0	\$5,898,054
VACANT COMMERCIAL	\$7,915,004	47	\$0	\$54,921	\$196,126	\$0	\$0	\$8,166,051

VACANT RESIDENTIAL	\$8,239,572	155	\$0	\$0	\$394,692	\$0	\$0	\$8,634,264
Total PGA = .15G	\$97,774,981	1358	\$881,510	\$54,921	\$240,267,830	\$1,283,065	\$0	\$340,262,307

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Riverbank**  
HAZARD: EARTHQUAKE  
Jurisdiction County: Percent Peak Ground Acceleration=.15G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$44,499,644	154	\$1,891,876	\$0	\$120,916,164	\$2,779,244	\$0	\$170,086,928
INDUSTRIAL	\$11,353,324	40	\$12,509,410	\$0	\$27,662,064	\$4,872,510	\$0	\$56,397,308
NON-ASSESSABLE	\$42,420	73	\$0	\$0	\$166,764	\$0	\$0	\$209,184
RESIDENTIAL	\$237,432,075	5387	\$0	\$0	\$683,251,200	\$47,874	\$0	\$920,731,149
RESIDENTIAL-INCOME	\$7,216,730	97	\$0	\$0	\$13,797,987	\$22,000	\$0	\$21,036,717
RURAL, FARM, AGRICULTURE	\$3,143,315	38	\$0	\$0	\$2,620,593	\$58,531	\$0	\$5,822,439
VACANT COMMERCIAL	\$8,112,496	31	\$0	\$0	\$2,643,180	\$0	\$0	\$10,755,676
VACANT RESIDENTIAL	\$9,588,147	282	\$0	\$0	\$1,025,664	\$0	\$0	\$10,613,811
Total PGA = .15G	\$321,388,151	6102	\$14,401,286	\$0	\$852,083,616	\$7,780,159	\$0	\$1,195,653,212

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Waterford**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.15G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$6,672,896	90	\$170,634	\$0	\$13,798,913	\$43,185	\$0	\$20,685,628
INDUSTRIAL	\$2,611,709	18	\$0	\$0	\$2,682,686	\$266,730	\$0	\$5,561,125
NON-ASSESSABLE	\$13,986	34	\$0	\$0	\$429,846	\$0	\$0	\$443,832
RESIDENTIAL	\$54,744,217	1412	\$0	\$0	\$114,335,227	\$8,900	\$0	\$169,088,344
RESIDENTIAL-INCOME	\$6,404,060	96	\$0	\$0	\$19,852,978	\$94,000	\$0	\$26,351,038
RURAL, FARM, AGRICULTURE	\$4,193,424	21	\$0	\$624,244	\$1,865,806	\$6,535	\$0	\$6,690,009
VACANT COMMERCIAL	\$2,146,904	22	\$0	\$0	\$18,798	\$0	\$0	\$2,165,702
VACANT RESIDENTIAL	\$2,882,213	49	\$0	\$0	\$888,297	\$0	\$0	\$3,770,510
<b>Total PGA = .15G</b>	<b>\$79,669,409</b>	<b>1742</b>	<b>\$170,634</b>	<b>\$624,244</b>	<b>\$153,872,551</b>	<b>\$419,350</b>	<b>\$0</b>	<b>\$234,756,188</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Ceres**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .25G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$88,270,305	312	\$3,502,041	\$0	\$239,208,685	\$4,433,944	\$0	\$335,414,975
INDUSTRIAL	\$40,654,447	189	\$3,999,340	\$0	\$176,433,620	\$8,287,316	\$0	\$229,374,723
NON-ASSESSABLE	\$710,232	190	\$9,170	\$0	\$831,104	\$124,190	\$0	\$1,674,696
RESIDENTIAL	\$455,046,228	10303	\$0	\$3,018	\$1,104,451,962	\$108,526	\$0	\$1,559,609,734
RESIDENTIAL-INCOME	\$29,143,787	317	\$4,540	\$148,942	\$103,612,376	\$1,070,710	\$0	\$133,980,355
RURAL, FARM, AGRICULTURE	\$208,938	2	\$0	\$2,266	\$54,037	\$0	\$0	\$265,241
VACANT COMMERCIAL	\$61,433,210	196	\$0	\$0	\$650,482	\$0	\$0	\$62,283,692
VACANT RESIDENTIAL	\$15,506,818	355	\$0	\$0	\$5,001,778	\$0	\$0	\$20,508,596
<b>Total PGA = .25G</b>	<b>\$690,973,965</b>	<b>11864</b>	<b>\$7,515,091</b>	<b>\$154,226</b>	<b>\$1,630,444,044</b>	<b>\$14,024,686</b>	<b>\$0</b>	<b>\$2,343,112,012</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .25G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$203,981,410	774	\$2,337,892	\$153,151	\$447,789,942	\$11,303,244	\$0	\$665,565,639

INDUSTRIAL	\$260,162,296	829	\$354,775,664	\$306,799	\$927,234,339	\$286,323,224	\$0	\$1,828,802,322
NON-ASSESSABLE	\$2,009,288	539	\$0	\$47,072	\$6,902,716	\$0	\$0	\$8,959,076
RESIDENTIAL	\$631,430,237	15883	\$0	\$12,959	\$1,534,766,174	\$618,435	\$0	\$2,166,827,805
RESIDENTIAL-INCOME	\$70,529,908	799	\$0	\$1,499,803	\$81,070,994	\$799,588	\$0	\$153,900,293
RURAL, FARM, AGRICULTURE	\$939,742,037	7216	\$22,221,695	\$96,556,917	\$935,914,612	\$55,515,360	\$0	\$2,049,950,621
VACANT COMMERCIAL	\$109,168,357	336	\$13,400	\$21,930	\$17,146,190	\$164,600	\$0	\$126,514,477
VACANT RESIDENTIAL	\$85,111,649	1031	\$0	\$609,651	\$2,908,092	\$0	\$0	\$88,629,392
<b>Total PGA = .25G</b>	<b>\$2,302,135,182</b>	<b>27407</b>	<b>\$379,348,651</b>	<b>\$99,208,282</b>	<b>\$3,953,733,059</b>	<b>\$354,724,451</b>	<b>\$0</b>	<b>\$7,089,149,625</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Hughson**  
HAZARD: EARTHQUAKE  
Jurisdiction County: Percent Peak Ground Acceleration=.25G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$8,193,953	82	\$1,758,900	\$0	\$73,811,357	\$1,997,557	\$0	\$85,761,767
INDUSTRIAL	\$3,539,444	19	\$1,808,950	\$0	\$15,119,671	\$233,250	\$0	\$20,701,315
NON-ASSESSABLE	\$0	58	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$73,559,192	1676	\$0	\$0	\$211,408,376	\$23,940	\$0	\$284,991,508
RESIDENTIAL-INCOME	\$3,055,559	44	\$0	\$0	\$5,518,383	\$0	\$0	\$8,573,942
RURAL, FARM, AGRICULTURE	\$803,394	13	\$0	\$69,795	\$559,446	\$0	\$0	\$1,432,635
VACANT COMMERCIAL	\$2,688,921	24	\$0	\$62,668	\$9,616	\$0	\$0	\$2,761,205



VACANT RESIDENTIAL	\$6,270,672	235	\$0	\$1,822	\$1,100,794	\$0	\$0	\$7,373,288
Total PGA = .25G	\$98,111,135	2151	\$3,567,850	\$134,285	\$307,527,643	\$2,254,747	\$0	\$411,595,660

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Modesto**  
HAZARD: EARTHQUAKE  
Jurisdiction County: Percent Peak Ground Acceleration=.25G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$788,210,758	2215	\$56,974,298	\$74,636	\$1,994,753,265	\$160,991,887	\$0	\$3,001,004,844
INDUSTRIAL	\$100,063,055	324	\$124,599,636	\$0	\$304,599,257	\$31,254,620	\$0	\$560,516,568
NON-ASSESSABLE	\$3,038,693	791	\$10,230	\$0	\$1,978,854	\$133,360	\$0	\$5,161,137
RESIDENTIAL	\$2,028,221,023	50915	\$11,365	\$0	\$5,451,043,072	\$937,770	\$0	\$7,480,213,230
RESIDENTIAL-INCOME	\$452,446,939	3089	\$22,970	\$0	\$2,091,323,515	\$6,407,127	\$0	\$2,550,200,551
RURAL, FARM, AGRICULTURE	\$802,315	8	\$0	\$16,236	\$659,734	\$125,411	\$0	\$1,603,696
VACANT COMMERCIAL	\$93,095,949	240	\$22,900	\$0	\$26,879,831	\$263,080	\$0	\$120,261,760
VACANT RESIDENTIAL	\$37,457,758	605	\$67,210	\$134,994	\$10,489,265	\$47,030	\$0	\$48,196,257
Total PGA = .25G	\$3,503,336,490	58187	\$181,708,609	\$225,866	\$9,881,726,793	\$200,160,285	\$0	\$13,767,158,043

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Oakdale**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .25G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$71,343,814	339	\$2,479,800	\$0	\$159,281,579	\$1,022,568	\$0	\$234,127,761
INDUSTRIAL	\$11,842,248	63	\$71,370,309	\$0	\$34,676,681	\$20,537,257	\$0	\$138,426,495
NON-ASSESSABLE	\$319,477	175	\$0	\$0	\$51,030	\$68,060	\$0	\$438,567
RESIDENTIAL	\$226,993,123	4809	\$0	\$0	\$556,873,975	\$148,203	\$0	\$784,015,301
RESIDENTIAL-INCOME	\$25,410,996	333	\$0	\$50,000	\$60,539,260	\$274,402	\$0	\$86,274,658
RURAL, FARM, AGRICULTURE	\$283,572	2	\$0	\$0	\$148,787	\$0	\$0	\$432,359
VACANT COMMERCIAL	\$11,547,891	50	\$0	\$0	\$268,425	\$0	\$0	\$11,816,316
VACANT RESIDENTIAL	\$11,900,155	237	\$0	\$11,413	\$2,616,628	\$0	\$0	\$14,528,196
<b>Total PGA = .25G</b>	<b>\$359,641,276</b>	<b>6008</b>	<b>\$73,850,109</b>	<b>\$61,413</b>	<b>\$814,456,365</b>	<b>\$22,050,490</b>	<b>\$0</b>	<b>\$1,270,059,653</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Riverbank**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .25G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$6,625,350	93	\$240,070	\$0	\$13,814,909	\$44,263	\$0	\$20,724,592

NON-ASSESSABLE	\$0	23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$30,354,358	669	\$1,530	\$0	\$78,394,677	\$10,580	\$0	\$108,761,145	\$0	\$0
RESIDENTIAL-INCOME	\$2,047,016	25	\$0	\$0	\$2,560,421	\$7,500	\$0	\$4,614,937	\$0	\$0
VACANT COMMERCIAL	\$504,695	10	\$0	\$0	\$31,788	\$0	\$0	\$536,483	\$0	\$0
VACANT RESIDENTIAL	\$1,092,342	23	\$0	\$0	\$0	\$0	\$0	\$1,092,342	\$0	\$0
<b>Total PGA = .25G</b>	<b>\$40,623,761</b>	<b>843</b>	<b>\$241,600</b>	<b>\$0</b>	<b>\$94,801,795</b>	<b>\$62,343</b>	<b>\$0</b>	<b>\$135,729,499</b>	<b>\$0</b>	<b>\$0</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Turlock**  
HAZARD: EARTHQUAKE  
Jurisdiction County: Percent Peak Ground Acceleration=.25G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$254,237,259	925	\$21,689,758	\$0	\$724,585,707	\$35,445,672	\$0	\$1,035,958,396
INDUSTRIAL	\$71,943,144	334	\$125,622,279	\$0	\$230,758,296	\$30,673,908	\$0	\$458,997,627
NON-ASSESSABLE	\$472,372	287	\$0	\$0	\$477,066	\$0	\$0	\$949,438
RESIDENTIAL	\$850,322,228	16444	\$19,296	\$0	\$2,030,445,025	\$490,065	\$0	\$2,881,276,614
RESIDENTIAL-INCOME	\$77,595,267	903	\$28,560	\$0	\$295,354,939	\$2,552,880	\$0	\$375,531,646
RURAL, FARM, AGRICULTURE	\$16,203,502	103	\$131,323	\$536,849	\$9,370,166	\$210,521	\$0	\$26,452,361
VACANT COMMERCIAL	\$106,066,646	292	\$0	\$33,000	\$3,804,563	\$1,027,040	\$0	\$110,931,249
VACANT RESIDENTIAL	\$32,273,108	571	\$0	\$0	\$7,172,836	\$0	\$0	\$39,445,944
<b>Total PGA = .25G</b>	<b>\$1,409,113,526</b>	<b>19859</b>	<b>\$147,491,216</b>	<b>\$569,849</b>	<b>\$3,301,968,598</b>	<b>\$70,400,086</b>	<b>\$0</b>	<b>\$4,929,543,275</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Waterford**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.25G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$4,132,171	25	\$197,910	\$0	\$10,647,261	\$19,470	\$0	\$14,996,812
INDUSTRIAL	\$407,878	2	\$0	\$0	\$1,100,948	\$0	\$0	\$1,508,826
NON-ASSESSABLE	\$5,667	16	\$0	\$0	\$250,882	\$0	\$0	\$256,549
RESIDENTIAL	\$28,248,448	683	\$0	\$0	\$72,041,883	\$0	\$0	\$100,290,331
RESIDENTIAL-INCOME	\$1,777,757	9	\$0	\$0	\$2,767,049	\$55,814	\$0	\$4,600,620
RURAL, FARM, AGRICULTURE	\$119,822	3	\$0	\$0	\$240,627	\$0	\$0	\$360,449
VACANT COMMERCIAL	\$1,423,435	5	\$0	\$0	\$0	\$0	\$0	\$1,423,435
VACANT RESIDENTIAL	\$1,484,500	16	\$0	\$0	\$746,996	\$0	\$0	\$2,231,496
<b>Total PGA = .25G</b>	<b>\$37,599,678</b>	<b>759</b>	<b>\$197,910</b>	<b>\$0</b>	<b>\$87,795,646</b>	<b>\$75,284</b>	<b>\$0</b>	<b>\$125,668,518</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .35G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$7,018,128	84	\$45,126	\$0	\$11,990,249	\$193,842	\$0	\$19,247,345
INDUSTRIAL	\$4,069,276	34	\$2,824,850	\$0	\$11,192,034	\$1,118,930	\$0	\$19,205,090
NON-ASSESSABLE	\$11,020,024	223	\$330	\$0	\$674,650	\$28,171	\$0	\$11,723,175
RESIDENTIAL	\$16,725,367	587	\$0	\$22,734	\$36,086,646	\$14,346	\$0	\$52,849,093
RESIDENTIAL-INCOME	\$5,541,379	29	\$0	\$62,790	\$1,510,928	\$5,680	\$0	\$7,120,777
RURAL, FARM, AGRICULTURE	\$529,690,762	3721	\$14,703,609	\$35,474,095	\$427,194,150	\$49,081,571	\$0	\$1,056,144,187
VACANT COMMERCIAL	\$3,236,270	22	\$0	\$0	\$37,956	\$0	\$0	\$3,274,226
VACANT RESIDENTIAL	\$12,192,917	78	\$0	\$0	\$106,335	\$12,782	\$0	\$12,312,034
<b>Total PGA = .35G</b>	<b>\$589,494,123</b>	<b>4778</b>	<b>\$17,573,915</b>	<b>\$35,559,619</b>	<b>\$488,792,948</b>	<b>\$50,455,322</b>	<b>\$0</b>	<b>\$1,181,875,927</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Newman**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .35G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$8,239,239	105	\$494,639	\$0	\$27,881,724	\$797,678	\$0	\$37,413,280

INDUSTRIAL	\$4,010,850	36	\$13,653,239	\$0	\$17,597,370	\$1,845,562	\$0	\$37,107,021
NON-ASSESSABLE	\$0	68	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$116,499,906	2890	\$0	\$2,373	\$256,551,582	\$0	\$0	\$373,053,861
RESIDENTIAL-INCOME	\$4,105,310	54	\$0	\$0	\$17,175,694	\$63,570	\$0	\$21,344,574
RURAL, FARM, AGRICULTURE	\$267,133	8	\$480	\$2,084	\$346,755	\$0	\$0	\$616,452
VACANT COMMERCIAL	\$3,154,249	34	\$23,350	\$0	\$303,430	\$5,990	\$0	\$3,487,019
VACANT RESIDENTIAL	\$6,658,994	334	\$0	\$0	\$3,559	\$0	\$0	\$6,662,553
<b>Total PGA = .35G</b>	<b>\$142,935,681</b>	<b>3529</b>	<b>\$14,171,708</b>	<b>\$4,457</b>	<b>\$319,860,114</b>	<b>\$2,712,800</b>	<b>\$0</b>	<b>\$479,684,760</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Patterson**  
HAZARD: EARTHQUAKE  
Jurisdiction County: Percent Peak Ground Acceleration=.35G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
NON-ASSESSABLE	\$331,223	3	\$0	\$0	\$0	\$0	\$0	\$331,223
RESIDENTIAL	\$13,000,144	326	\$0	\$0	\$28,083,673	\$0	\$0	\$41,083,817
RESIDENTIAL-INCOME	\$2,913,600	10	\$0	\$0	\$1,548,500	\$0	\$0	\$4,462,100
RURAL, FARM, AGRICULTURE	\$3,205,164	19	\$0	\$146,733	\$1,115,828	\$42,610	\$0	\$4,510,335
VACANT RESIDENTIAL	\$1,341,137	49	\$0	\$0	\$0	\$0	\$0	\$1,341,137
<b>Total PGA = .35G</b>	<b>\$20,791,268</b>	<b>407</b>	<b>\$0</b>	<b>\$146,733</b>	<b>\$30,748,001</b>	<b>\$42,610</b>	<b>\$0</b>	<b>\$51,728,612</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.45G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$7,238,726	15	\$1,187,054	\$0	\$14,656,406	\$658,194	\$0	\$23,740,380
INDUSTRIAL	\$483,395	4	\$0	\$0	\$475,051	\$0	\$0	\$958,446
NON-ASSESSABLE	\$2,149,005	57	\$677,960	\$41,991	\$35,613,744	\$14,939,040	\$0	\$53,421,740
RESIDENTIAL	\$1,249,676	22	\$0	\$15,311	\$2,236,052	\$40,640	\$0	\$3,541,679
RESIDENTIAL-INCOME	\$1,487,499	10	\$830	\$30,309	\$658,387	\$66,360	\$0	\$2,443,385
RURAL, FARM, AGRICULTURE	\$159,036,357	794	\$4,929,700	\$13,503,162	\$74,236,533	\$8,283,270	\$0	\$259,989,022
VACANT COMMERCIAL	\$1,769,647	9	\$0	\$0	\$0	\$0	\$0	\$1,769,647
VACANT RESIDENTIAL	\$16,915,802	14	\$0	\$0	\$1,538	\$0	\$0	\$16,917,340
<b>Total PGA = .45G</b>	<b>\$190,330,107</b>	<b>925</b>	<b>\$6,795,544</b>	<b>\$13,590,773</b>	<b>\$128,077,711</b>	<b>\$23,987,504</b>	<b>\$0</b>	<b>\$362,781,639</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Patterson**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.45G

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$25,943,433	162	\$1,548,542	\$0	\$73,305,546	\$1,578,994	\$0	\$102,376,515

INDUSTRIAL	\$28,264,413	62	\$34,493,070	\$0	\$137,685,718	\$12,245,610	\$0	\$212,688,811
NON-ASSESSABLE	\$0	91	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$201,451,406	5170	\$0	\$3,909	\$611,027,473	\$287,164	\$0	\$812,769,952
RESIDENTIAL-INCOME	\$6,234,225	104	\$0	\$3,145	\$11,590,529	\$29,826	\$0	\$17,857,725
RURAL, FARM, AGRICULTURE	\$4,006,993	19	\$0	\$44,085	\$985,267	\$10,823	\$0	\$5,047,168
VACANT COMMERCIAL	\$34,139,684	67	\$0	\$0	\$569,566	\$63,410	\$0	\$34,772,660
VACANT RESIDENTIAL	\$5,470,831	227	\$0	\$0	\$896,303	\$0	\$0	\$6,367,134
Total PGA = .45G	\$305,510,985	5902	\$36,041,612	\$51,139	\$836,060,402	\$14,215,827	\$0	\$1,191,879,965
Grand Total	\$11,062,949,999	160197	\$916,430,392	\$203,651,089	\$24,379,621,571	\$791,725,310	\$104,447	\$37,354,482,808



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .15G

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
LAGRANGE REGIONAL PARK	008-029-015		\$82,848	\$31,983	\$0	\$114,831
LAGRANGE REGIONAL PARK	008-029-015		\$218,020	\$0	\$0	\$218,020
WATERFORD LIBRARY	134-007-027	BOOKS \$546,276	\$239,768	\$630,614	\$0	\$870,382
WOODWARD RESERVOIR	002-009-024		\$46,055	\$25,943	\$0	\$71,998
WOODWARD RESERVOIR	002-007-032		\$31,546	\$15,615	\$0	\$47,161
WOODWARD RESERVOIR	002-007-032		\$134,426	\$48,969	\$0	\$183,395
WOODWARD RESERVOIR	002-009-024		\$126,378	\$73,185	\$0	\$199,563
WOODWARD RESERVOIR	002-007-032		\$30,533	\$9,945	\$0	\$40,478
WOODWARD RESERVOIR	002-009-024		\$27,021	\$7,400	\$0	\$34,421
WOODWARD RESERVOIR	002-007-032		\$48,579	\$18,735	\$0	\$67,314
WOODWARD RESERVOIR	002-007-032		\$824,351	\$0	\$0	\$824,351
TOTAL COUNTY PGA= .15G			\$1,809,525	\$862,389	\$0	\$2,671,914

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .25G

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
12TH ST PARKING GARAGE	105-024-010		\$11,395,050	\$0	\$0	\$11,395,050
12TH STREET OFFICE BUILDING	105-024-014		\$19,237,942	\$1,048,254	\$0	\$20,286,196
ADMIN. ANNEX #4	105-038-023		\$5,897,704	\$1,908,112	\$2,940,000	\$10,745,816
ADMIN. ANNEX #4	105-038-023	REAL INCL. IN LOC. 63	\$0	\$2,558,642	\$0	\$2,558,642

ADMIN. ANNEX #4	105-038-023	REAL INCL. IN LOC. 63	\$0	\$3,837,965	\$0	\$3,837,965
ADMIN. ANNEX #4	105-038-023	REAL INCL. IN LOC. 63	\$0	\$2,558,642	\$0	\$2,558,642
ADULT RESIDENTIAL TREATMENT	040-008-016		\$647,767	\$0	\$0	\$647,767
ADULT RESIDENTIAL TREATMENT	040-008-016		\$2,755,189	\$579,671	\$0	\$3,334,860
AGRICULTURAL COMPLEX	086-015-005	1997 A COP - BI AT LO	\$3,880,351	\$0	\$0	\$3,880,351
AGRICULTURAL COMPLEX	086-015-005	1997 A COP - BI AT LO	\$2,824,879	\$0	\$0	\$2,824,879
AGRICULTURAL COMPLEX	086-015-005	1997 A COP - BI AT LO	\$8,953,763	\$2,107,259	\$0	\$11,061,022
AGRICULTURAL COMPLEX	086-015-005	1997 A COP - BI AT LO	\$203,780	\$0	\$0	\$203,780
AGRICULTURAL COMPLEX	086-015-005	STORAGE	\$533,867	\$117,085	\$0	\$650,952
ANIMAL SERVICES	039-010-002		\$30,599	\$43,040	\$0	\$73,639
ANIMAL SERVICES	039-010-002	ADOPTION CENTER	\$123,035	\$127,932	\$0	\$250,967
ANIMAL SERVICES	039-010-002		\$1,122,739	\$160,975	\$0	\$1,283,714
BHRS	111-048-001		\$3,696,884	\$652,183	\$0	\$4,349,067
BONITA PARK	045-021-036		\$0	\$36,228	\$0	\$36,228
BURBANK-PARADISE	037-002-017		\$648,920	\$125,680	\$0	\$774,600
BUSES	081-003-014	REPLACEMENT COST	\$0	\$0	\$0	\$0
CAPITAL PROJECTS TRAILER	105-025-001		\$122,713	\$70,254	\$0	\$192,967
CENTRAL SERVICES	111-048-001		\$758,489	\$678,617	\$0	\$1,437,106
CERES COUNSELING CTR.	127-016-016		\$0	\$147,360	\$0	\$147,360
CERES LIBRARY	127-016-037	BOOKS \$915,225	\$613,893	\$1,030,865	\$0	\$1,644,758
CERES MUNICIPAL COURT	127-016-014		\$401,620	\$0	\$0	\$401,620
Children and Families Commission	105-007-010		\$0	\$157,238	\$0	\$157,238
COMMUNITY SERV. FACILITIES	018-042-025		\$0	\$6,397	\$0	\$6,397
COMMUNITY SERVICES FACILITY	086-015-016		\$51,120,820	\$7,897,717	\$9,932,663	\$68,951,200
COUNTY ANNEX	105-025-001		\$7,820,474	\$632,642	\$4,031,022	\$12,484,138
COUNTY CENTER #3	032-016-006		\$2,970,408	\$1,058,384	\$153,120	\$4,181,912
COUNTY CENTER #3	032-016-006		\$470,143	\$56,237	\$0	\$526,380

COUNTY CENTER #3	032-016-006				\$675,810	\$356,273	\$0	\$1,032,083
COUNTY CENTER #3	032-016-006				\$851,640	\$712,548	\$0	\$1,564,188
COUNTY GARAGE	086-015-014				\$1,630,271	\$585,423	\$0	\$2,215,694
COURT BUILDING	105-025-001				\$19,067,965	\$262,064	\$0	\$19,330,029
DENAIR LIBRARY	024-024-018	BOOKS \$333,112			\$241,638	\$401,801	\$0	\$643,439
DRUG ENFORCEMENT BLDG.	029-002-038	LEASED			\$0	\$255,864	\$0	\$255,864
EMERGENCY SERVICES	052-063-019				\$3,557,711	\$10,482,540	\$0	\$14,040,251
Empire Community Pool	009-007-009				\$2,200,000	\$0	\$0	\$2,200,000
EMPIRE LIBRARY	133-017-006	BOOKS \$282,235			\$331,652	\$570,255	\$0	\$901,907
FOX GROVE REG. PARK	018-005-003				\$60,296	\$0	\$0	\$60,296
FRANK RAINES PARK	025-020-003				\$811,754	\$109,902	\$0	\$921,656
FRANK RAINES PARK	025-020-003				\$77,151	\$0	\$0	\$77,151
FRANK RAINES PARK	025-020-003				\$172,773	\$76,241	\$0	\$249,014
FRANK RAINES PARK	025-020-003				\$36,245	\$12,609	\$0	\$48,854
FRANK RAINES PARK	025-020-003				\$363,198	\$0	\$0	\$363,198
GALLO CENTER FOR THE ARTS	105-039-014	COC FROM APRIL 200			\$42,462,422	\$0	\$2,251,865	\$44,714,287
H.S.A.	111-048-001				\$79,003	\$45,864	\$0	\$124,867
H.S.A.	111-048-001				\$57,433	\$33,293	\$0	\$90,726
H.S.A.	111-048-001				\$117,507	\$0	\$0	\$117,507
H.S.A.	111-048-001				\$4,842	\$3,904	\$0	\$8,746
H.S.A.	111-048-001				\$9,735	\$5,855	\$0	\$15,590
H.S.A.	111-048-001				\$6,348	\$3,807	\$0	\$10,155
H.S.A.	111-048-001				\$159,147	\$93,895	\$0	\$253,042
H.S.A.	111-048-001	REAL/CONTENTS INCL			\$0	\$486,141	\$0	\$486,141
HEALTH SERVICES	111-048-001				\$15,000,934	\$8,983,133	\$0	\$23,984,067
HEALTH SERVICES	111-048-001				\$1,271,595	\$535,112	\$0	\$1,806,707
HEALTH SERVICES	111-048-001				\$2,960,774	\$605,757	\$0	\$3,566,531

HEALTH SERVICES	111-048-001	CONTENTS INCL. IN L	\$1,600,773	\$469,129	\$0	\$2,069,902
HEALTH SERVICES	111-048-001		\$2,696,267	\$546,015	\$0	\$3,242,282
HEALTH SERVICES	111-048-001	CONTENTS INCL. IN L	\$1,831,238	\$432,812	\$0	\$2,264,050
HEALTH SERVICES	111-048-001		\$1,665,263	\$326,842	\$0	\$1,992,105
HEALTH SERVICES	111-048-001		\$748,798	\$283,480	\$0	\$1,032,278
HEALTH SERVICES	111-048-001		\$3,659,440	\$1,612,260	\$406,285	\$5,677,985
HOSPITAL / STORAGE BUILDING	040-008-016		\$15,433,606	\$579,671	\$0	\$16,013,277
HUGHSON LIBRARY	018-042-065	BOOKS \$289,235	\$276,157	\$357,093	\$0	\$633,250
HUGHSON LIBRARY	018-042-065	LEASED	\$0	\$38,381	\$0	\$38,381
JUVENILE JUSTICE CENTER	081-012-006		\$925,793	\$115,354	\$0	\$1,041,147
JUVENILE JUSTICE CENTER	081-012-006		\$14,536	\$7,878	\$0	\$22,414
JUVENILE JUSTICE CENTER	081-012-006		\$165,695	\$15,130	\$0	\$180,825
JUVENILE JUSTICE CENTER	081-012-006		\$89,200	\$64,916	\$0	\$154,116
JUVENILE JUSTICE CENTER	081-012-006		\$126,518	\$64,916	\$0	\$191,434
JUVENILE JUSTICE CENTER	081-012-006		\$3,421,358	\$201,556	\$0	\$3,622,914
JUVENILE JUSTICE CENTER	081-012-006		\$125,751	\$124,866	\$0	\$250,617
JUVENILE JUSTICE CENTER	081-012-006		\$17,088,609	\$316,399	\$0	\$17,405,008
JUVENILE JUSTICE CENTER	081-012-006		\$6,213,224	\$637,493	\$0	\$6,850,717
KEYES COMMUNITY CENTER	045-021-021		\$666,087	\$194,385	\$0	\$860,472
KEYES LIBRARY	045-032-001	LEASED - BOOKS \$342	\$0	\$341,897	\$0	\$341,897
LAW LIBRARY	105-021-006	LEASED	\$0	\$639,661	\$0	\$639,661
MAIN LIBRARY	105-006-012	BOOK \$10,519,207	\$12,481,545	\$12,122,643	\$0	\$24,604,188
MANCINI HALL	102-012-001		\$417,405	\$127,114	\$0	\$544,519
MCHENRY MED. OFFICE	055-007-009		\$0	\$871,059	\$0	\$871,059
MECHANICAL EQUIPMENT	105-025-001		\$151,695	\$34,112	\$0	\$185,807
MEDICAL BUILDING	106-002-010	1997 B COP BI AT LOC	\$3,668,592	\$992,049	\$0	\$4,660,641
MENS JAIL	105-025-001		\$10,192,455	\$676,284	\$0	\$10,868,739

MENTAL HEALTH	106-008-010	LEASED	\$0	\$127,932	\$0	\$127,932
MENTAL HEALTH CENTER	111-048-001		\$1,515,762	\$1,449,130	\$0	\$2,964,892
MENTAL HEALTH CENTER	111-048-001		\$49,999	\$17,283	\$0	\$67,282
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L	\$429,853	\$103,332	\$0	\$533,185
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L	\$518,559	\$123,660	\$0	\$642,219
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L	\$445,707	\$107,691	\$0	\$553,398
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L	\$512,244	\$125,871	\$0	\$638,115
MINIMUM SECURITY FACILITY	086-015-014	RENTS FOR COP AT L	\$8,718,429	\$1,019,907	\$0	\$9,738,336
MODESTO RESERVOIR	008-003-021		\$133,044	\$80,011	\$0	\$213,055
MODESTO RESERVOIR	008-003-021		\$1,011,995	\$129,156	\$0	\$1,141,151
MODESTO RESERVOIR	008-003-021		\$117,557	\$43,571	\$0	\$161,128
OAKDALE COMM. CARE CTR.	130-003-036	LEASED	\$0	\$26,210	\$0	\$26,210
OAKDALE LIBRARY	130-009-045	BOOKS \$1,226,383	\$990,116	\$1,391,439	\$0	\$2,381,555
OAKDALE PRENATAL &	063-018-017	LEASED	\$0	\$126,549	\$0	\$126,549
OFFICE OF EDUCATION	032-016-006		\$2,464,065	\$0	\$0	\$2,464,065
P.W. GEER RD. LANDFILL	009-029-009		\$145,348	\$0	\$0	\$145,348
P.W. GEER RD. LANDFILL	009-029-009		\$290,692	\$0	\$0	\$290,692
P.W. GEER RD. LANDFILL	009-029-009		\$218,020	\$0	\$0	\$218,020
P.W. GEER RD. LANDFILL	009-029-009		\$29,069	\$19,189	\$0	\$48,258
P.W. GEER RD. LANDFILL	009-029-009		\$363,367	\$0	\$0	\$363,367
PARK SHOP GROUNDS	111-048-001		\$43,305	\$9,371	\$0	\$52,676
PERINATAL UNIT	040-008-016	UNIT	\$1,759,568	\$579,671	\$0	\$2,339,239
PSC GENERATORS/ELEC. YARD	086-015-015		\$0	\$1,279,322	\$0	\$1,279,322
PSC PROGRAMS TRAILER	086-015-014		\$124,084	\$70,131	\$0	\$194,215
PUBLIC HEALTH	111-048-001	CONTENTS INCL. IN L	\$2,104,618	\$808,272	\$0	\$2,912,890
PUBLIC SAFETY CENTER	086-015-015		\$491,389	\$135,725	\$0	\$627,114
PUBLIC SAFETY CENTER	086-015-014		\$71,049	\$33,931	\$0	\$104,980

PUBLIC SAFETY CENTER	086-015-014			\$44,951,607	\$7,449,890	\$10,500,000	\$62,901,497
PUBLIC WORKS	129-007-002			\$53,834	\$28,826	\$0	\$82,660
PUBLIC WORKS	129-007-002			\$199,589	\$136,882	\$0	\$336,471
PUBLIC WORKS	129-007-002			\$86,103	\$52,727	\$0	\$138,830
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$173,564	\$157,290	\$0	\$330,854
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$229,029	\$130,098	\$0	\$359,127
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$256,413	\$325,249	\$0	\$581,662
PUBLIC WORKS DEPT.	040-006-002			\$3,054	\$2,827	\$0	\$5,881
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$443,177	\$131,988	\$0	\$575,165
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$52,010	\$31,613	\$0	\$83,623
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$151,735	\$190,273	\$0	\$342,008
PUBLIC WORKS DEPT.	040-006-002			\$274,530	\$168,926	\$0	\$443,456
PUBLIC WORKS DEPT.	040-006-002			\$25,357	\$14,132	\$0	\$39,489
PUBLIC WORKS DEPT.	040-006-002			\$876,838	\$2,818,359	\$0	\$3,695,197
PUBLIC WORKS DEPT.	040-006-002	WASTE OFFICE		\$500,505	\$202,236	\$0	\$702,741
PUBLIC WORKS DEPT.	040-006-002			\$4,174	\$2,921	\$0	\$7,095
PUBLIC WORKS DEPT.	040-006-002			\$22,013	\$6,397	\$0	\$28,410
PUBLIC WORKS DEPT.	040-006-002			\$30,546	\$20,294	\$0	\$50,840
PUBLIC WORKS DEPT.	040-006-002	REPAIR SHOP		\$905,607	\$419,869	\$0	\$1,325,476
RAY SIMON CENTER	086-015-005			\$124,375	\$69,818	\$0	\$194,193
RAY SIMON REG. JUSTICE	086-015-005	1997 A COP - BI AT LO		\$2,405,072	\$233,427	\$0	\$2,638,499
RAY SIMON REG. JUSTICE	086-015-005	1997 A COP		\$1,722,889	\$252,520	\$1,925,000	\$3,900,409
RECOVERY RESOURCE CTR.	040-008-016			\$71,530	\$19,516	\$0	\$91,046
RECOVERY RESOURCE CTR.	040-008-016			\$510,388	\$144,410	\$0	\$654,798
RIVERBANK LIBRARY	132-012-015	BOOKS \$655,590		\$614,229	\$745,087	\$0	\$1,359,316
RONDA OUSDAHL	105-023-010	LEASED		\$0	\$31,983	\$0	\$31,983
SALIDA REGIONAL LIBRARY	135-053-006	Books \$2,615,595		\$8,508,255	\$4,018,417	\$0	\$12,526,672

SHERIFF HANGER #5-MODESTO	036-023-002	LEASED	\$0	\$51,173	\$0	\$51,173
SHERIFF STORAGE TRAILER	086-015-014		\$39,631	\$17,225	\$0	\$56,856
SHERIFF SUBSTATION	135-049-005	LEASED	\$0	\$25,226	\$0	\$25,226
SHERIFF SUBSTATION	024-027-040	LEASED	\$0	\$18,930	\$0	\$18,930
SHERIFF TRAILER	086-015-014		\$123,791	\$68,242	\$0	\$192,033
SHERIFF'S EVIDENCE BUNKER	086-015-014		\$86,055	\$31,974	\$0	\$118,029
SHERIFF'S K-9/EQUESRIAN	086-015-014		\$14,536	\$24,440	\$0	\$38,976
SHERIFF'S OFFICE MODULE	086-015-005		\$112,876	\$15,724	\$0	\$128,600
SHERIFFS OPERATIONS	086-015-014		\$7,260,018	\$1,268,606	\$0	\$8,528,624
SHERIFF'S PUBLIC SAFETY CENTER	086-015-014		\$444,900	\$0	\$0	\$444,900
SHERIFF'S SUBSTATION	035-037-038		\$366,056	\$0	\$0	\$366,056
SHERIFF'S TRAILER	086-015-014		\$72,412	\$45,579	\$0	\$117,991
SIGN SHOP	040-006-002	CONTENTS INCL. IN L	\$216,825	\$94,454	\$0	\$311,279
SUPPORT SERVICES	086-015-015	1992 B COP & 1997 B	\$8,532,914	\$1,318,612	\$1,130,000	\$10,981,526
Tenth Street Place	105-037-034		\$50,000,000	\$0	\$0	\$50,000,000
TRAILER	086-015-014		\$36,034	\$20,774	\$0	\$56,808
TURLOCK COURTS BLDG.	042-037-005		\$816,227	\$0	\$0	\$816,227
TURLOCK LIBRARY	061-033-056	BOOKS \$2,388,875	\$1,465,748	\$2,659,110	\$0	\$4,124,858
VEHICLES	086-015-014	REPLACEMENT COST	\$0	\$0	\$0	\$0
WEST MODESTO COMMUNITY CENTER	030-020-031		\$0	\$1,133,724	\$0	\$1,133,724
WIC-HUGHSON	018-042-025	LEASED	\$0	\$25,586	\$0	\$25,586
WIC-TURLOCK	042-006-014	LEASED	\$0	\$145,623	\$0	\$145,623
WORKPLACE WELLNESS	105-015-005	LEASED	\$0	\$74,757	\$0	\$74,757
TOTAL COUNTY PGA= .25G			\$457,431,163	\$107,066,143	\$33,269,955	\$597,767,261

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.35G

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
Grayson Community Center	016-034-006		\$1,713,838	\$0	\$0	\$1,713,838
HONOR FARM	017-060-002		\$109,009	\$0	\$0	\$109,009
HONOR FARM	016-026-010		\$43,378	\$21,101	\$0	\$64,479
HONOR FARM	017-060-002		\$10,338	\$47,682	\$0	\$58,020
HONOR FARM	016-026-010		\$0	\$12,793	\$0	\$12,793
HONOR FARM	016-026-010		\$52,821	\$17,522	\$0	\$70,343
HONOR FARM	016-026-010		\$145,187	\$40,180	\$0	\$185,367
HONOR FARM	017-060-002		\$918,192	\$292,845	\$0	\$1,211,037
HONOR FARM	017-060-002		\$29,069	\$0	\$0	\$29,069
HONOR FARM	016-026-010		\$50,266	\$22,731	\$0	\$72,997
HONOR FARM	016-026-010		\$45,502	\$8,562	\$0	\$54,064
HONOR FARM	016-026-010	REAL/CONTENTS INCL	\$41,572	\$19,516	\$0	\$61,088
HONOR FARM	016-026-010		\$450,315	\$231,554	\$0	\$681,869
HONOR FARM	017-060-002		\$456,829	\$194,629	\$0	\$651,458
HONOR FARM	017-060-002	REAL/CONTENTS INCL	\$818,301	\$268,656	\$0	\$1,086,957
HONOR FARM	016-026-010		\$27,732	\$11,683	\$0	\$39,415
HONOR FARM	016-026-010	REAL/CONTENTS INCL	\$671,811	\$211,413	\$0	\$883,224
HONOR FARM	016-026-010	REAL/CONTENTS INCL	\$13,891	\$21,075	\$0	\$34,966
HONOR FARM	016-026-010	REAL/CONTENTS INCL	\$82,470	\$65,051	\$0	\$147,521
HONOR FARM	016-026-010	REAL/CONTENTS INCL	\$8,644	\$8,587	\$0	\$17,231
HONOR FARM	017-060-002		\$61,259	\$31,066	\$0	\$92,325



HONOR FARM	016-026-010		\$87,101	\$22,253	\$0	\$109,354
NEWMAN LIBRARY	128-005-044	BOOKS \$467,843	\$472,381	\$554,434	\$0	\$1,026,815
PARKS-BONTTA POOL	027-014-006		\$345,420	\$0	\$0	\$345,420
TOTAL COUNTY PGA= .35G			\$6,655,326	\$2,103,333	\$0	\$8,758,659

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .45G

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
PATTERSON LIBRARY	131-014-021	BOOKS \$744,333	\$1,079,971	\$910,872	\$0	\$1,990,843
P.W. FINK RD. LANDFILL	027-017-040		\$57,449	\$63,964	\$0	\$121,413
P.W. FINK RD. LANDFILL	027-017-040		\$12,482	\$5,888	\$0	\$18,370
P.W. FINK RD. LANDFILL	027-017-040		\$125,155	\$255,864	\$0	\$381,019
P.W. FINK RD. LANDFILL	027-017-040		\$19,172	\$38,381	\$0	\$57,553
P.W. FINK RD. LANDFILL	027-017-040		\$19,089	\$89,552	\$0	\$108,641
PUBLIC WORKS	131-004-001		\$233,544	\$58,440	\$0	\$291,984
W.I.C.	131-009-001	LEASED	\$0	\$25,586	\$0	\$25,586
TOTAL COUNTY PGA= .45G			\$1,546,862	\$1,448,547	\$0	\$2,995,409
<b>GRAND TOTAL EXISTING FACILITIES</b>			<b>\$467,442,876</b>	<b>\$111,480,412</b>	<b>\$33,269,955</b>	<b>\$612,193,243</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
FUTURE COUNTY FACILITIES**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration = .25G

Description	APN	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
Animal Services Facility	086-015-014	\$0	\$0	\$0	\$11,000,000
Coroner Facility	086-015-014	\$0	\$0	\$0	\$5,500,000
Juvenile Commitment Facility	081-012-006	\$0	\$0	\$0	\$24,000,000
Maximum Security Jail Units (2)	086-015-014	\$0	\$0	\$0	\$30,000,000
Public Safety Center "Core" Facility ( Intake/Property?Admin/S	086-015-014	\$0	\$0	\$0	\$125,200,000
Public Works Building	040-006-002	\$0	\$0	\$0	\$17,000,000
<b>TOTAL COUNTY PGA= .25G</b>					<b>\$212,700,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
FUTURE COUNTY FACILITIES**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration = .35G

Description	APN	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
Honor Farm Barracks #4 ( to replace existing bldg #4)	017-060-002	\$0	\$0	\$0	\$2,000,000
Honor Farm Wastewater Facility ( expansion of WW treatment	017-060-002	\$0	\$0	\$0	\$365,000
<b>TOTAL COUNTY PGA= .35G</b>					<b>\$2,365,000</b>
<b>GRAND TOTAL FUTURE FACILITIES</b>					<b>\$215,065,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.05G

Crossing	Bridge Number	Road Name	Type	Cost
DRY CREEK TRIBUTARY	38C0256	COOPERSTOWN	Slab	\$177,446
TUOLUMNE RIVER	38C0317	LAKE	Slab	\$3,552,000
TOTAL COUNTY PGA= .05G				\$3,729,446

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.15G

Crossing	Bridge Number	Road Name	Type	Cost
ROCK RIVER	38C0008	COOPERSTOWN	Slab	\$1,184,992
DRY CREEK	38C0009	CRABTREE	Girder	\$748,883
CASHMAN CREEK	38C0015	CLARIBEL	Slab	\$989,480
WOODWARD RESERVOIR (SSJID RESERVOIR )	38C0020	28 MILE	Slab	\$791,126
DRY CREEK	38C0025	ALBERS	Girder	\$2,577,613
DRY CREEK	38C0038	WELLSFORD	Girder	\$2,633,701
TID MAIN CANAL	38C0039	LAKE	Slab	\$1,004,821
LITTLE JOHN CREEK	38C0045	FRANKENHEIMER	Slab	\$1,140,093
DRY CREEK	38C0047	CHURCH	Girder	\$3,908,029
MODESTO MAIN CANAL	38C0049	ALBERS	Slab	\$604,456
DRY CREEK	38C0055	OAKDALE/WATERFORD HWY	Girder	\$4,183,401
HIGHLINE CANAL	38C0072	MONTPELIER	Slab	\$313,640
CLARIBEL LATERAL (OID CANAL)	38C0078	OAKDALE/WATERFORD	Slab	\$209,323

SSJID CANAL (SOUTH SAN JOAQUIN MAIN CANAL	38C0079	VALLEY HOME	Slab	\$258,447
LONE TREE CREEK	38C0080	VALLEY HOME	Slab	\$252,239
MID MAIN CANAL	38C0087	CLAUS	Slab	\$448,610
TID MAIN CANAL	38C0106	EAST	Slab	\$174,507
GASBURG CREEK	38C0111	LA GRANGE	Slab	\$451,788
MID MAIN CANAL	38C0114	CLARIBEL	Slab	\$810,146
DAWSON LAKE (MCDONALD CREEK)	38C0144	NEW LA GRANGE ROAD	Slab	\$772,870
MID MAIN CANAL	38C0146	NEW LA GRANGE ROAD	Slab	\$817,721
MID MAIN CANAL	38C0147	WELLSFORD	Slab	\$1,051,154
SOUTH SAN JOAQUIN MAIN CANAL	38C0154	PLEASANT VALLEY	Slab	\$556,665
TID MAIN CANAL	38C0161	SANTE FE	Slab	\$334,534
SOUTH SAN JOAQUIN MAIN CANAL	38C0169	SHELL	Girder	\$110,779
TID MAIN CANAL	38C0171	LAKE	Slab	\$494,704
MID MAIN CANAL	38C0176	RICE	Slab	\$345,383
MID LATERAL NO.3	38C0177	DEWITT	Slab	\$317,138
MID MAIN CANAL	38C0178	DUSTY	Slab	\$404,963
MID LATERAL NO.3	38C0179	SANTE FE	Slab	\$317,138
TID MAIN CANAL	38C0225	KEYES	Slab	\$468,539
MID MAIN CANAL	38C0230	MILNES	Slab	\$377,737
ROCK CREEK TRIBUTARY	38C0231	MILTON	Slab	\$1,031,417
SHIRLEY CREEK	38C0233	DUNTON	Slab	\$181,365
SOUTH SAN JOAQUIN MAIN CANAL	38C0234	26 MILE	Slab	\$243,350
TID MAIN CANAL	38C0237	MONTE VISTA	Slab	\$396,467
HIGHLINE CANAL TID	38C0246	KEYES	Slab	\$236,516
HIGHLINE CANAL TID	38C0247	MONTE VISTA	Slab	\$240,004
MID MAIN CANAL	38C0249	TERMINAL	Slab	\$492,267
MID MAIN CANAL	38C0251	LANGWORTH	Slab	\$598,927

WILDCAT CREEK	38C0253	WILLMS	Slab	\$321,798
RYDBERG CREEK	38C0257	COOPERSTOWN	Slab	\$297,318
DRY CREEK	38C0259	COOPERSTOWN	Girder	\$186,363
SOUTH SAN JOAQUIN MAIN CANAL	38C0261	LAMBUTH	Slab	\$248,153
LONE TREE CREEK	38C0262	PIONEER	Slab	\$154,555
SOUTH SAN JOAQUIN MAIN CANAL	38C0263	PIONEER	Slab	\$248,153
DRY CREEK TRIBUTARY	38C0265	CROW	Girder	\$319,308
TID MAIN CANAL	38C0268	LAKE	Slab	\$471,932
DRY CREEK TRIBUTARY	38C0270	WARNERVILLE	Slab	\$161,699
DRY CREEK TRIBUTARY	38C0278	WILLMS	Slab	\$200,123
MID LATERAL NO.3	38C0287	CHURCH	Slab	\$243,344
MID MAIN CANAL	38C0289	RESERVOIR	Slab	\$568,721
SOUTH SAN JOAQUIN MAIN CANAL	38C0294	SONORA	Slab	\$146,000
DRY CREEK TRIBUTARY	38C0307	WARNERVILLE	Slab	\$156,897
MID LATERAL NO.2	38C0312	WELLSFORD	Slab	\$181,413
SOUTH SAN JOAQUIN MAIN CANAL	38C0319	FRANKENHEIMER	Slab	\$347,903
TOTAL COUNTY PGA= .15G				\$36,728,613

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## STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN COUNTY BRIDGES

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.25G

Crossing	Bridge Number	Road Name	Type	Cost
STANISLAUS RIVER	38C0001	ORANGE BLOSSOM	Girder	\$6,359,977
DRY SLOUGH	38C0002	MCHENRY	Slab	\$2,389,912
TUOLUMNE RIVER	38C0003	SANTE FE	Girder	\$4,944,820
TUOLUMNE RIVER	38C0004	HICKMAN	Girder	\$7,734,211

TUOLUMNE RIVER	38C0005	ROBERTS FERRY	Girder	\$4,956,000
LITTLE JOHN CREEK (PUMP)	38C0013	SONORA	Slab	\$1,045,013
BRANCH DRY CREEK NO 2	38C0014	CLARIBELL	Slab	\$808,497
LITTLE JOHN CREEK	38C0017	26 MILE	Slab	\$2,250,364
DEL PUERTO CREEK	38C0019	DEL PUERTO CANYON	Slab	\$112,069
LITTLE JOHN CREEK (MT. BROW)	38C0021	SONORA	Slab	\$1,575,656
TUOLUMNE RIVER	38C0023	SEVENTH STREET	Girder	\$18,585,000
LITTLE JOHN CREEK	38C0024	SONORA	Slab	\$1,715,611
STANISLAUS RIVER	38C0032	MCHENRY	Girder	\$12,271,516
DEL PUERTO CREEK	38C0041	DEL PUERTO CANYON	Slab	\$107,357
TUOLUMNE RIVER	38C0044	MITCHELL	Girder	\$20,454,013
TUOLUMNE RIVER	38C0048	GEER	Girder	\$7,769,190
TUOLUMNE RIVER	38C0050	CARPENTER	Girder	\$7,485,473
MID LATERAL NO.1	38C0051	GEER	Slab	\$225,142
CERES MAIN CANAL	38C0052	ROHDE ROAD	Slab	\$260,650
TUOLUMNE RIVER	38C0061	9TH ST.	Girder	\$60,180,000
MID LATERAL NO.6	38C0068	SALIDA BOULEVARD	Slab	\$320,822
MID LATERAL NO.6	38C0069	SALIDA BOULEVARD	Slab	\$228,366
DRY CREEK	38C0073	TIM BELL	Girder	\$927,397
MID MAIN CANAL	38C0076	OAKDALE/WATERFORD	Slab	\$586,080
TID LATERAL NO.3	38C0083	SANTA FE	Slab	\$179,669
CERES MAIN CANAL	38C0084	SANTA FE	Slab	\$536,211
TID MAIN CANAL	38C0090	WHITMORE	Slab	\$402,588
TID MAIN CANAL	38C0091	HICKMAN	Slab	\$612,198
CERES MAIN CANAL	38C0092	GEER	Slab	\$512,124
TID MAIN CANAL	38C0105	EAST	Slab	\$313,626
MID LATERAL NO.6	38C0108	FINNEY	Slab	\$275,608

MID MAIN CANAL	38C0109	DALE	Slab	\$236,847
MID MAIN CANAL	38C0110	AMERICAN	Slab	\$150,493
MID LATERAL NO.6	38C0113	CLARIBEL	Slab	\$499,507
TID LATERAL NO.1	38C0124	CARPENTER	Slab	\$253,123
RIVER ROAD UNDERPASS	38C0129	RIVER ROAD	Slab	\$0
MID LATERAL NO.5	38C0137	CHICAGO	Slab	\$315,036
MID LATERAL NO.5	38C0138	CALIFORNIA	Slab	\$233,100
GOLDEN STATE OVERHEAD	38C0141	GOLDEN STATE	Slab	\$15,853,624
TUOLUMNE RIVER	38C0145	LA GRANGE (OLD)	Girder	\$7,062,221
CERES MAIN CANAL	38C0150	GILBERT	Slab	\$238,547
CERES MAIN CANAL	38C0151	BALDWIN	Slab	\$242,107
CERES MAIN CANAL	38C0155	SWANSON	Slab	\$248,033
TID MAIN CANAL	38C0156	LAKE	Slab	\$531,336
TID MAIN CANAL	38C0157	MONTPELIER	Slab	\$407,248
TID MAIN CANAL	38C0158	LAMPLEY	Slab	\$346,912
TID MAIN CANAL	38C0159	DENTON	Slab	\$405,933
HOODS CREEK	38C0162	DUNTON	Slab	\$752,702
MID MAIN CANAL	38C0164	SKITONE	Slab	\$136,084
MID MAIN CANAL	38C0166	CARVER	Slab	\$246,026
GALLUP CREEK	38C0170	COOPERSTOWN	Girder	\$200,244
DEL PUERTO CR. (WASHINGTON CANAL)	38C0175	DEL PUERTO CANYON	Slab	\$112,069
TID LATERAL NO.5	38C0190	WALNUT	Slab	\$143,037
TID LATERAL NO.4	38C0191	FAITH HOME	Slab	\$130,468
CERES MAIN CANAL	38C0192	FULKERTH	Slab	\$153,898
CERES MAIN CANAL	38C0193	KEYES	Slab	\$181,413
TID LOWER LATERAL NO.2	38C0194	MITCHELL	Slab	\$135,489
MID LATERAL NO.8	38C0197	HAMMETT	Slab	\$168,252

ROCK CREEK	38C0198	MILTON	Slab	\$225,142
ROCK CREEK DITCH	38C0199	MILTON	Slab	\$216,300
CERES MAIN CANAL	38C0223	CLINTON	Slab	\$327,408
MID LATERAL NO.6	38C0226	COVERT	Slab	\$265,870
MID LATERAL NO.6	38C0228	COFFEE	Slab	\$377,737
HOODS CREEK	38C0232	MILTON	Slab	\$609,330
MID MAIN CANAL	38C0236	ST. FRANCIS	Slab	\$260,937
CERES MAIN CANAL	38C0244	MONTE VISTA	Slab	\$177,972
CERES MAIN CANAL	38C0252	ALDRICH	Slab	\$226,487
DRY CREEK TRIBUTARY	38C0255	COOPERSTOWN	Slab	\$200,244
JOHNSON CREEK	38C0258	COOPERSTOWN	Slab	\$161,699
SOUTH SAN JOAQUIN MAIN CANAL	38C0264	VICTORY	Slab	\$462,971
MID MAIN CANAL	38C0266	HAZELDEAN	Slab	\$321,758
MID MAIN CANAL	38C0267	CRABTREE	Slab	\$0
PEASLEE CREEK	38C0269	LAKE	Slab	\$313,626
MARTELL CREEK	38C0272	SONORA	Slab	\$395,443
MARTELL CREEK	38C0273	SONORA	Slab	\$297,783
MID LATERAL NO.5	38C0274	PAULINE	Slab	\$112,069
MID LATERAL NO.4	38C0275	PAULINE	Slab	\$308,751
MID LATERAL NO.5	38C0279	HOUSER	Slab	\$247,746
TID HIGHLINE CANAL	38C0280	LAKE	Slab	\$203,758
MID MAIN CANAL	38C0285	REINWAY	Slab	\$322,344
MID LATERAL NO.2	38C0286	CHURCH	Slab	\$190,715
MID MAIN CANAL	38C0288	RESERVOIR ROAD	Slab	\$439,988
MID MAIN CANAL	38C0290	HAZELDEAN	Slab	\$287,804
MID MAIN CANAL	38C0291	HOPPER	Slab	\$345,814
MID MAIN CANAL	38C0292	BLOSSOM	Slab	\$326,589



TID LATERAL NO.2	38C0295	MORGAN	Slab	\$226,766
TID LATERAL NO.5	38C0302	TEGNER	Slab	\$113,766
MID LATERAL NO.7	38C0304	BECKWITH	Slab	\$243,541
MID LATERAL NO.7	38C0305	DAKOTA	Slab	\$181,413
TID LATERAL NO.3	38C0306	FAITH HOME	Slab	\$177,355
MID LATERAL NO.6	38C0308	WILLIAMS	Slab	\$136,084
MID LATERAL NO.6	38C0309	JACKSON	Slab	\$142,177
MID LATERAL NO.6	38C0310	DUNN	Slab	\$113,742
MID LATERAL NO.4	38C0311	ROSEMORE	Slab	\$183,157
CERES MAIN CANAL	38C0313	WARNER	Slab	\$121,675
DEL PUERTO CREEK	38C0315	FRANK RAIN ORV PK	Slab	\$61,889
CERES MAIN CANAL	38C0321	PRAIRIE FLOWER ROAD	Slab	\$327,748
MID LATERAL NO.6	38C0322	HAMMETT	Slab	\$195,941
TOTAL COUNTY PGA= .25G				\$205,360,448

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## STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN COUNTY BRIDGES

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.35G

Crossing	Bridge Number	Road Name	Type	Cost
SAN JOAQUIN RIVER	38C0010	CROWS LANDING	Girder	\$6,857,073
ORESTIMBA CREEK	38C0012	ANDERSON	Slab	\$0
SAN JOAQUIN RIVER	38C0016	GRAYSON	Girder	\$2,610,382
TUOLUMNE RIVER	38C0018	SHILOH	Girder	\$4,679,087
LAIRD SLOUGH	38C0027	GRAYSON	Slab	\$2,942,850
CCID MAIN CANAL (SAN JOAQUIN & KINGS RIVER)	38C0031	STUHR	Girder	\$660,940
SAN JOAQUIN RIVER	38C0033	LAS PALMAS	Girder	\$7,450,151

ORESTIMBA CREEK	38C0042	MORRIS	Slab	\$0
ORESTIMBA CREEK	38C0043	RIVER	Slab	\$612,699
SAN JOAQUIN & KINGS RIVER CANAL (CCID MAIN	38C0096	CROWS LANDING	Girder	\$726,440
TID CANAL LATERAL NO.4	38C0098	CROWSLANDING	Slab	\$173,958
MID LATERAL NO.5	38C0107	STONE	Slab	\$133,858
MID LATERAL NO.5	38C0116	PARADISE	Slab	\$273,362
TID LATERAL NO.2	38C0123	CARPENTER	Slab	\$249,736
NEWMAN WASTEWAY	38C0167	UPPER	Slab	\$881,450
DEL PUERTO CREEK	38C0174	DEL PUERTO CANYON	Slab	\$204,926
SAN JOAQUIN & KINGS RIVER CANAL	38C0183	ANDERSON	Girder	\$430,453
PATTERSON IRRIGATION CANAL	38C0184	ELM	Slab	\$156,753
PATTERSON IRRIGATION CANAL	38C0185	SYCAMORE	Slab	\$116,872
TID LATERAL NO. 5.5	38C0186	MORGAN	Slab	\$154,794
WEST STANISLAUS LATERAL NO.5 S	38C0188	W. STANISLAUS	Slab	\$132,141
CALIFORNIA AQUEDUCT	38C0201	PETE MILLER	Slab	\$1,059,804
SAN JOAQUIN & KINGS RIVER CANAL	38C0204	ORESTIMBA	Girder	\$632,134
SAN JOAQUIN & KINGS RIVER CANAL	38C0208	FIFTH	Girder	\$430,453
CALIFORNIA AQUEDUCT	38C0211	OAK FLAT	Slab	\$1,095,289
DEL PUERTO CREEK	38C0217	VINEYARD	Slab	\$272,980
WESTLEY WASTEWAY	38C0218	FRANK COX	Slab	\$383,940
WESTLEY WASTEWAY	38C0219	COX	Slab	\$272,316
WEST STANISLAUS LATERAL NO.4 S	38C0242	W. STANISLAUS	Slab	\$122,344
INGRAM CREEK	38C0243	HAMILTON	Slab	\$190,498
TID LATERAL NO.2	38C0314	GRIFFIN	Slab	\$115,414
SAN JOAQUIN RIVER	39C0001	HILLS FERRY	Girder	\$2,571,456
TOTAL COUNTY PGA= .35G				\$36,594,553

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.45G

Crossing	Bridge Number	Road Name	Type	Cost
ORESTIMBA CREEK	38C0011	ORESTIMBA	Slab	\$1,224,969
CALIFORNIA AQUEDUCT	38C0053	SPERRY	Slab	\$1,251,253
INGRAM CREEK	38C0059	MCCRACKEN	Slab	\$529,329
CALIFORNIA AQUEDUCT	38C0094	FINK	Slab	\$1,279,832
DELTA MENDOTA CANAL	38C0095	FINK	Slab	\$632,389
DELTA MENDOTA CANAL	38C0101	HAMILTON	Slab	\$683,406
CALIFORNIA AQUEDUCT	38C0117	HOWARD	Slab	\$1,349,415
DELTA MENDOTA CANAL	38C0118	HOWARD	Slab	\$679,200
SAN JOAQUIN & KINGS RIVER CANAL	38C0180	SHIELLS	Girder	\$482,502
SAN JOAQUIN & KINGS RIVER CANAL	38C0181	MOOREHEAD	Girder	\$482,502
NEWMAN WASTEWAY	38C0182	EASTIN	Slab	\$266,074
WESTLEY WASTEWAY	38C0187	STARK	Slab	\$329,630
SALADO CREEK	38C0189	WARD	Slab	\$173,604
CALIFORNIA AQUEDUCT	38C0200	SULLIVAN	Slab	\$1,066,901
DELTA MENDOTA CANAL	38C0202	PETE MILLER	Slab	\$887,686
SAN JOAQUIN & KINGS RIVER CANAL	38C0203	DRAPER	Girder	\$671,076
DELTA MENDOTA CANAL	38C0205	ORESTIMBA	Slab	\$696,429
DELTA MENDOTA CANAL	38C0206	STUHR	Slab	\$675,640
CALIFORNIA AQUEDUCT	38C0207	ORESTIMBA	Slab	\$1,066,901
DELTA MENDOTA CANAL	38C0209	DAVIS	Slab	\$721,375
CALIFORNIA AQUEDUCT	38C0210	WARD	Slab	\$1,386,692

DELTA MENDOTA CANAL	38C0212	MARSHALL	Slab	\$677,718
DELTA MENDOTA CANAL	38C0213	WARD	Slab	\$683,955
DEL PUERTO CREEK	38C0215	ROGERS	Slab	\$496,783
DELTA MENDOTA CANAL	38C0220	WELTY	Slab	\$702,665
DELTA MENDOTA CANAL	38C0221	GAFFERY	Slab	\$848,188
NEWMAN WASTEWAY	38C0238	DRAPER	Slab	\$867,280
DELTA MENDOTA CANAL	38C0239	NEEDHAM	Slab	\$860,231
CALIFORNIA AQUEDUCT	38C0240	MCCRACKEN	Slab	\$1,279,832
DELTA MENDOTA CANAL	38C0241	MCCRACKEN	Slab	\$829,167
DELTA MENDOTA CANAL	38C0296	DIEHL	Slab	\$675,640
TOTAL COUNTY PGA= .45G				\$24,458,264
<b>GRAND TOTAL COUNTY BRIDGES</b>				<b>\$306,871,324</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.15G

Sub Division	Location	Cost
MOUNTAIN OAK - SUNSET OAKS NO. 10	N/ORANGE BLOSSOME (N/E CORNR)	\$403,263
RIO CASA DRIVE - RIO CASA ESTATES	S/DIXON ROAD	\$403,263
RIO SOMBRA DRIVE - HUNTER RANCH ESTATES	W/MORRIS HUNTER	\$403,263
SIERRA SUNSET	RANCH WOOD CT	\$403,263
ST. ANDREWS - OAKDALE CC ESTATES	2500 ATLAS	\$403,263
TOTAL COUNTY PGA= .15G		\$2,016,315

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.25G

Sub Division	Location	Cost
17PM9 - INDUSTRIAL AREA - FARRAR AVE	FARRAR AVE	\$403,263
46-PM-63 AUTO CENTER COURT	AUTO CENTER CT	\$403,263
ALYSSA AVENUE - KIERNAN ESTATES	N/HORACE WAY	\$758,580
ARDENCOURT - WALNUT GREEN ESTATES	S/GREENVIEW	\$403,263
BANGS INDUSTRIAL PARK 35-PM-34	GALAXY WAY	\$403,263
BRANDI WAY - REICH MANOR NO. 3	W/GRATTON	\$403,263
CASABA WAY - RAYMOND TRACT CSA NO. 6	S/STELLA (KEYES)	\$403,263
CORONA WAY - GLENMOOR ESTATES	W/MILLS STREET	\$403,263
COUNTRY CLUB - COUNTRY CLUB LANE	E/DEL RIO	\$403,263
DANIEL COURT - SUNNYBROOK VILLAGE WEST	E/DANIEL	\$758,580

DEL RIO HEIGHTS	HARTLEY DR	\$403,263
DURLEY DRIVE - CLARENDON WOODS NO. 1	AT WESSEX LANE	\$758,580
ELMSBURY DRIVE - BRISTOL GLEN CSA NO. 4	AT KILLIGREW	\$758,580
ESTATES DRIVE - SHERMAN ESTATES	E/CHURCH STREET	\$403,263
EVELLE LANE - LA JUNE ESTATES	E/JOHNSON (TURLOCK)	\$403,263
GREENLEAF COURT - GREENLEAF INDUSTRIAL PARK	E/SISK ROAD	\$758,580
HARTLEY DRIVE - WALNUTWOODS	S/END WALNUTWOOD DRIVE	\$403,263
HILLCREST DRIVE - RANCH DEL RIO	S/COUNTRY CLUB DRIVE	\$403,263
KATELLA DRIVE - GLENMOOR ESTATES	CHALMER WAY	\$403,263
LA JOLLA	BLACK BERRY WAY	\$403,263
MARY LOU DRIVE - HONEY BEE ESTATES CSA NO. 8	N/FRONA DRIVE	\$403,263
NORTH EMPIRE MANOR UNIT #3 (17-PM-74 )	CAMERON WAY	\$403,263
ORLANDO DRIVE	WESTLEY DRIVE (CERES)	\$403,263
PARKLAWN AVENUE - IN OLYMPIC PARK	PEARSON AVENUE	\$403,263
PARKSIDE PLAZA NO.1	TOOMES RD-WHITESTONE WAY	\$758,580
PECOS AVENUE - PORTER ESTATES NO. 2	AERON STREET (CERES)	\$403,263
PIN RIDGE PLAZA	SOUZA AVE	\$403,263
PIRRONE ROAD - MORGAN GLEN ESTATES	N/KIERNAN AVENUE	\$758,580
Portion Lavery Industrial Park	WELLS AVE	\$403,263
RAVENNA WAY - ENTERPRISE HOMES	N/TYSON STREET	\$403,263
ROMIE WAY - MYSTY LAND ESTATES	N/WALTON	\$403,263
SHERRY COURT	E/SHERRY LANE	\$403,263
SOLAR AVENUE - HERNDON ESTATES	ORBIT LANE (CERES)	\$403,263
SOMERSET ESTATES NO.1	wincanton rd	\$758,580
STARLITE DRIVE - STARLITE PLACE CSA NO. 5	W/FAITH HOME ROAD	\$403,263
STILLWATER DRIVE - SUNNYBROOK VILLAGE	E/OVERLAND PLACE	\$758,580
STODDARD ROAD - LANDMARK BUSINESS CENTER	S/KIERNAN	\$758,580

SUNSET TERRACE - KEYES NORTH	W/GREENDALE (KEYES)	\$403,263
WINGATE DRIVE - WALNUT GREEN NORTH	W/SPERRY	\$403,263
ZINFANDEL AVENUE - DeARBOLES ESTATES	N/ESCAMILLA AVENUE	\$758,580
ZINFANDEL AVENUE - EDGEWOOD ESTATES	N/PARKS AVENUE	\$758,580
TOTAL COUNTY PGA= .25G		\$20,797,587
<b>GRAND TOTAL DRAINAGE DISTRICTS</b>		<b>\$22,813,902</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.15G

District	Number	Cost
Almond Wood Estates Lighting District	38	\$266,000
Country Club Estates Lighting District	1	\$7,000
Denair Lighting District	11	\$77,000
Deo Gloria Estates Lighting District	12	\$84,000
Gibbs Ranch Lighting District	5	\$35,000
Gilbert Road Lighting District	2	\$14,000
North Oaks Lighting District	21	\$147,000
Sunset Oaks Lighting District	51	\$357,000
<b>TOTAL COUNTY PGA= .15G</b>	<b>141</b>	<b>\$987,000</b>

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**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.25G

District	Number	Cost
Almond Wood Estates Lighting District	24	\$168,000
Beard Industrial Lighting District	18	\$126,000
Bret Harte Landscape & Lighting District	2	\$14,000
Country Club Estates Lighting District	2	\$14,000
Denair Lighting District	139	\$973,000
Deo Gloria Estates Lighting District	6	\$42,000



Empire Lighting District	51	\$357,000
Gibbs Ranch Lighting District	2	\$14,000
Hillcrest Lighting District	77	\$539,000
Mancini Tract Lighting District	36	\$252,000
North McHenry No.2 Lighting District	8	\$56,000
North McHenry Lighting District	79	\$553,000
North Oaks Lighting District	2	\$14,000
Paradise South Landscape & Lighting District	1	\$7,000
Peach Blossom Estates Lighting District	5	\$35,000
Salida Lighting District	645	\$4,515,000
Schwartz-Baize Lighting District	1	\$7,000
Sunset Oaks Lighting District	28	\$196,000
Tempo Park Lighting District	61	\$427,000
<b>TOTAL COUNTY PGA= .25G</b>	<b>1187</b>	<b>\$8,309,000</b>

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**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .35G

District	Number	Cost
Crowslanding Lighting District	22	\$154,000
<b>TOTAL COUNTY PGA= .35G</b>	<b>22</b>	<b>\$154,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration=.45G

District	Number	Cost
Crowslanding Lighting District	1	\$7,000
TOTAL COUNTY PGA= .45G	1	\$7,000
<b>GRAND TOTAL LIGHTING DISTRICTS</b>	<b>1351</b>	<b>\$9,457,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY TRAFFIC SIGNALS**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .15G

Location	Cost
ALBERS RD AT MILNES RD	\$250,000
CLARIBEL AT ALBERS	\$250,000
CLARIBEL AT OAKDALE	\$250,000
PATTERSON RD AT ALBERS RD	\$250,000
<b>TOTAL COUNTY PGA= .15G</b>	<b>\$1,000,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY TRAFFIC SIGNALS**

HAZARD: EARTHQUAKE

Jurisdiction County: Percent Peak Ground Acceleration= .25G

Location	Cost
Broadway At Salida Blve	\$250,000
BUTTE CROWS LANDING	\$250,000
Carpenter Road At Paradise Road	\$250,000
Crows Landing At Whitmore	\$250,000
FINCH RD AT MARIPOSA RD	\$250,000
GEER RD AT HATCH RD	\$250,000
GEER RD AT KEYES RD	\$250,000
GEER RD AT SERVICE RD	\$250,000
HACKETT AT CROWS LANDING	\$250,000
HATCH AT CROWS LANDING	\$250,000

Hatch RoadAt Morgan Road	\$250,000
Herndon Road At Joyce Ave	\$250,000
KANSAS AVE AT EMERALD AVE	\$250,000
Keyes Road At Golden Blvd	\$250,000
KIERNAN AVE AT N. HWY99	\$250,000
KIERNAN AVE AT S. HWY99	\$250,000
KIERNAN AVE AT SISK RD	\$250,000
LATIMER AT 9TH STREET	\$250,000
LESTER RD AT MAIN ST	\$250,000
MITCHELL AT RIVERSIDE	\$250,000
MITCHELL RD AT TENAYA DR	\$250,000
PARADISE RD AT BURBANK	\$250,000
PECOS RD AT 9TH STREET	\$250,000
PELANDALE AVE AT SISK RD	\$250,000
PELANDALE RD AT SALIDA BLVD	\$250,000
SCHOOL AVE AT CROWS LANDING RD	\$250,000
SERVICE AT CROWS LANDING	\$250,000
SERVICE RD AT CENTRAL AVE	\$250,000
Stewart Road At McHenry Ave	\$250,000
WINMOORE CROWS LANDING	\$250,000
Woodland Ave At Carpenter Road	\$250,000
TOTAL COUNTY PGA= .25G	\$7,750,000
<b>GRAND TOTAL TRAFFIC SIGNALS</b>	<b>\$8,750,000</b>

# RISK ASSESSMENT—Plan Update



Landslide

# RISK ASSESSMENT/LANDSLIDE

## LANDSLIDE DESCRIPTION

According to the USGS National Landslide Information Center (NLIC), the term “landslide” is defined as the movement of a mass of rock, debris, or earth down a slope. The force of gravity acting upon a steep (or sometimes, even a moderately steep) slope is the primary cause of a landslide. Slope failure occurs when the force of gravity pulling the slope downward exceeds the strength of the earth materials that comprise the slope to hold it in place. In addition to the force of gravity, other contributing factors to landslides can include rainfall, earthquakes, changes in groundwater, and human-induced modifications to existing slopes. The potential for a landslide to occur exists in every state wherever very weak or fractured materials are resting on a moderate to steep slope.



The severity of a landslide depends in large part on the degree of development in the area in which it occurs and the geographic area of slide itself. Generally speaking, landslides often result in devastating consequences, but in very localized areas. A landslide occurring in an undeveloped area would be less severe because lives and property would not be affected; the only impacts would be to land, vegetation, and possibly some wildlife. On the contrary, a landslide occurring in a developed area could have devastating affects, ranging from structure and infrastructure damage to injury and/or loss of life. Structures or infrastructure built on susceptible land would likely collapse as their footings slide downhill, while those below the land failure would likely be crushed. Landslides in the area of roadways could have the potential to fall and damage or destroy vehicles, and force other drivers to have accidents.

## PROFILING HAZARDS

NATURAL HAZARD	HOW IDENTIFIED	WHY IDENTIFIED
LANDSLIDE	<ul style="list-style-type: none"> <li>• California proclaimed State of Emergency</li> <li>• County General Plan Safety Element</li> <li>• County Emergency Operations Plan</li> <li>• Input from Planning Director</li> <li>• Input from Public Works Director</li> <li>• Input from MJHMP Planning Team</li> <li>• Risk Assessments</li> <li>• Feedback from MJHMP partners through submittal of the Hazard Identification Questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>• Previous occurrences</li> </ul>

## **LOCATION**

Virtually the entire area located west of Interstate 5 is composed of geological formations that, due to structure, slope, runoff, lack of vegetation, earthquake and human activity, are considered extremely susceptible to failure and sliding.

## **EXTENT**

In the winter of 1982-1983, saturation of the soil in this area resulted in a considerable amount of damage to Del Puerto Canyon Road. There is a history of a number of slides throughout the Diablo Range in Stanislaus County.

## **PROBABILITY OF FUTURE EVENTS**

It is evident that the steep slopes and undesirable geology of the area on the west side of the County, even without considering the very real possibility of an earthquake, present substantial risks in certain conditions.

## **NEW OCCURRENCES**

There have been no new occurrences since the County's original MJHMP plan was adopted on January 12, 2006.

## **ASSESSING VULNERABILITY: OVERVIEW**

On a California Division of Mines and Geology scale used to rate landslide potential, this area is rated at five, the next to highest rating on a scale of six. The remainder of the area is rated at six. The prime reason is the generally unstable formation comprising the underlying geologic structure of the Diablo Range.

Stanislaus County took into account the following when updating our vulnerability assessment:

- Updates to inventories of existing structures in hazard areas, including new development, and redeveloped areas or structures;
- Potential impacts of future land development, including areas that may be annexed in the future;
- New buildings; and
- Completed mitigation actions that reduced overall vulnerability.

## **ASSESSING VULNERABILITY: IDENTIFYING STRUCTURES**

This section is based on an inventory of existing and future buildings, infrastructure, and critical facilities located within the identified landslide hazard area boundaries.

Hazards due to landslide events are mostly limited to areas within the foothills at the western and eastern edges of Stanislaus County, and along specific river bluff regions near rivers and streams. Those areas near rivers and streams are subject to natural erosion, although erosion activity may be increased during flood events.

No County occupied buildings other than non-critical "out" structures are located at sites having a landslide risk. County infrastructure (roads, utilities, drainage, and bridge structures) may be subject to landslide hazards; however, most landslide threats are limited in scale to a specific point.

Several State highways traverse cuts through hillsides or along river bluffs where landslide hazards may pose a risk, including State Routes 4, 108, 120, 132, 219 and Interstate 5. County roads at risk include:

<b>COUNTY ROADS AT RISK</b>	
Ingram Creek Road	Roberts Ferry Road
Del Puerto Canyon Road	Lake Road
Diablo Grande Parkway	Warnerville Road
Orestimba Road	Crabtree Road
Crows Landing Road-at San Joaquin River	La Grange Road
South Carpenter Road	Cooperstown Road
Grayson Road (at San Joaquin River)	Los Cerritos Road
Paradise Road (at San Joaquin River)	River Road (Ceres area)
Shiloh Road (at Tuolumne River)	Mitchell Road (at Tuolumne River)
Santa Fe Avenue	Hills Ferry Road
Geer/Albers Roads	

### **ASSESSING VULNERABILITY: ESTIMATING POTENTIAL LOSSES**

This section describes the vulnerability in terms of dollar losses and provides the community and the State of California with a common framework in which to measure the effects of hazards on vulnerable structures. The County has reviewed and revised this new plan to reflect changes in development and updated the inventory of structures.

In the event of a specific landslide event, the County's GIS system Multi-Jurisdictional Hazard Mitigation Plan layers can quickly identify land use, population, valuation risks interactively with emergency response officials.

The data reports for Population and Housing Units by Jurisdiction, Total Property Value by Jurisdiction, Existing County Facilities, Future County Facilities, County Bridges, County Drainage Districts, County Lighting Districts, and County Traffic Signals are included in the following pages.

### **ASSESSING VULNERABILITY: ANALYZING DEVELOPMENT TRENDS**

Construction is possible west of Interstate 5, but any proposals for significant development (anything other than the currently permitted two dwellings for every 160 acres), should include a geological report identifying potential problems and mitigation measures to be incorporated into the development plan.

The County shall utilize the California Environmental Quality Act (CEQA) process to ensure that development does not occur that would be especially susceptible to landslides. Most discretionary projects require review for compliance with CEQA. As part of this review, potential impacts must be identified and mitigated or a statement of overriding concerns adopted.

The routes of new public roads in areas subject to landslides shall be designed to minimize landslide risks.

### **MULTI-JURISDICTIONAL RISK ASSESSMENT**

Each participating jurisdiction has reviewed, updated, and prepared their own risk assessment to identify where their risks vary from the risks facing the entire planning area of the County. See Volumes Two and Three for assessments from participating multi-jurisdictional partners.





STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

TOTAL PROPERTY VALUE BY JURISDICTION--COUNTY

HAZARD: LANDSLIDES

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
Commercial								
Industrial								
Non-Assessable								
Residential								
Residential-Income								
Rural, Farm, Agricultural								
Vacant Commercial								
Vacant Residential								
<b>TOTAL</b>	0	0	0	0	0	0	0	0







STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN		
COUNTY DRAINAGE DISTRICTS		
HAZARD: LANDSLIDES		
Sub Division	Location	Cost
0	0	0







# RISK ASSESSMENT—Plan Update



Dam Failure

# RISK ASSESSMENT/DAM FAILURE

## DAM FAILURE DESCRIPTION

Dam failure is the breakdown, collapse or other failure of a dam structure characterized by the uncontrolled release of impounded water that results in downstream flooding. In the event of a dam failure, the energy of the water stored behind even a small dam is capable of causing loss of life and severe property damage if development exists downstream. An uncontrolled breach is the unintentional discharge from the impounded water body and is considered a failure. Dam failure can result from natural events or human-induced events. Natural occurrences that may cause dam failure include floods, earthquakes and landslides. Dams have received more attention recently in the emergency management community as a potential target for terrorist acts.



Dam failure presents a significant potential for disaster, because there would be considerable loss of life and property in addition to the possible loss of power and water resources. The most common cause of dam failure is prolonged rainfall that produces flooding. Failures due to other natural events such as earthquakes or landslides are significant because there is little advance warning. The best way to mitigate dam failure is through the proper construction, inspection, maintenance, and operation of the dam.

## PROFILING HAZARDS

NATURAL HAZARD	HOW IDENTIFIED	WHY IDENTIFIED
DAM FAILURE	<ul style="list-style-type: none"> <li>• County General Plan Safety Element</li> <li>• County Emergency Operations Plan</li> <li>• Input from MJHMP Planning Team</li> <li>• Feedback from MJHMP partners through submittal of the Hazard Identification Questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>• Potential to cause devastation.</li> </ul>

## LOCATION

Three major dams have a direct effect on Stanislaus County. LaGrange Dam, located in the eastern corner of Stanislaus County, is situated on the Tuolumne River just above the town of LaGrange and operated by the Modesto and Turlock Irrigation Districts.

Don Pedro Dam is located in Tuolumne County on the upper Tuolumne River. It has a gross pool capacity of 2,030,000 acre feet and is operated jointly by the Modesto and Turlock Irrigation Districts and the City of San Francisco.

New Melones Dam, located in both Tuolumne and Calaveras Counties, is located on the Stanislaus River and operated by the U.S. Bureau of Reclamation. Gross pool capacity of New Melones is 2,420,000 acre feet.

## **EXTENT**

A severe storm, earthquake or erosion of the embankment and foundation leakage may cause the collapse and structural failure of dams in or adjacent to Stanislaus County. Seismic activity may also cause inundation by the action of a seismically induced wave that overtops the dam without causing failure of the dam, but significant flooding downstream. Landslides flowing into Lakes and Reservoirs may also cause dams to fail or overtop.

## **PROBABILITY OF FUTURE EVENTS**

There have been no previous occurrences.

## **NEW OCCURRENCES**

There have been no new occurrences since the County's original MJHMP plan was adopted on January 12, 2006.

## **ASSESSING VULNERABILITY: OVERVIEW**

Stanislaus County took into account the following when updating our vulnerability assessment:

- Updates to inventories of existing structures in hazard areas, including new development, and redeveloped areas or structures;
- Potential impacts of future land development, including areas that may be annexed in the future;
- New buildings; and
- Completed mitigation actions that reduced overall vulnerability.

The catastrophic failure of New Melones, Don Pedro, or LaGrange dams will have severe consequences resulting in injuries, loss of life, limited transportation routes, and a decrease in vital utilities. Additionally, because of Stanislaus County's strong agricultural influences significant downstream property damage, and the loss of domestic and farm production animals, will be a major concern.

There are a number of dams, both in and out of the County on the east and west sides, which could produce flooding should they fail. There are requirements that the owners of dams prepare maps showing areas, which would be flooded, should the dams fail. For purposes of emergency preparedness, areas expected to be inundated, should a failure occur, are depicted "Dam Failure Inundation Areas." More specific emergency preparedness information and potential hazards can be found in the individual Emergency Plan for each dam. These plans are available at the Office of Emergency Services and will be available in the EOC when activated.

## **ASSESSING VULNERABILITY: IDENTIFYING STRUCTURES**

This section is based on an inventory of existing and future buildings, infrastructure, and critical facilities located within the identified dam failure hazard area boundaries.

**For the Dam Inundation hazard, there are five (5) GIS maps:**

- Two GIS maps of Stanislaus County showing the dam inundation areas of regional dams;
- GIS map showing the northern County assets in relation to dam inundation areas of regional dams;
- GIS map showing the southern County assets in relation to dam inundation areas of regional dams; and
- GIS map showing the placement of the planned future facilities in the County in relation to dam inundation areas of regional dams. The County used our Final Capital Improvement Plan for Fiscal Year 2009-2010 to identify the sites where planned facilities are known. However, sites of other planned future projects have not yet been identified. Mitigation of local hazards is always of the utmost importance when the County is considering the location of future facilities.

The dams presenting an inundation risk for Stanislaus County are:

- Don Pedro Reservoir
- Exchequer Reservoir
- New Melones Reservoir
- Pine Flat Reservoir
- San Luis Reservoir
- Tulloch Reservoir

There are eight (8) separate data reports for each dam. They include:

- Populations and Housing Units by jurisdiction;
- Total Property Value by jurisdiction;
- Existing County facilities;
- Future County Facilities;
- Infrastructure-County Bridges;
- County Drainage Districts;
- County Lighting Districts; and
- County Traffic Signals.

Facilities affected by a dam failure are:

- Modesto City/County Airport
- Bridges
- Highways
- Hospitals
- Schools
- Utilities
- Emergency Services
- Agriculture
- Sanitation
- Residential
- Domestic Water Supply

## ASSESSING VULNERABILITY: ESTIMATING POTENTIAL LOSSES

This section describes the vulnerability in terms of dollar losses and provides the community and the State of California with a common framework in which to measure the effects of hazards on vulnerable structures. The County has reviewed and revised this new plan to reflect changes in development and updated the inventory of structures.

Inundation due to dam failure within the San Joaquin Valley is a low-probability but high-risk hazard. The potential risk for inundation of property is present in nearly all of the developed areas of Stanislaus County; however, catastrophic failure or flooding release of water from multiple dams at a single point in time is considered to be extremely unlikely.

The table below summarizes the population, number of housing units, and total property value at risk from inundation by name of dam.

POPULATION AND PROPERTY VALUE ANALYSIS BY DAM			
Name of Dam	Population	Households	Total Value
<b>Don Pedro Reservoir</b>	17,878	5,892	\$2,126,724,825
<b>Exchequer Reservoir</b>	6,331	2,054	\$569,460,328
<b>New Melones Reservoir</b>	38,445	12,698	\$3,852,827,574
<b>Pine Flat Reservoir</b>	2,691	722	\$147,947,697
<b>San Luis Reservoir</b>	11,040	3,509	\$858,654,988
<b>Tulloch Reservoir</b>	13,105	4,074	\$1,096,169,225

### Interactive Resources

Stanislaus County has incorporated risk data supplied from the State of California Office of Emergency Services, property valuation and land use data, and County facilities data into layers within a secured geographic information system (GIS) database to provide specific risk and value data pertinent to a specific dam failure event. The GIS system allows authorized users to define a specific area within the County and to rapidly identify land use, ownership, population, and housing and valuation data for all included properties. Specific County-operated facilities and infrastructure are also layered into the GIS system. Property valuation and land use data is updated live as the County Assessor conducts property appraisals as the system is linked directly to the Assessor's database. County facilities and infrastructure are updated periodically as changes occur. The County is working to add layers to the GIS system to identify potential resources such as location and capacity of possible shelters and medical care facilities in the near future.

### Existing County Facilities

The table below shows a breakdown of the number of existing County facilities and the total value by dam. The total value number includes property value, personal property value, and rent value. In the event of a dam failure it is anticipated that the following existing County facilities could be negatively impacted.

EXISTING COUNTY FACILITIES TOTAL VALUE BY DAM		
Name of Dam	Existing Facilities	Total Value
Don Pedro Reservoir	21	\$9,342,767
Exchequer Reservoir	21	\$5,672,586
New Melones Reservoir	76	\$353,933,135
Pine Flat Reservoir	22	\$7,386,424
San Luis Reservoir	22	\$7,386,424
Tulloch Reservoir	3	\$2,432,991

### Future County Facilities

The table below shows a breakdown of the number of future County facilities and the total value that could be negatively impacted in the event of a dam failure.

FUTURE COUNTY FACILITIES TOTAL VALUE BY DAM		
Name of Dam	Future Facilities	Total Value
Don Pedro Reservoir	0	\$0
Exchequer Reservoir	0	\$0
New Melones Reservoir	1	\$24,000,000
Pine Flat Reservoir	2	\$2,365,000
San Luis Reservoir	2	\$2,365,000
Tulloch Reservoir	0	\$0

### County Bridges

The table below reflects the cost of County Bridges in the event of a dam failure. The associated data reports further break out the following information: crossing name, bridge number, road name, and type of bridge such as slab or girder.

COUNTY BRIDGES BY DAM		
Name of Dam	# of Bridges	Cost
Don Pedro Reservoir	42	\$163,395,325
Exchequer Reservoir	16	\$114,846,804
New Melones Reservoir	42	\$124,724,934
Pine Flat Reservoir	9	\$23,747,042
San Luis Reservoir	15	\$29,253,889
Tulloch Reservoir	12	\$24,030,355

### County Drainage Districts

The table below reflects the cost of County Drainage Districts in the event of a dam failure. The associated data reports break out drainage districts by sub division name, and location.

COUNTY DRAINAGE DISTRICTS BY DAM		
Name of Dam	Drainage Districts	Cost
Don Pedro Reservoir	5	\$2,016,315
Exchequer Reservoir	0	\$0
New Melones Reservoir	25	\$14,345,379
Pine Flat Reservoir	0	\$0
San Luis Reservoir	0	\$0
Tulloch Reservoir	9	\$6,827,220

### County Lighting Districts

The table below reflects the value of County Lighting Districts in the event of an inundation hazard:

COUNTY LIGHTING DISTRICTS BY DAM		
Name of Dam	Lighting Districts	Cost
Don Pedro Reservoir	70	\$490,000
Exchequer Reservoir	0	\$0
New Melones Reservoir	1,010	\$7,070,000
Pine Flat Reservoir	0	\$0
San Luis Reservoir	0	\$0
Tulloch Reservoir	546	\$3,822,000

## County Traffic Signals

The table below reflects the value of County Traffic Signals in the event of an inundation hazard. The associated data report shows the location of each traffic signal by street name.

COUNTY TRAFFIC SIGNALS BY DAM		
Name of Dam	Traffic Signals	Cost
Don Pedro Reservoir	5	\$1,250,000
Exchequer Reservoir	0	\$0
New Melones Reservoir	12	\$3,000,000
Pine Flat Reservoir	0	\$0
San Luis Reservoir	0	\$0
Tulloch Reservoir	3	\$750,000

### ASSESSING VULNERABILITY: ANALYZING DEVELOPMENT TRENDS

Growth continues to occur within the valley floor adjacent to the existing incorporated cities, with few exceptions. The risks of inundation resulting from failure of a dam pose a threat to the entire valley floor and, in particular, from New Melones and Don Pedro dams within the area of greatest population density. In the western side of the valley and along the San Joaquin River, inundation caused by the failure of San Luis Dam and Exchequer Dam predominantly threatens the Newman, Patterson and Grayson communities.

The Stanislaus County Board of Supervisors has maintained support for the preservation of agricultural resources through the adoption of the Agricultural Element of the General Plan. This policy has minimized "leap frog" development and the resulting conflict with agricultural uses throughout Stanislaus County. The Board has also encouraged the development of "infill" areas within existing communities as a priority over expansion into existing agricultural lands.

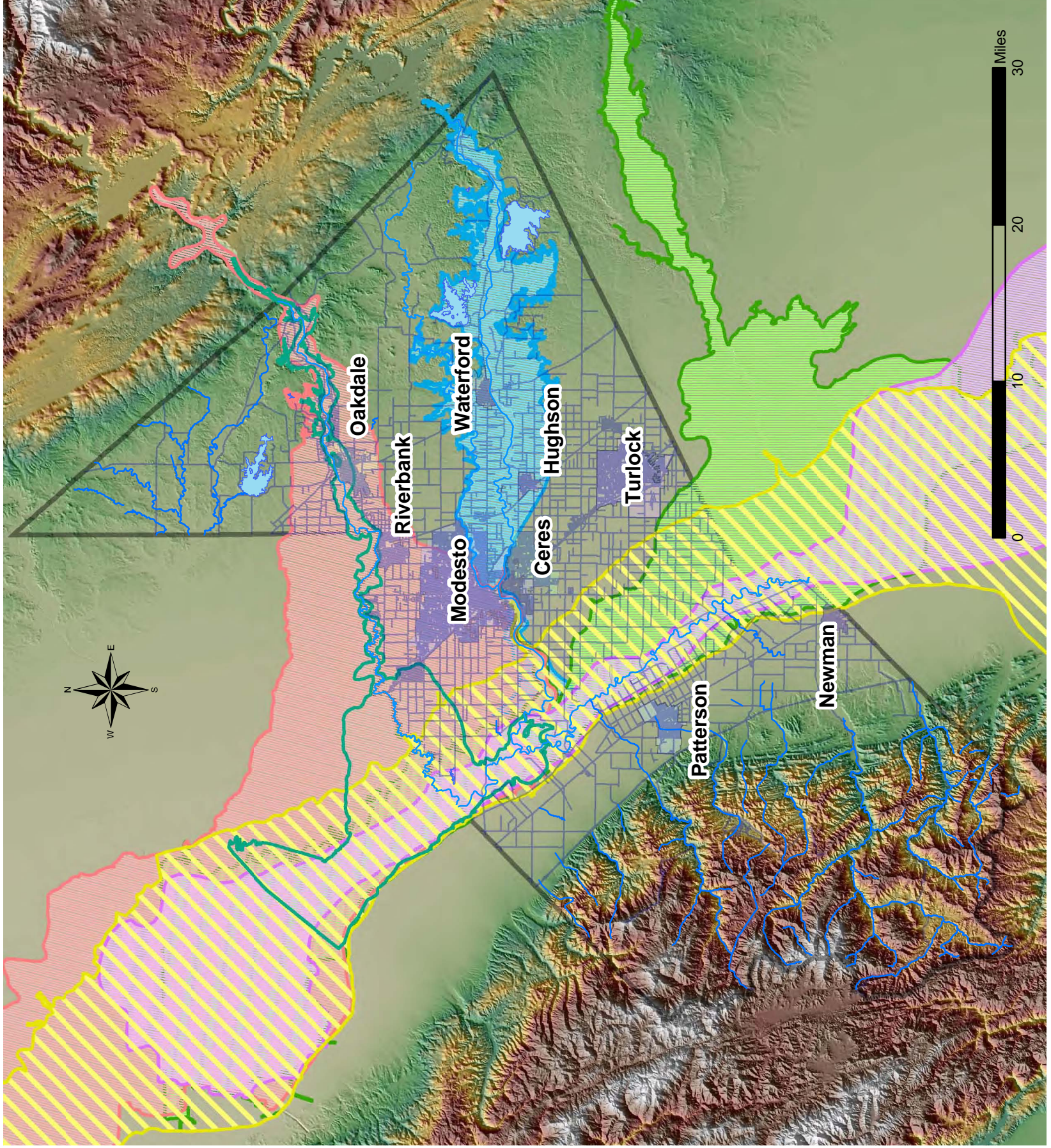
In Stanislaus County, the vast majority of developable lands lie within areas potentially subject to inundation due to dam failure. Inundation from dam failure in Stanislaus County could potentially be catastrophic given the potentially widespread area affected; however, such an event would be an extraordinary occurrence with little probability.

### MULTI-JURISDICTIONAL RISK ASSESSMENT

Each participating jurisdiction has reviewed, updated, and prepared their own risk assessment to identify where their risks vary from the risks facing the entire planning area of the County. See Volumes Two and Three for assessments from participating multi-jurisdictional partners.



# 2010 Stanislaus County -- Dam Inundation Hazard



## Map Legend:

- Lakes
- Rivers
- Streams
- Roads

## Dam Inundation Areas

### Dam Name

- Don Pedro
- Exchequer
- New Melones
- San Luis
- Pine Flat
- Tulloch

Map displays Stanislaus County with Dam Inundation Areas of regional dams.

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

# 2010 Stanislaus County -- Dam Inundation Hazard



## Map Legend:

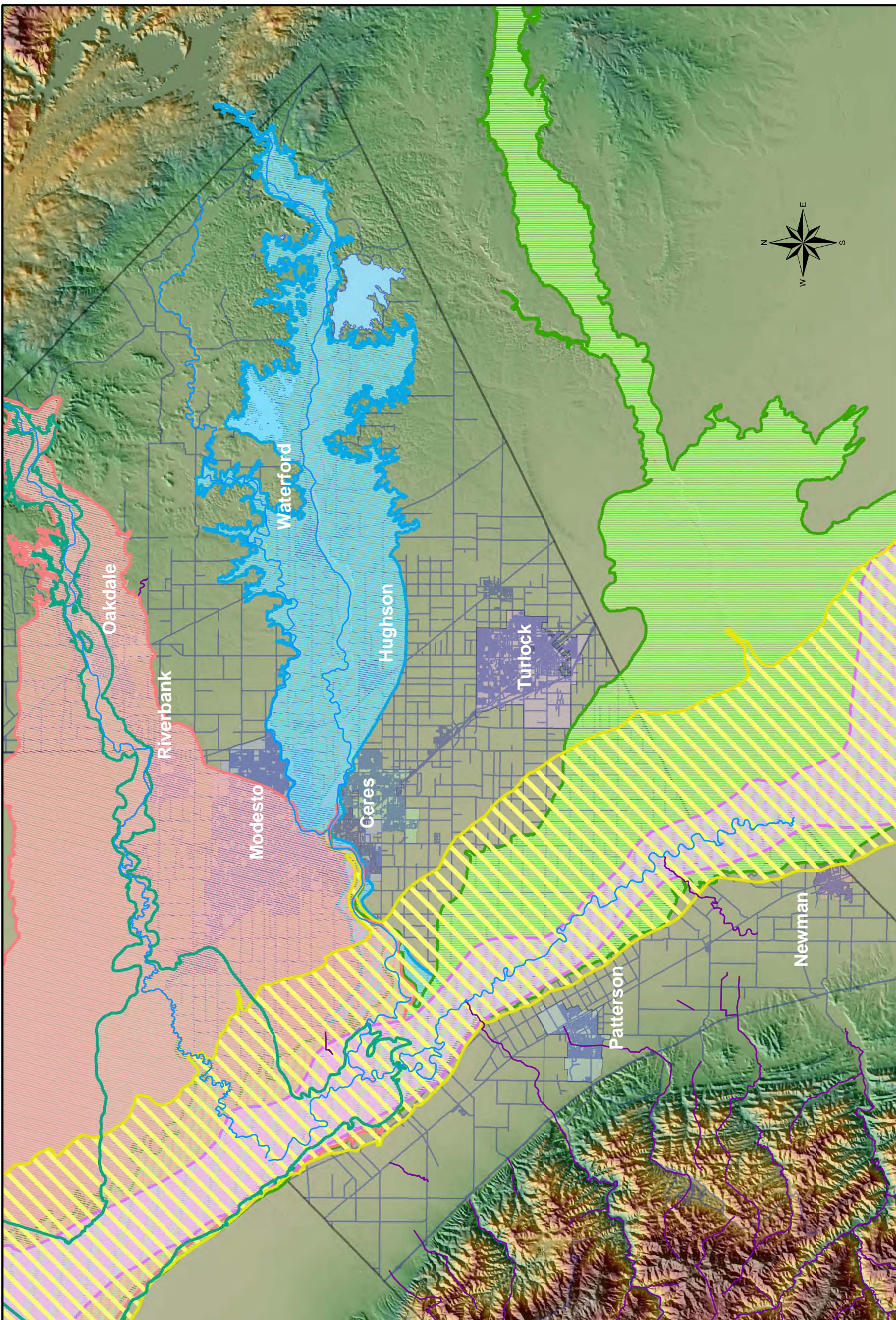
- Lakes
- Rivers
- Streams
- Roads

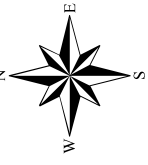
## Dam Inundation Areas

- | Dam Name    | Symbol |
|-------------|--------|
| Don Pedro   |        |
| Exchequer   |        |
| New Melones |        |
| San Luis    |        |
| Pine Flat   |        |
| Tulloch     |        |

Map displays Stanislaus County with Dam Inundation Areas of regional dams.

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009



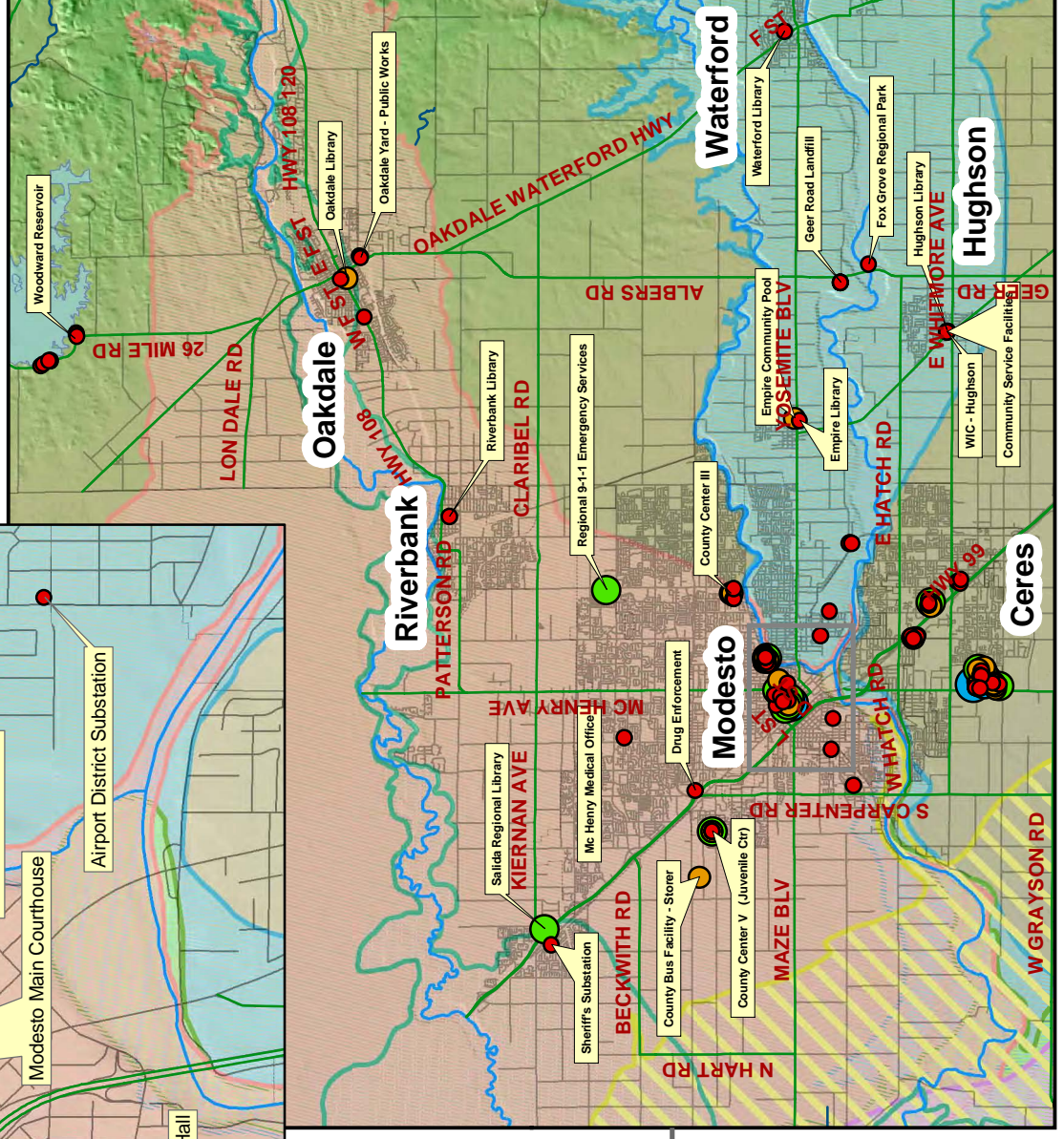
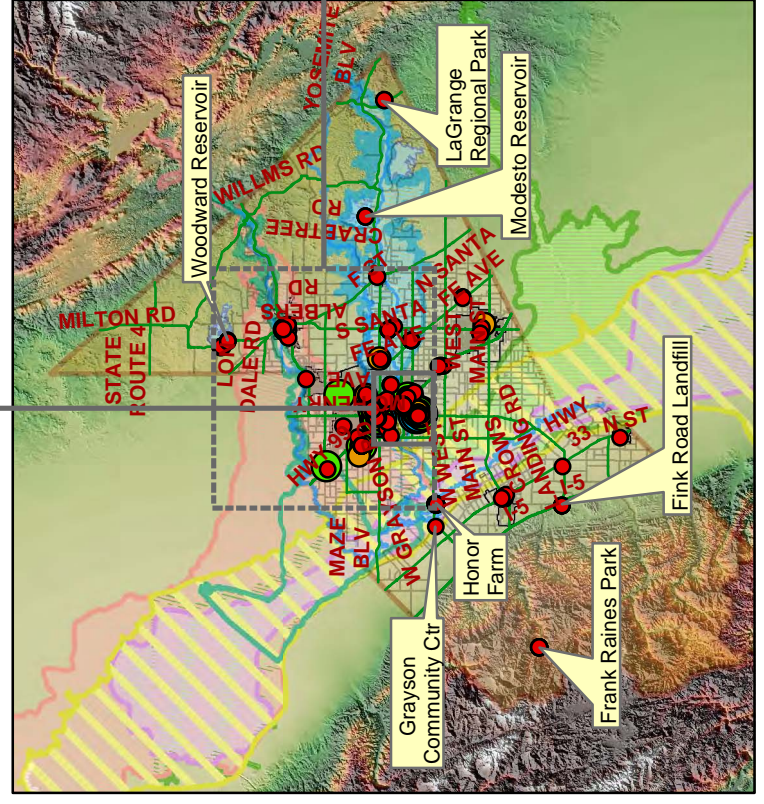
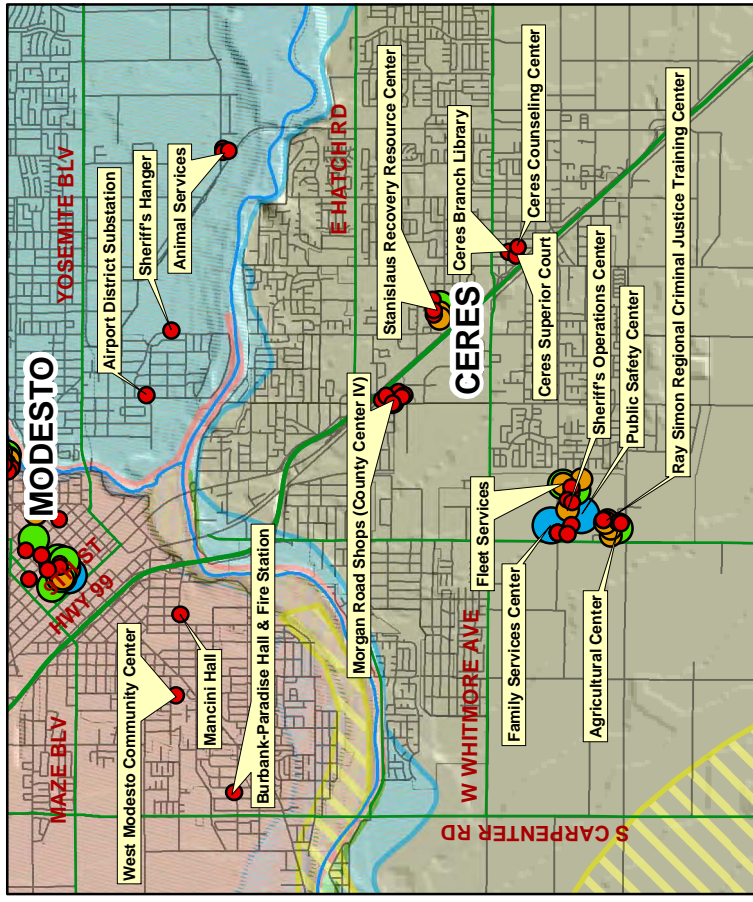
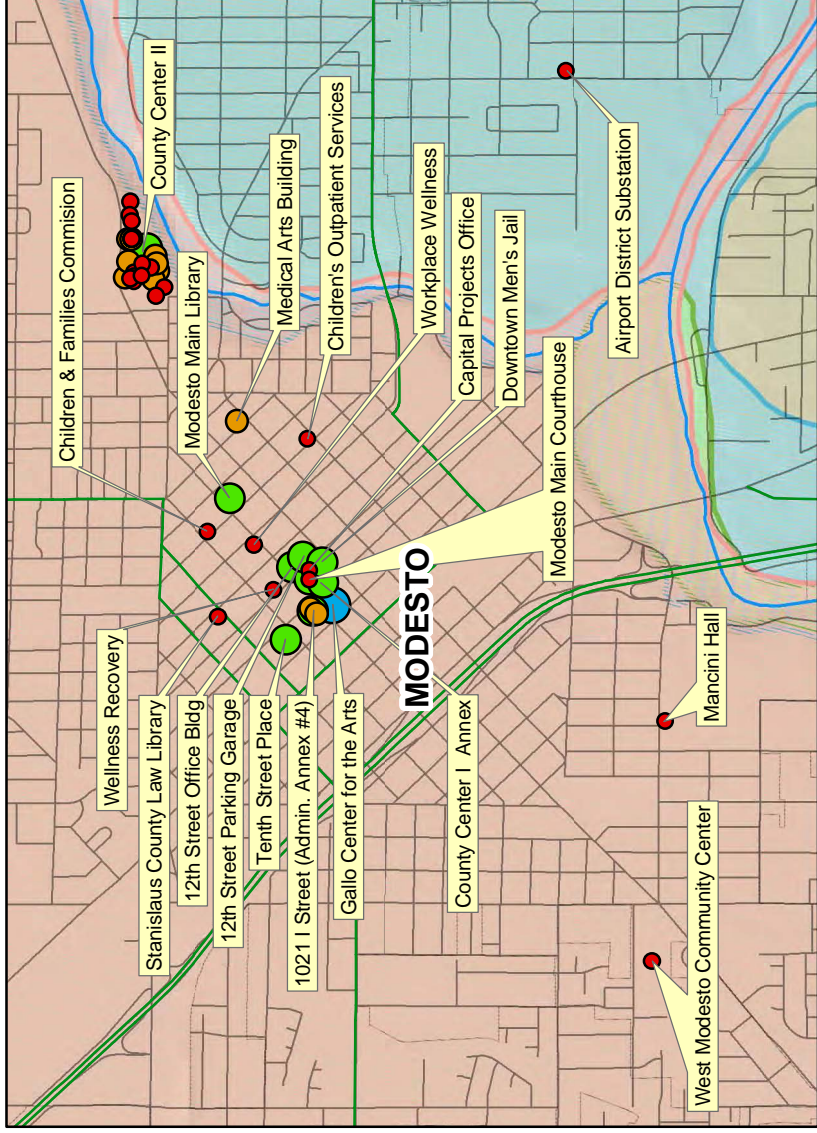


# 2010 Stanislaus County (North) Facilities Map – Dam Inundation Hazard



Map of Northern County Assets  
in relation to  
Dam Inundation Areas  
of regional dams.

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009



### Map Legend:

- Lakes
- Rivers
- Roads

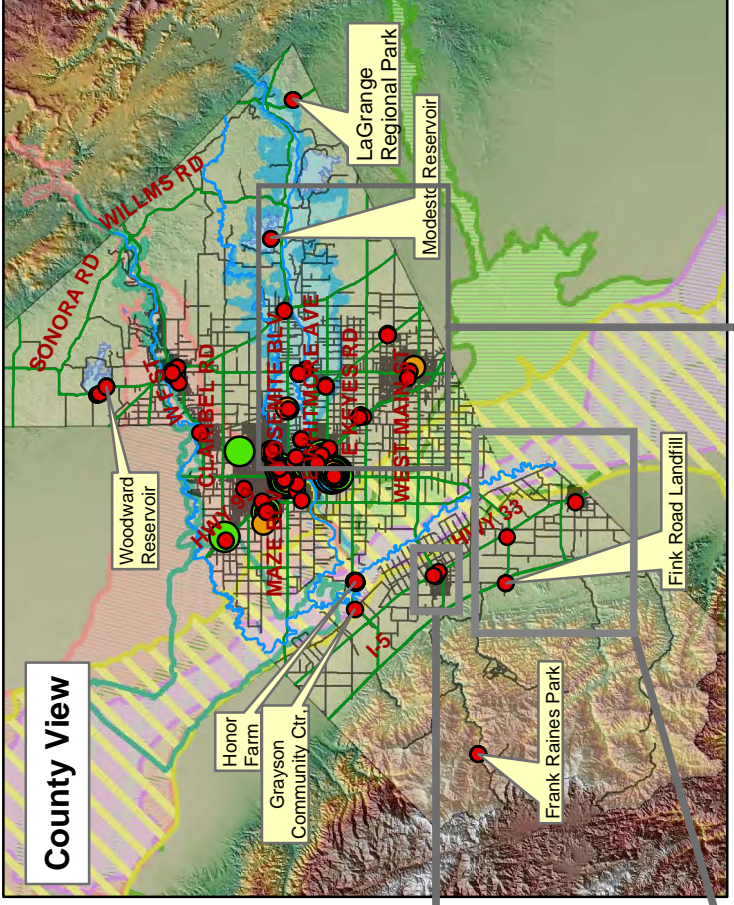
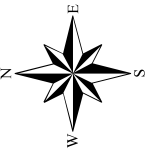
### County Facilities

- Total Facility Value**
- < \$2,000,000
  - \$2,000,000 - \$10,000,000
  - \$10,000,000 - \$30,000,000
  - > \$30,000,000

### Dam Inundation Areas

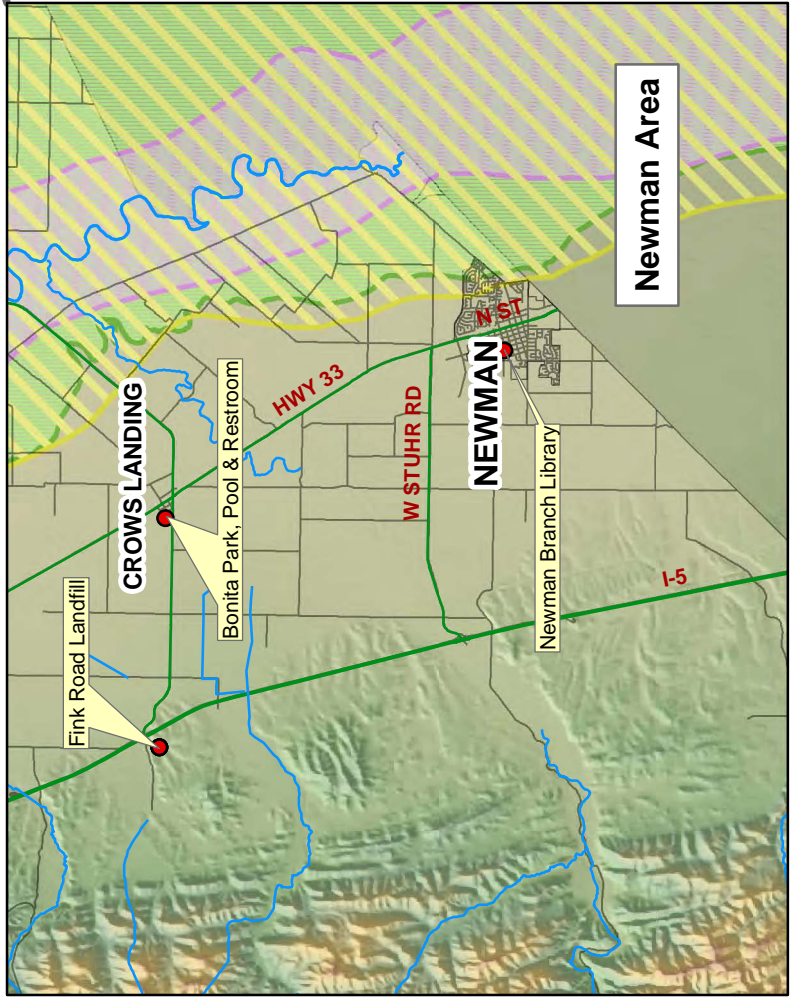
- Dam Name**
- Don Pedro
  - Exchequer
  - New Melones
  - San Luis
  - Pine Flat
  - Tulloch

# 2010 Stanislaus County (South) Facilities Map -- Dam Inundation Hazard



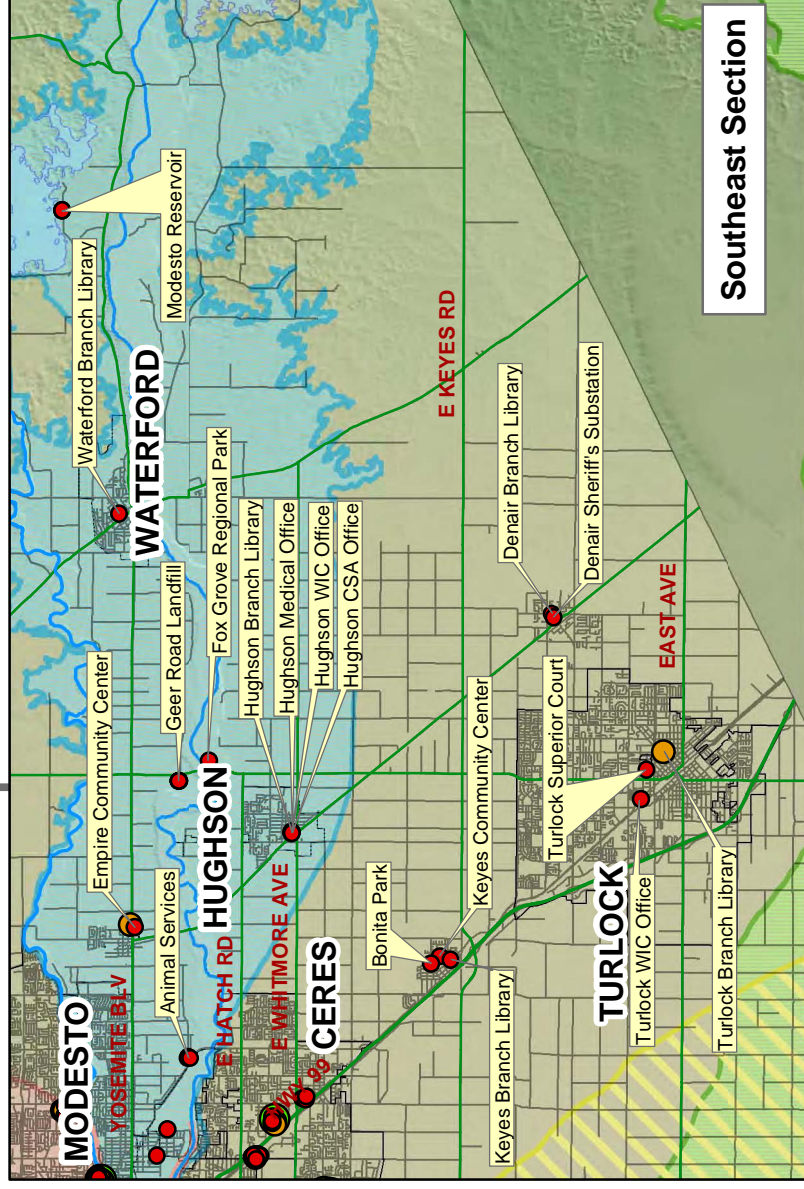
Map of Stanislaus County Assets in the Southern County area in relation to Dam Inundation Areas of regional dams.

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

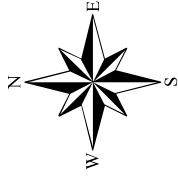


**Map Legend:**

- Lakes (Blue wavy line)
- Rivers (Blue line)
- Roads (Black line)
- County Facilities (Black outline)
- Total Facility Value
  - < \$2,000,000 (Red circle)
  - \$2,000,000 - \$10,000,000 (Orange circle)
  - \$10,000,000 - \$30,000,000 (Green circle)
  - > \$30,000,000 (Blue circle)
- Dam Inundation Areas
  - Don Pedro (Blue hatched)
  - Exchequer (Green hatched)
  - New Melones (Red hatched)
  - San Luis (Yellow hatched)
  - Pine Flat (Purple hatched)
  - Tulloch (White hatched)



# 2010 Future Stanislaus County Facilities -- Dam Inundation Hazard



**Map Legend:**

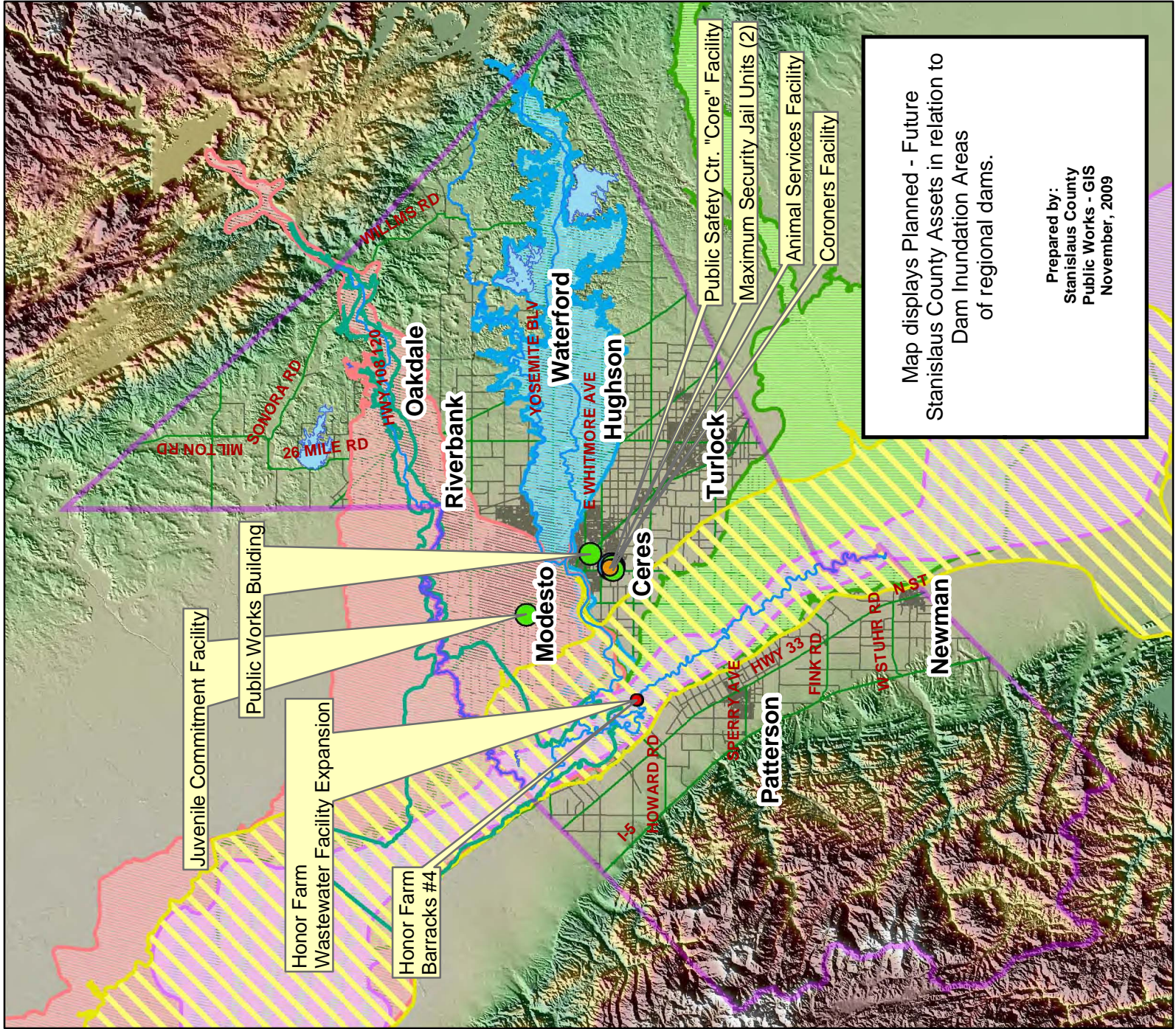
- Lakes (Blue wavy line)
- River (Blue line)
- Roads (Black line)
- County Line (Purple outline)

**County Future Facilities Estimated Facility Value**

- < \$2,000,000 (Red dot)
- \$2,000,000 - \$10,000,000 (Orange dot)
- \$10,000,000 - \$30,000,000 (Green dot)
- > \$30,000,000 (Blue dot)

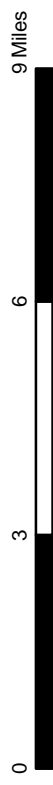
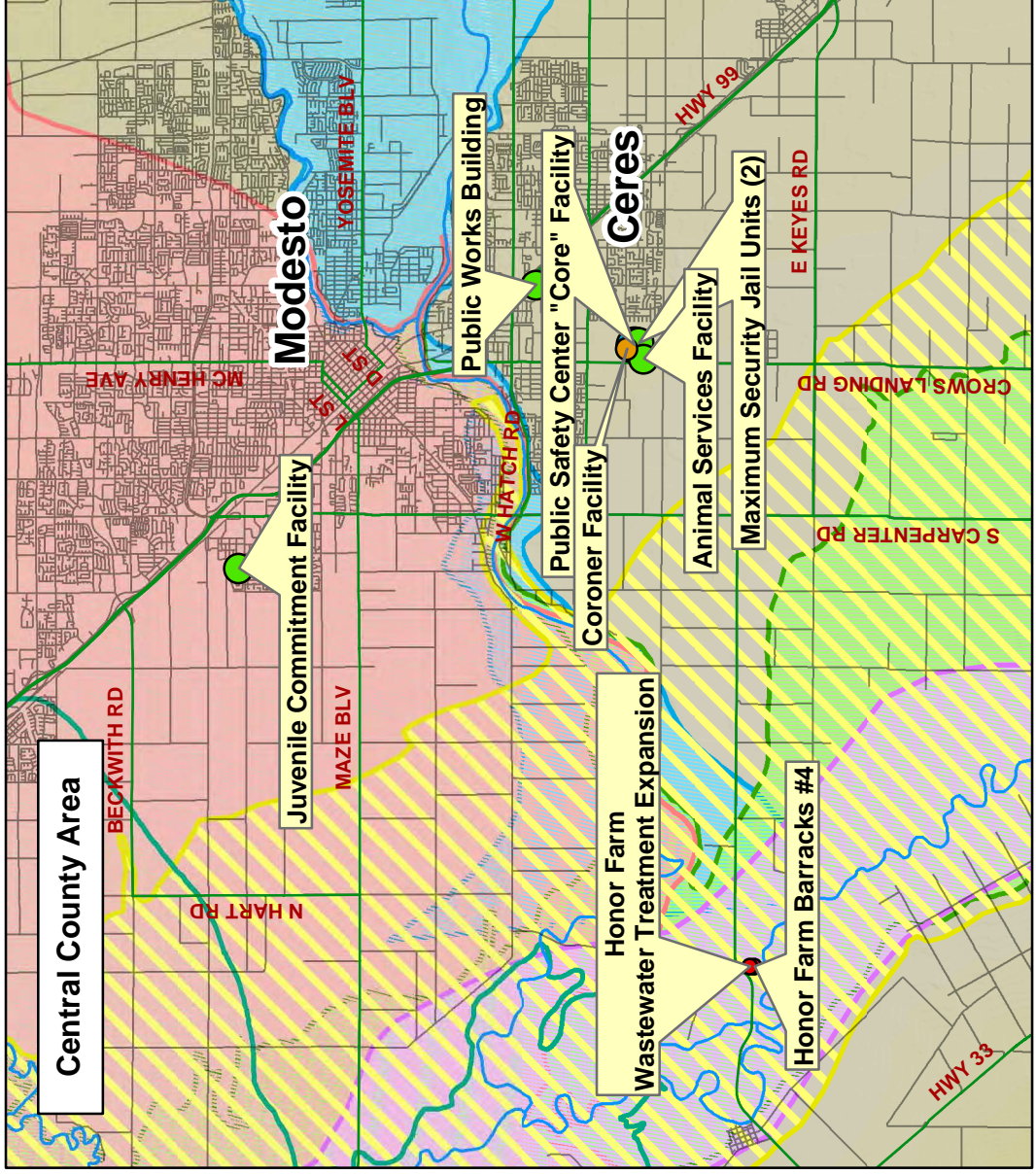
**Dam Inundation Areas Dam Name**

- Don Pedro (Blue hatched)
- Exchequer (Green hatched)
- New Melones (Red hatched)
- San Luis (Yellow hatched)
- Pine Flat (Purple hatched)
- Tulloch (Light blue hatched)



Map displays Planned - Future Stanislaus County Assets in relation to Dam Inundation Areas of regional dams.

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009





**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

HAZARD: DON PEDRO INUNDATION

Jurisdiction	Flood Zone	POPULATION		HOUSEHOLDS	
		Total #	% of County	Total #	% of County
Ceres		408	0.09%	112	0.07%
County		17878	4.00%	5892	3.91%
Hughson		4116	0.92%	1302	0.86%
Modesto		26593	5.95%	8509	5.64%
Waterford		6984	1.56%	2099	1.39%
<b>GRAND TOTAL</b>		<b>55979</b>	<b>12.52%</b>	<b>17914</b>	<b>11.88%</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Ceres**

HAZARD: DON PEDRO INUNDATION

Jurisdiction County: Don Pedro Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$295,317	2	\$0	\$0	\$569,609	\$0	\$0	\$864,926
RESIDENTIAL	\$4,900,099	146	\$0	\$0	\$12,646,747	\$0	\$0	\$17,546,846
RESIDENTIAL-INCOME	\$654,053	1	\$0	\$148,942	\$26,254	\$0	\$0	\$680,307
VACANT RESIDENTIAL	\$100,490	2	\$0	\$0	\$0	\$0	\$0	\$100,490
<b>Total =</b>	<b>\$5,949,959</b>	<b>151</b>	<b>\$0</b>	<b>\$148,942</b>	<b>\$13,242,610</b>	<b>\$0</b>	<b>\$0</b>	<b>\$19,192,569</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: DON PEDRO INUNDATION

Jurisdiction County: Don Pedro Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$49,713,172	150	\$378,206	\$0	\$42,660,394	\$836,125	\$0	\$93,587,897
INDUSTRIAL	\$136,626,104	274	\$283,279,031	\$106,286	\$534,577,136	\$180,230,086	\$0	\$1,134,712,357
NON-ASSESSABLE	\$1,108,933	222	\$0	\$33,750	\$1,591,240	\$0	\$0	\$2,700,173
RESIDENTIAL	\$69,393,915	2587	\$0	\$14,605	\$130,268,814	\$47,136	\$0	\$199,709,865
RESIDENTIAL-INCOME	\$19,337,579	191	\$0	\$335,362	\$16,217,439	\$22,400	\$0	\$35,577,418
RURAL, FARM, AGRICULTURE	\$283,908,778	2147	\$18,481,476	\$44,064,576	\$303,723,655	\$25,549,010	\$0	\$631,662,919



VACANT COMMERCIAL	\$18,331,516	114	\$0	\$0	\$3,488,911	\$29,810	\$0	\$21,850,237
VACANT RESIDENTIAL	\$6,702,050	112	\$0	\$114,766	\$221,909	\$0	\$0	\$6,923,959
Total =	\$585,122,047	5797	\$302,138,713	\$44,669,345	\$1,032,749,498	\$206,714,567	\$0	\$2,126,724,825

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Hughson**

HAZARD: DON PEDRO INUNDATION  
Jurisdiction County: Don Pedro Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$8,193,953	82	\$1,758,900	\$0	\$73,811,357	\$1,997,557	\$0	\$85,761,767
INDUSTRIAL	\$3,539,444	19	\$1,808,950	\$0	\$15,119,671	\$233,250	\$0	\$20,701,315
RESIDENTIAL	\$73,559,192	1676	\$0	\$0	\$211,408,376	\$23,940	\$0	\$284,991,508
RESIDENTIAL-INCOME	\$3,055,559	44	\$0	\$0	\$5,518,383	\$0	\$0	\$8,573,942
RURAL, FARM, AGRICULTURE	\$803,394	13	\$0	\$69,795	\$559,446	\$0	\$0	\$1,362,840
VACANT COMMERCIAL	\$2,688,921	24	\$0	\$62,668	\$9,616	\$0	\$0	\$2,698,537
VACANT RESIDENTIAL	\$6,270,672	235	\$0	\$1,822	\$1,100,794	\$0	\$0	\$7,371,466
Total =	\$98,111,135	2093	\$3,567,850	\$134,285	\$307,527,643	\$2,254,747	\$0	\$411,461,375

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Modesto**

HAZARD: DON PEDRO INUNDATION  
Jurisdiction County: Don Pedro Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
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COMMERCIAL	\$27,211,266	164	\$813,383	\$0	\$56,813,665	\$522,822	\$0	\$85,361,136
INDUSTRIAL	\$3,292,104	14	\$3,470	\$0	\$5,004,121	\$4,960	\$0	\$8,304,655
NON-ASSESSABLE	\$9,765	175	\$0	\$0	\$1,663	\$0	\$0	\$11,428
RESIDENTIAL	\$227,647,270	6960	\$0	\$0	\$588,946,038	\$39,902	\$0	\$816,633,210
RESIDENTIAL-INCOME	\$19,987,936	428	\$0	\$0	\$61,850,114	\$470,100	\$0	\$82,308,150
RURAL, FARM, AGRICULTURE	\$657	1	\$0	\$0	\$0	\$0	\$0	\$657
VACANT COMMERCIAL	\$6,951,319	38	\$0	\$0	\$502,795	\$0	\$0	\$7,454,114
VACANT RESIDENTIAL	\$4,085,454	68	\$67,100	\$29,588	\$383,744	\$35,990	\$0	\$4,572,288
<b>Total =</b>	<b>\$289,185,771</b>	<b>7848</b>	<b>\$883,953</b>	<b>\$29,588</b>	<b>\$713,502,140</b>	<b>\$1,073,774</b>	<b>\$0</b>	<b>\$1,004,645,638</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Waterford**

HAZARD: DON PEDRO INUNDATION  
Jurisdiction County: Don Pedro Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$10,805,067	115	\$368,544	\$0	\$24,446,174	\$62,655	\$0	\$35,682,440
INDUSTRIAL	\$3,019,587	20	\$0	\$0	\$3,783,634	\$266,730	\$0	\$7,069,951
NON-ASSESSABLE	\$19,653	49	\$0	\$0	\$680,728	\$0	\$0	\$700,381
RESIDENTIAL	\$82,992,665	2095	\$0	\$0	\$186,377,110	\$8,900	\$0	\$269,378,675
RESIDENTIAL-INCOME	\$8,181,817	105	\$0	\$0	\$22,620,027	\$149,814	\$0	\$30,951,658
RURAL, FARM, AGRICULTURE	\$4,278,447	23	\$0	\$612,996	\$2,102,563	\$6,535	\$0	\$6,387,545
VACANT COMMERCIAL	\$3,570,339	27	\$0	\$0	\$18,798	\$0	\$0	\$3,589,137
VACANT RESIDENTIAL	\$4,366,713	65	\$0	\$0	\$1,635,293	\$0	\$0	\$6,002,006

Total =	\$117,234,288	2499	\$368,544	\$612,996	\$241,664,327	\$494,634	\$0	\$359,761,793
Grand Total	1,095,603,200	18388	\$306,959,060	\$45,595,156	\$2,308,686,218	\$210,537,722	\$0	\$3,921,786,200

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: DON PEDRO INUNDATION  
Jurisdiction County: Don Pedro Dam

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
ANIMAL SERVICES	039-010-002	ADOPTION CENTER	\$123,035	\$127,932	\$0	\$250,967
ANIMAL SERVICES	039-010-002		\$30,599	\$43,040	\$0	\$73,639
ANIMAL SERVICES	039-010-002		\$1,122,739	\$160,975	\$0	\$1,283,714
COMMUNITY SERV. FACILITIES	018-042-025		\$0	\$6,397	\$0	\$6,397
Empire Community Pool	009-007-009		\$2,200,000	\$0	\$0	\$2,200,000
EMPIRE LIBRARY	133-017-006	BOOKS \$282,235	\$331,652	\$570,255	\$0	\$901,907
FOX GROVE REG. PARK	018-005-003		\$60,296	\$0	\$0	\$60,296
HUGHSON LIBRARY	018-042-065	BOOKS \$289,235	\$276,157	\$357,093	\$0	\$633,250
HUGHSON LIBRARY	018-042-065	LEASED	\$0	\$38,381	\$0	\$38,381
MODESTO RESERVOIR	008-003-021		\$133,044	\$80,011	\$0	\$213,055
MODESTO RESERVOIR	008-003-021		\$1,011,995	\$129,156	\$0	\$1,141,151
MODESTO RESERVOIR	008-003-021		\$117,557	\$43,571	\$0	\$161,128
P.W. GEER RD. LANDFILL	009-029-009		\$29,069	\$19,189	\$0	\$48,258
P.W. GEER RD. LANDFILL	009-029-009		\$145,348	\$0	\$0	\$145,348
P.W. GEER RD. LANDFILL	009-029-009		\$218,020	\$0	\$0	\$218,020
P.W. GEER RD. LANDFILL	009-029-009		\$363,367	\$0	\$0	\$363,367
P.W. GEER RD. LANDFILL	009-029-009		\$290,692	\$0	\$0	\$290,692
SHERIFF HANGER #5-MODESTO	036-023-002	LEASED	\$0	\$51,173	\$0	\$51,173
SHERIFF'S SUBSTATION	035-037-038		\$366,056	\$0	\$0	\$366,056
WATERFORD LIBRARY	134-007-027	BOOKS \$546,276	\$239,768	\$630,614	\$0	\$870,382
WIC-HUGHSON	018-042-025	LEASED	\$0	\$25,586	\$0	\$25,586
<b>GRAND TOTAL EXISTING FACILITIES</b>			<b>\$7,059,394</b>	<b>\$2,283,373</b>	<b>\$0</b>	<b>\$9,342,767</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
FUTURE COUNTY FACILITIES**

HAZARD: DON PEDRO INUNDATION

Jurisdiction County: Don Pedro Dam

Description	APN	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
<b>GRAND TOTAL FUTURE FACILITIES</b>		\$0	\$0	\$0	\$0

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: DON PEDRO INUNDATION

Jurisdiction County: Don Pedro Dam

Crossing	Bridge Number	Road Name	Type	Cost
TUOLUMNE RIVER	38C0003	SANTE FE	Girder	\$4,944,820
TUOLUMNE RIVER	38C0004	HICKMAN	Girder	\$7,734,211
TUOLUMNE RIVER	38C0005	ROBERTS FERRY	Girder	\$4,956,000
TUOLUMNE RIVER	38C0023	SEVENTH STREET	Girder	\$18,585,000
DRY CREEK	38C0025	ALBERS	Girder	\$2,577,613
DRY CREEK	38C0038	WELLSFORD	Girder	\$2,633,701
TUOLUMNE RIVER	38C0044	MITCHELL	Girder	\$20,454,013
DRY CREEK	38C0047	CHURCH	Girder	\$3,908,029
TUOLUMNE RIVER	38C0048	GEER	Girder	\$7,769,190
TUOLUMNE RIVER	38C0050	CARPENTER	Girder	\$7,485,473
MID LATERAL NO.1	38C0051	GEER	Slab	\$225,142
DRY CREEK	38C0055	OAKDALE/WATERFORD HW	Girder	\$4,183,401
TUOLUMNE RIVER	38C0061	9TH ST.	Girder	\$60,180,000
DRY CREEK	38C0073	TIM BELL	Girder	\$927,397
MID MAIN CANAL	38C0076	OAKDALE/WATERFORD	Slab	\$586,080
CERES MAIN CANAL	38C0084	SANTA FE	Slab	\$536,211
TID MAIN CANAL	38C0090	WHITMORE	Slab	\$402,588
TID MAIN CANAL	38C0091	HICKMAN	Slab	\$612,198
CERES MAIN CANAL	38C0092	GEER	Slab	\$512,124
RIVER ROAD UNDERPASS	38C0129	RIVER ROAD	Slab	\$0

DAWSON LAKE (MCDONALD CREEK)	38C0144	NEW LA GRANGE ROAD	Slab	\$772,870
TUOLUMNE RIVER	38C0145	LA GRANGE (OLD)	Girder	\$7,062,221
CERES MAIN CANAL	38C0150	GILBERT	Slab	\$238,547
CERES MAIN CANAL	38C0151	BALDWIN	Slab	\$242,107
CERES MAIN CANAL	38C0155	SWANSON	Slab	\$248,033
TID MAIN CANAL	38C0156	LAKE	Slab	\$531,336
TID MAIN CANAL	38C0157	MONTPELIER	Slab	\$407,248
TID MAIN CANAL	38C0158	LAMPLEY	Slab	\$346,912
TID MAIN CANAL	38C0159	DENTON	Slab	\$405,933
CERES MAIN CANAL	38C0223	CLINTON	Slab	\$327,408
CERES MAIN CANAL	38C0252	ALDRICH	Slab	\$226,487
MID MAIN CANAL	38C0266	HAZELDEAN	Slab	\$321,758
MID MAIN CANAL	38C0267	CRABTREE	Slab	\$0
TID MAIN CANAL	38C0268	LAKE	Slab	\$471,932
TID HIGHLINE CANAL	38C0280	LAKE	Slab	\$203,758
MID MAIN CANAL	38C0285	REINWAY	Slab	\$322,344
MID LATERAL NO.2	38C0286	CHURCH	Slab	\$190,715
MID MAIN CANAL	38C0288	RESERVOIR ROAD	Slab	\$439,988
MID MAIN CANAL	38C0289	RESERVOIR	Slab	\$568,721
MID MAIN CANAL	38C0291	HOPPER	Slab	\$345,814
MID MAIN CANAL	38C0292	BLOSSOM	Slab	\$326,589
MID LATERAL NO.2	38C0312	WELLSFORD	Slab	\$181,413
<b>GRAND TOTAL COUNTY BRIDGES</b>				<b>\$163,395,325</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: DON PEDRO INUNDATION

Jurisdiction County: Don Pedro Dam

Sub Division	Location	Cost
17PM9 - INDUSTRIAL AREA - FARRAR AVE	FARRAR AVE	\$403,263
ESTATES DRIVE - SHERMAN ESTATES	E/CHURCH STREET	\$403,263
MARY LOU DRIVE - HONEY BEE ESTATES CSA NO. 8	N/FRONA DRIVE	\$403,263
NORTH EMPIRE MANOR UNIT #3 (17-PM-74 )	CAMERON WAY	\$403,263
RAVENNA WAY - ENTERPRISE HOMES	N/TYSON STREET	\$403,263
<b>GRAND TOTAL DRAINAGE DISTRICTS</b>		<b>\$2,016,315</b>



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: DON PEDRO INUNDATION

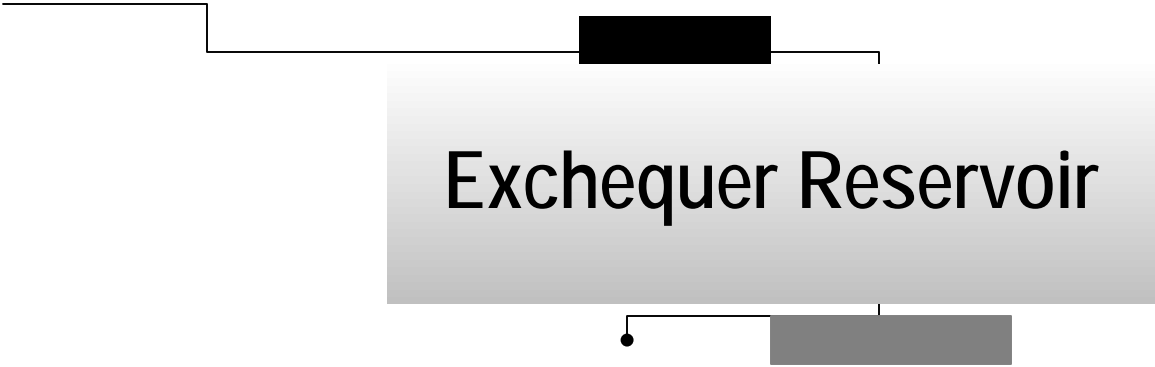
Jurisdiction County: Don Pedro Dam

District	Number	Cost
Beard Industrial Lighting District	18	\$126,000
Empire Lighting District	51	\$357,000
Mancini Tract Lighting District	1	\$7,000
<b>GRAND TOTAL LIGHTING DISTRICTS</b>	<b>70</b>	<b>\$490,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY TRAFFIC SIGNALS**

HAZARD: DON PEDRO INUNDATION  
Jurisdiction County: Don Pedro Dam

Location	Cost
Carpenter Road At Paradise Road	\$250,000
FINCH RD AT MARIPOSA RD	\$250,000
GEER RD AT HATCH RD	\$250,000
MITCHELL AT RIVERSIDE	\$250,000
MITCHELL RD AT TENAYA DR	\$250,000
<b>GRAND TOTAL TRAFFIC SIGNALS</b>	<b>\$1,250,000</b>



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: EXCHEQUER INUNDATION**

Jurisdiction	Flood Zone	POPULATION		HOUSEHOLDS	
		Total #	% of County	Total #	% of County
County		6331	1.42%	2054	1.36%
Modesto		585	0.13%	126	0.08%
Patterson		0	0.00%	0	0.00%
<b>GRAND TOTAL</b>		<b>6916</b>	<b>1.55%</b>	<b>2180</b>	<b>1.45%</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: EXCHEQUER INUNDATION  
Jurisdiction County: Exchequer Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$2,237,020	24	\$0	\$0	\$3,230,601	\$32,065	\$0	\$5,499,686
INDUSTRIAL	\$2,018,454	17	\$301,660	\$0	\$7,384,280	\$567,210	\$0	\$10,271,604
NON-ASSESSABLE	\$10,590,469	115	\$0	\$0	\$268,417	\$0	\$0	\$10,858,886
RESIDENTIAL	\$6,713,968	243	\$0	\$0	\$12,544,536	\$18,755	\$0	\$19,277,259
RESIDENTIAL-INCOME	\$134,102	3	\$0	\$0	\$30,814	\$0	\$0	\$164,916
RURAL, FARM, AGRICULTURE	\$242,451,784	1760	\$9,088,043	\$10,077,429	\$228,557,231	\$27,917,079	\$0	\$518,091,566
VACANT COMMERCIAL	\$429,961	7	\$5,360	\$0	\$1,475,918	\$123,450	\$0	\$2,034,689
VACANT RESIDENTIAL	\$3,123,970	57	\$0	\$0	\$137,752	\$0	\$0	\$3,261,722
<b>Total =</b>	<b>\$267,699,728</b>	<b>2226</b>	<b>\$9,395,063</b>	<b>\$10,077,429</b>	<b>\$253,629,549</b>	<b>\$28,658,559</b>	<b>\$0</b>	<b>\$569,460,328</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Modesto**

HAZARD: EXCHEQUER INUNDATION  
Jurisdiction County: Exchequer Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$87,390	2	\$0	\$0	\$37,941	\$0	\$0	\$125,331
INDUSTRIAL	\$50,123	3	\$0	\$0	\$0	\$0	\$0	\$50,123

RESIDENTIAL	\$109,600	5	\$0	\$0	\$211,086	\$0	\$0	\$320,686
RESIDENTIAL-INCOME	\$402,962	9	\$0	\$0	\$1,208,880	\$0	\$0	\$1,611,842
Total =	\$650,075	19	\$0	\$0	\$1,457,907	\$0	\$0	\$2,107,982

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Newman**

HAZARD: EXCHEQUER INUNDATION  
Jurisdiction County: Exchequer Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
RESIDENTIAL	\$4,112,293	102	\$0	\$0	\$10,534,663	\$0	\$0	\$14,646,956
VACANT RESIDENTIAL	\$1,331,747	122	\$0	\$0	\$0	\$0	\$0	\$1,331,747
Total =	\$5,444,040	224	\$0	\$0	\$10,534,663	\$0	\$0	\$15,978,703
Grand Total	\$273,793,843	2469	\$9,395,063	\$10,077,429	\$265,622,119	\$28,658,559	\$0	\$587,547,013

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

**HAZARD: EXCHEQUER INUNDATION**

Jurisdiction County: Exchequer Dam

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
HONOR FARM	016-026-010		\$50,266	\$22,731	\$0	\$72,997
HONOR FARM	017-060-002	REAL/CONTENTS INC	\$818,301	\$268,656	\$0	\$1,086,957
HONOR FARM	016-026-010	REAL/CONTENTS INC	\$41,572	\$19,516	\$0	\$61,088
HONOR FARM	016-026-010	REAL/CONTENTS INC	\$671,811	\$211,413	\$0	\$883,224
HONOR FARM	016-026-010	REAL/CONTENTS INC	\$13,891	\$21,075	\$0	\$34,966
HONOR FARM	016-026-010	REAL/CONTENTS INC	\$82,470	\$65,051	\$0	\$147,521
HONOR FARM	016-026-010	REAL/CONTENTS INC	\$8,644	\$8,587	\$0	\$17,231
HONOR FARM	017-060-002		\$61,259	\$31,066	\$0	\$92,325
HONOR FARM	016-026-010		\$87,101	\$22,253	\$0	\$109,354
HONOR FARM	016-026-010		\$450,315	\$231,554	\$0	\$681,869
HONOR FARM	016-026-010		\$45,502	\$8,562	\$0	\$54,064
HONOR FARM	016-026-010		\$43,378	\$21,101	\$0	\$64,479
HONOR FARM	017-060-002		\$109,009	\$0	\$0	\$109,009
HONOR FARM	017-060-002		\$29,069	\$0	\$0	\$29,069
HONOR FARM	017-060-002		\$456,829	\$194,629	\$0	\$651,458
HONOR FARM	017-060-002		\$918,192	\$292,845	\$0	\$1,211,037
HONOR FARM	016-026-010		\$145,187	\$40,180	\$0	\$185,367
HONOR FARM	016-026-010		\$52,821	\$17,522	\$0	\$70,343
HONOR FARM	016-026-010		\$0	\$12,793	\$0	\$12,793
HONOR FARM	017-060-002		\$10,338	\$47,682	\$0	\$58,020
HONOR FARM	016-026-010		\$27,732	\$11,683	\$0	\$39,415
<b>GRAND TOTAL EXISTING FACILITIES</b>			<b>\$4,123,687</b>	<b>\$1,548,899</b>	<b>\$0</b>	<b>\$5,672,586</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
FUTURE COUNTY FACILITIES**

HAZARD: EXCHEQUER INUNDATION

Jurisdiction County: Exchequer Dam

Description	APN	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
<b>GRAND TOTAL FUTURE FACILITIES</b>		\$0	\$0	\$0	\$0



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: EXCHEQUER INUNDATION

Jurisdiction County: Exchequer Dam

Crossing	Bridge Number	Road Name	Type	Cost
SAN JOAQUIN RIVER	38C0010	CROWS LANDING	Girder	\$6,857,073
SAN JOAQUIN RIVER	38C0016	GRAYSON	Girder	\$2,610,382
TUOLUMNE RIVER	38C0018	SHILOH	Girder	\$4,679,087
TUOLUMNE RIVER	38C0023	SEVENTH STREET	Girder	\$18,585,000
LAIRD SLOUGH	38C0027	GRAYSON	Slab	\$2,942,850
SAN JOAQUIN RIVER	38C0033	LAS PALMAS	Girder	\$7,450,151
ORESTIMBA CREEK	38C0043	RIVER	Slab	\$612,699
TUOLUMNE RIVER	38C0050	CARPENTER	Girder	\$7,485,473
TUOLUMNE RIVER	38C0061	9TH ST.	Girder	\$60,180,000
TID CANAL LATERAL NO.4	38C0098	CROWSLANDING	Slab	\$173,958
MID LATERAL NO.5	38C0116	PARADISE	Slab	\$273,362
RIVER ROAD UNDERPASS	38C0129	RIVER ROAD	Slab	\$0
PATTERSON IRRIGATION CANAL	38C0184	ELM	Slab	\$156,753
TID LATERAL NO. 5.5	38C0186	MORGAN	Slab	\$154,794
TID LATERAL NO.5	38C0302	TEGNER	Slab	\$113,766
SAN JOAQUIN RIVER	39C0001	HILLS FERRY	Girder	\$2,571,456
<b>GRAND TOTAL COUNTY BRIDGES</b>				<b>\$114,846,804</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: EXCHEQUER INUNDATION

Jurisdiction County: Exchequer Dam

Sub Division	Location	Cost
<b>GRAND TOTAL DRAINAGE DISTRICTS</b>		<b>\$0</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: EXCHEQUER INUNDATION

Jurisdiction County: Exchequer Dam

District	Number	Cost
<b>GRAND TOTAL LIGHTING DISTRICTS</b>		<b>\$0</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY TRAFFIC SIGNALS**

HAZARD: EXCHEQUER INUNDATION

Jurisdiction County: Exchequer Dam

Location	Cost
<b>GRAND TOTAL TRAFFIC SIGNALS</b>	
	\$0



New Melones Reservoir

The diagram consists of a horizontal line on the left that steps down and then continues horizontally to a black rectangular box. From the right side of this box, a line extends to the right and then down to a larger, light gray rectangular box containing the text 'New Melones Reservoir'. Below this box, a line extends to the right and then down to a smaller, gray rectangular box. A small black dot is located at the end of the line leading to the smaller box.

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: NEW MELONES INUNDATION**

Jurisdiction	Flood Zone	POPULATION		HOUSEHOLDS	
		Total #	% of County	Total #	% of County
County		38445	8.60%	12698	8.42%
Modesto		138728	31.04%	50578	33.54%
Oakdale		16080	3.60%	6064	4.02%
Riverbank		15927	3.56%	4760	3.16%
<b>GRAND TOTAL</b>		<b>209180</b>	<b>46.80%</b>	<b>74100</b>	<b>49.14%</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: NEW MELONES INUNDATION

Jurisdiction County: New Melones Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$106,314,825	337	\$746,046	\$21,754	\$311,830,974	\$8,657,754	\$0	\$427,571,353
INDUSTRIAL	\$82,218,638	382	\$14,550,582	\$85,918	\$250,799,219	\$9,761,964	\$0	\$357,416,321
NON-ASSESSABLE	\$1,240,907	346	\$0	\$13,322	\$1,308,163	\$0	\$0	\$2,562,392
RESIDENTIAL	\$442,700,630	8070	\$0	\$875	\$1,100,349,566	\$435,814	\$0	\$1,543,486,885
RESIDENTIAL-INCOME	\$28,104,294	251	\$0	\$915,151	\$24,384,376	\$602,339	\$0	\$54,006,160
RURAL, FARM, AGRICULTURE	\$629,283,727	4593	\$10,464,781	\$47,398,043	\$642,894,524	\$26,148,282	\$0	\$1,356,189,357
VACANT COMMERCIAL	\$63,676,523	109	\$0	\$21,930	\$5,973,968	\$0	\$0	\$69,672,421
VACANT RESIDENTIAL	\$40,375,849	334	\$0	\$0	\$1,546,836	\$0	\$0	\$41,922,685
<b>Total =</b>	<b>\$1,393,915,393</b>	<b>14422</b>	<b>\$25,761,409</b>	<b>\$48,456,993</b>	<b>\$2,339,087,626</b>	<b>\$45,606,153</b>	<b>\$0</b>	<b>\$3,852,827,574</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Modesto**

HAZARD: NEW MELONES INUNDATION

Jurisdiction County: New Melones Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$740,375,031	2011	\$55,538,065	\$74,636	\$1,869,296,284	\$159,703,745	\$0	\$2,824,987,761
INDUSTRIAL	\$73,352,697	270	\$75,320,036	\$0	\$200,604,644	\$15,974,920	\$0	\$365,252,297

NON-ASSESSABLE	\$3,031,008	563	\$10,230	\$0	\$1,978,691	\$133,360	\$0	\$5,153,289
RESIDENTIAL	\$1,502,634,455	37052	\$11,075	\$0	\$3,996,494,182	\$693,203	\$0	\$5,499,832,915
RESIDENTIAL-INCOME	\$422,367,327	2608	\$22,970	\$0	\$1,949,264,163	\$4,941,597	\$0	\$2,376,596,057
RURAL, FARM, AGRICULTURE	\$2,951,163	9	\$0	\$16,236	\$1,015,547	\$125,411	\$0	\$4,108,357
VACANT COMMERCIAL	\$78,258,954	181	\$22,900	\$0	\$20,131,596	\$263,080	\$0	\$98,676,530
VACANT RESIDENTIAL	\$34,878,163	455	\$110	\$90,230	\$7,315,122	\$11,040	\$0	\$42,294,665
<b>Total =</b>	<b>\$2,857,848,798</b>	<b>43149</b>	<b>\$130,925,386</b>	<b>\$181,102</b>	<b>\$8,046,100,229</b>	<b>\$181,846,356</b>	<b>\$0</b>	<b>\$11,216,901,871</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Oakdale**

HAZARD: NEW MELONES INUNDATION  
Jurisdiction County: New Melones Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$73,124,427	351	\$2,996,970	\$0	\$162,928,688	\$1,535,718	\$0	\$240,585,803
INDUSTRIAL	\$34,719,579	200	\$71,630,539	\$0	\$100,931,847	\$21,279,922	\$0	\$228,561,887
NON-ASSESSABLE	\$319,477	208	\$0	\$0	\$51,030	\$68,060	\$0	\$438,567
RESIDENTIAL	\$281,040,756	5764	\$0	\$0	\$722,736,346	\$148,203	\$0	\$1,003,925,305
RESIDENTIAL-INCOME	\$25,970,996	336	\$0	\$50,000	\$61,039,760	\$274,402	\$0	\$87,335,158
RURAL, FARM, AGRICULTURE	\$2,638,400	17	\$104,110	\$0	\$3,560,653	\$27,250	\$0	\$6,330,413
VACANT COMMERCIAL	\$19,462,895	97	\$0	\$54,921	\$464,551	\$0	\$0	\$19,982,367
VACANT RESIDENTIAL	\$20,139,727	392	\$0	\$11,413	\$3,011,320	\$0	\$0	\$23,162,460
<b>Total =</b>	<b>\$457,416,257</b>	<b>7365</b>	<b>\$74,731,619</b>	<b>\$116,334</b>	<b>\$1,054,724,195</b>	<b>\$23,333,555</b>	<b>\$0</b>	<b>\$1,610,321,960</b>



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Riverbank**

HAZARD: NEW MELONES INUNDATION

Jurisdiction County: New Melones Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$51,124,994	247	\$2,131,946	\$0	\$134,731,073	\$2,823,507	\$0	\$190,811,520
INDUSTRIAL	\$11,353,324	40	\$12,509,410	\$0	\$27,662,064	\$4,872,510	\$0	\$56,397,308
NON-ASSESSABLE	\$42,420	96	\$0	\$0	\$166,764	\$0	\$0	\$209,184
RESIDENTIAL	\$267,786,433	6056	\$1,530	\$0	\$761,645,877	\$58,454	\$0	\$1,029,492,294
RESIDENTIAL-INCOME	\$9,263,746	122	\$0	\$0	\$16,358,408	\$29,500	\$0	\$25,651,654
RURAL, FARM, AGRICULTURE	\$3,143,315	38	\$0	\$0	\$2,620,593	\$58,531	\$0	\$5,822,439
VACANT COMMERCIAL	\$8,617,191	41	\$0	\$0	\$2,674,968	\$0	\$0	\$11,292,159
VACANT RESIDENTIAL	\$10,680,489	305	\$0	\$0	\$1,025,664	\$0	\$0	\$11,706,153
Total =	\$362,011,912	6945	\$14,642,886	\$0	\$946,885,411	\$7,842,502	\$0	\$1,331,382,711
Grand Total	\$5,071,192,360	71881	\$246,061,300	\$48,754,429	12,386,797,461	\$258,628,566	\$0	\$18,011,434,116

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: NEW MELONES INUNDATION  
Jurisdiction County: New Melones Dam

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
12TH ST PARKING GARAGE	105-024-010		\$11,395,050	\$0	\$0	\$11,395,050
12TH STREET OFFICE BUILDING	105-024-014		\$19,237,942	\$1,048,254	\$0	\$20,286,196
ADMIN. ANNEX #4	105-038-023	REAL INCL. IN LOC. 6	\$0	\$2,558,642	\$0	\$2,558,642
ADMIN. ANNEX #4	105-038-023		\$5,897,704	\$1,908,112	\$2,940,000	\$10,745,816
ADMIN. ANNEX #4	105-038-023	REAL INCL. IN LOC. 6	\$0	\$3,837,965	\$0	\$3,837,965
ADMIN. ANNEX #4	105-038-023	REAL INCL. IN LOC. 6	\$0	\$2,558,642	\$0	\$2,558,642
BHRS	111-048-001		\$3,696,884	\$652,183	\$0	\$4,349,067
BURBANK-PARADISE	037-002-017		\$648,920	\$125,680	\$0	\$774,600
BUSES	081-003-014	REPLACEMENT COST	\$0	\$0	\$0	\$0
CAPITAL PROJECTS TRAILER	105-025-001		\$122,713	\$70,254	\$0	\$192,967
CENTRAL SERVICES	111-048-001		\$758,489	\$678,617	\$0	\$1,437,106
Children and Families Commission	105-007-010		\$0	\$157,238	\$0	\$157,238
COUNTY ANNEX	105-025-001		\$7,820,474	\$632,642	\$4,031,022	\$12,484,138
COUNTY CENTER #3	032-016-006		\$2,970,408	\$1,058,384	\$153,120	\$4,181,912
COUNTY CENTER #3	032-016-006		\$851,640	\$712,548	\$0	\$1,564,188
COUNTY CENTER #3	032-016-006		\$675,810	\$356,273	\$0	\$1,032,083
COURT BUILDING	105-025-001		\$19,067,965	\$262,064	\$0	\$19,330,029
DRUG ENFORCEMENT BLDG.	029-002-038	LEASED	\$0	\$255,864	\$0	\$255,864
EMERGENCY SERVICES	052-063-019		\$3,557,711	\$10,482,540	\$0	\$14,040,251
GALLO CENTER FOR THE ARTS	105-039-014	COC FROM APRIL 20	\$42,462,422	\$0	\$2,251,865	\$44,714,287
H.S.A.	111-048-001		\$6,348	\$3,807	\$0	\$10,155
H.S.A.	111-048-001		\$9,735	\$5,855	\$0	\$15,590

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H.S.A.	111-048-001				\$159,147	\$93,895	\$0	\$253,042
H.S.A.	111-048-001				\$4,842	\$3,904	\$0	\$8,746
H.S.A.	111-048-001	REAL/CONTENTS INC			\$0	\$486,141	\$0	\$486,141
H.S.A.	111-048-001				\$79,003	\$45,864	\$0	\$124,867
H.S.A.	111-048-001				\$57,433	\$33,293	\$0	\$90,726
H.S.A.	111-048-001				\$117,507	\$0	\$0	\$117,507
HEALTH SERVICES	111-048-001				\$748,798	\$283,480	\$0	\$1,032,278
HEALTH SERVICES	111-048-001	CONTENTS INCL. IN L			\$1,831,238	\$432,812	\$0	\$2,264,050
HEALTH SERVICES	111-048-001				\$1,665,263	\$326,842	\$0	\$1,992,105
HEALTH SERVICES	111-048-001				\$3,659,440	\$1,612,260	\$406,285	\$5,677,985
HEALTH SERVICES	111-048-001				\$2,960,774	\$605,757	\$0	\$3,566,531
HEALTH SERVICES	111-048-001	CONTENTS INCL. IN L			\$1,600,773	\$469,129	\$0	\$2,069,902
HEALTH SERVICES	111-048-001				\$15,000,934	\$8,983,133	\$0	\$23,984,067
HEALTH SERVICES	111-048-001				\$1,271,595	\$535,112	\$0	\$1,806,707
HEALTH SERVICES	111-048-001				\$2,696,267	\$546,015	\$0	\$3,242,282
HEALTH SERVICES	111-048-001				\$14,536	\$7,878	\$0	\$22,414
JUVENILE JUSTICE CENTER	081-012-006				\$17,088,609	\$316,399	\$0	\$17,405,008
JUVENILE JUSTICE CENTER	081-012-006				\$125,751	\$124,866	\$0	\$250,617
JUVENILE JUSTICE CENTER	081-012-006				\$165,695	\$15,130	\$0	\$180,825
JUVENILE JUSTICE CENTER	081-012-006				\$126,518	\$64,916	\$0	\$191,434
JUVENILE JUSTICE CENTER	081-012-006				\$89,200	\$64,916	\$0	\$154,116
JUVENILE JUSTICE CENTER	081-012-006				\$925,793	\$115,354	\$0	\$1,041,147
JUVENILE JUSTICE CENTER	081-012-006				\$6,213,224	\$637,493	\$0	\$6,850,717
JUVENILE JUSTICE CENTER	081-012-006				\$3,421,358	\$201,556	\$0	\$3,622,914
LAW LIBRARY	105-021-006	LEASED			\$0	\$639,661	\$0	\$639,661
MAIN LIBRARY	105-006-012	BOOK \$10,519,207			\$12,481,545	\$12,122,643	\$0	\$24,604,188
MANCINI HALL	102-012-001				\$417,405	\$127,114	\$0	\$544,519
MCHENRY MED. OFFICE	055-007-009				\$0	\$871,059	\$0	\$871,059

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MECHANICAL EQUIPMENT	105-025-001		\$151,695	\$34,112	\$0	\$185,807
MEDICAL BUILDING	106-002-010	1997 B COP BI AT LO	\$3,668,592	\$992,049	\$0	\$4,660,641
MENS JAIL	105-025-001		\$10,192,455	\$676,284	\$0	\$10,868,739
MENTAL HEALTH	106-008-010	LEASED	\$0	\$127,932	\$0	\$127,932
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L	\$445,707	\$107,691	\$0	\$553,398
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L	\$512,244	\$125,871	\$0	\$638,115
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L	\$518,559	\$123,660	\$0	\$642,219
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L	\$429,853	\$103,332	\$0	\$533,185
MENTAL HEALTH CENTER	111-048-001		\$1,515,762	\$1,449,130	\$0	\$2,964,892
MENTAL HEALTH CENTER	111-048-001		\$49,999	\$17,283	\$0	\$67,282
OAKDALE COMM. CARE CTR.	130-003-036	LEASED	\$0	\$26,210	\$0	\$26,210
OAKDALE LIBRARY	130-009-045	BOOKS \$1,226,383	\$990,116	\$1,391,439	\$0	\$2,381,555
OAKDALE PRENATAL &	063-018-017	LEASED	\$0	\$126,549	\$0	\$126,549
OFFICE OF EDUCATION	032-016-006		\$2,464,065	\$0	\$0	\$2,464,065
PARK SHOP GROUNDS	111-048-001		\$43,305	\$9,371	\$0	\$52,676
PUBLIC HEALTH	111-048-001	CONTENTS INCL. IN L	\$2,104,618	\$808,272	\$0	\$2,912,890
PUBLIC WORKS	129-007-002		\$53,834	\$28,826	\$0	\$82,660
PUBLIC WORKS	129-007-002		\$199,589	\$136,882	\$0	\$336,471
PUBLIC WORKS	129-007-002		\$86,103	\$52,727	\$0	\$138,830
RIVERBANK LIBRARY	132-012-015	BOOKS \$655,590	\$614,229	\$745,087	\$0	\$1,359,316
RONDA OUSDAHL	105-023-010	LEASED	\$0	\$31,983	\$0	\$31,983
SALIDA REGIONAL LIBRARY	135-053-006	Books \$2,615,595	\$8,508,255	\$4,018,417	\$0	\$12,526,672
SHERIFF SUBSTATION	135-049-005	LEASED	\$0	\$25,226	\$0	\$25,226
Tenth Street Place	105-037-034		\$50,000,000	\$0	\$0	\$50,000,000
WEST MODESTO COMMUNITY CENTER	030-020-031		\$0	\$1,133,724	\$0	\$1,133,724
WORKPLACE WELLNESS	105-015-005	LEASED	\$0	\$74,757	\$0	\$74,757
<b>GRAND TOTAL EXISTING FACILITIES</b>			<b>\$274,651,843</b>	<b>\$69,499,000</b>	<b>\$9,782,292</b>	<b>\$353,933,135</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
FUTURE COUNTY FACILITIES**

HAZARD: NEW MELONES INUNDATION

Jurisdiction County: New Melones Dam

Description	APN	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
Juvenile Commitment Facility	081-012-006	\$0	\$0	\$0	\$24,000,000
<b>GRAND TOTAL FUTURE FACILITIES</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$24,000,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: NEW MELONES INUNDATION

Jurisdiction County: New Melones Dam

Crossing	Bridge Number	Road Name	Type	Cost
STANISLAUS RIVER	38C0001	ORANGE BLOSSOM	Girder	\$6,359,977
DRY SLOUGH	38C0002	MCHENRY	Slab	\$2,389,912
TUOLUMNE RIVER	38C0018	SHILOH	Girder	\$4,679,087
TUOLUMNE RIVER	38C0023	SEVENTH STREET	Girder	\$18,585,000
STANISLAUS RIVER	38C0032	MCHENRY	Girder	\$12,271,516
TUOLUMNE RIVER	38C0050	CARPENTER	Girder	\$7,485,473
TUOLUMNE RIVER	38C0061	9TH ST.	Girder	\$60,180,000
MID LATERAL NO.6	38C0068	SALIDA BOULEVARD	Slab	\$320,822
MID LATERAL NO.6	38C0069	SALIDA BOULEVARD	Slab	\$228,366
SSIID CANAL (SOUTH SAN JOAQUIN MAIN CANAL)	38C0079	VALLEY HOME	Slab	\$258,447
LONE TREE CREEK	38C0080	VALLEY HOME	Slab	\$252,239
MID LATERAL NO.5	38C0107	STONE	Slab	\$133,858
MID LATERAL NO.6	38C0108	FINNEY	Slab	\$275,608
MID MAIN CANAL	38C0109	DALE	Slab	\$236,847
MID MAIN CANAL	38C0110	AMERICAN	Slab	\$150,493
MID LATERAL NO.6	38C0113	CLARIBEL	Slab	\$499,507
MID MAIN CANAL	38C0114	CLARIBEL	Slab	\$810,146
MID LATERAL NO.5	38C0116	PARADISE	Slab	\$273,362
MID LATERAL NO.5	38C0137	CHICAGO	Slab	\$315,036
MID LATERAL NO.5	38C0138	CALIFORNIA	Slab	\$233,100

SOUTH SAN JOAQUIN MAIN CANAL	38C0154	PLEASANT VALLEY	Slab	\$556,665
MID MAIN CANAL	38C0164	SKITONE	Slab	\$136,084
MID MAIN CANAL	38C0166	CARVER	Slab	\$246,026
MID LATERAL NO.8	38C0197	HAMMETT	Slab	\$168,252
MID LATERAL NO.6	38C0226	COVERT	Slab	\$265,870
MID LATERAL NO.6	38C0228	COFFEE	Slab	\$377,737
MID MAIN CANAL	38C0236	ST. FRANCIS	Slab	\$260,937
MID MAIN CANAL	38C0249	TERMINAL	Slab	\$492,267
LONE TREE CREEK	38C0262	PIONEER	Slab	\$154,555
SOUTH SAN JOAQUIN MAIN CANAL	38C0263	PIONEER	Slab	\$248,153
SOUTH SAN JOAQUIN MAIN CANAL	38C0264	VICTORY	Slab	\$462,971
MID LATERAL NO.5	38C0274	PAULINE	Slab	\$112,069
MID LATERAL NO.4	38C0275	PAULINE	Slab	\$308,751
MID LATERAL NO.5	38C0279	HOUSER	Slab	\$247,746
MID LATERAL NO.7	38C0304	BECKWITH	Slab	\$243,541
MID LATERAL NO.7	38C0305	DAKOTA	Slab	\$181,413
MID LATERAL NO.6	38C0308	WILLIAMS	Slab	\$136,084
MID LATERAL NO.6	38C0309	JACKSON	Slab	\$142,177
MID LATERAL NO.6	38C0310	DUNN	Slab	\$113,742
MID LATERAL NO.4	38C0311	ROSEMORE	Slab	\$183,157
TUOLUMNE RIVER	38C0317	LAKE	Slab	\$3,552,000
MID LATERAL NO.6	38C0322	HAMMETT	Slab	\$195,941
<b>GRAND TOTAL COUNTY BRIDGES</b>				<b>\$124,724,934</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: NEW MELONES INUNDATION

Jurisdiction County: New Melones Dam

Sub Division	Location	Cost
46-PM-63 AUTO CENTER COURT	AUTO CENTER CT	\$403,263
ALYSSA AVENUE - KIERNAN ESTATES	N/HORACE WAY	\$758,580
BANGS INDUSTRIAL PARK 35-PM-34	GALAXY WAY	\$403,263
COUNTRY CLUB - COUNTRY CLUB LANE	E/DEL RIO	\$403,263
DANIEL COURT - SUNNYBROOK VILLAGE WEST	E/DANIEL	\$758,580
DEL RIO HEIGHTS	HARTLEY DR	\$403,263
DURLEY DRIVE - CLARENDON WOODS NO. 1	AT WESEX LANE	\$758,580
ELMSBURY DRIVE - BRISTOL GLEN CSA NO. 4	AT KILLIGREW	\$758,580
GREENLEAF COURT - GREENLEAF INDUSTRIAL PARK	E/SISK ROAD	\$758,580
HARTLEY DRIVE - WALNUTWOODS	S/END WALNUTWOOD DRIVE	\$403,263
HILLCREST DRIVE - RANCH DEL RIO	S/COUNTRY CLUB DRIVE	\$403,263
MOUNTAIN OAK - SUNSET OAKS NO. 10	N/ORANGE BLOSSOME (N/E CORNR)	\$403,263
PARKSIDE PLAZA NO.1	TOOMES RD-WHITESTONE WAY	\$758,580
PIRRONE ROAD - MORGAN GLEN ESTATES	N/KIERNAN AVENUE	\$758,580
Portion Lavery Industrial Park	WELLS AVE	\$403,263
RIO CASA DRIVE - RIO CASA ESTATES	S/DIXON ROAD	\$403,263
RIO SOMBRA DRIVE - HUNTER RANCH ESTATES	W/MORRIS HUNTER	\$403,263
SHERRY COURT	E/SHERRY LANE	\$403,263
SIERRA SUNSET	RANCH WOOD CT	\$403,263
SOMERSET ESTATES NO.1	wincanton rd	\$758,580
ST. ANDREWS - OAKDALE CC ESTATES	2500 ATLAS	\$403,263



STILLWATER DRIVE - SUNNYBROOK VILLAGE	E/OVERLAND PLACE	\$758,580
STODDARD ROAD - LANDMARK BUSINESS CENTER	S/KIERNAN	\$758,580
ZINFANDEL AVENUE - DeARBOLES ESTATES	N/ESCAMILLA AVENUE	\$758,580
ZINFANDEL AVENUE - EDGEWOOD ESTATES	N/PARKS AVENUE	\$758,580
<b>GRAND TOTAL DRAINAGE DISTRICTS</b>		<b>\$14,345,379</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: NEW MELONES INUNDATION

Jurisdiction County: New Melones Dam

District	Number	Cost
Almond Wood Estates Lighting District	62	\$434,000
Country Club Estates Lighting District	3	\$21,000
Deo Gloria Estates Lighting District	18	\$126,000
Gibbs Ranch Lighting District	7	\$49,000
Gilbert Road Lighting District	2	\$14,000
Hillcrest Lighting District	77	\$539,000
North McHenry No.2 Lighting District	8	\$56,000
North McHenry Lighting District	79	\$553,000
North Oaks Lighting District	23	\$161,000
Paradise South Landscape & Lighting District	1	\$7,000
Peach Blossom Estates Lighting District	5	\$35,000
Salida Lighting District	645	\$4,515,000
Schwartz-Baize Lighting District	1	\$7,000
Sunset Oaks Lighting District	79	\$553,000
<b>GRAND TOTAL LIGHTING DISTRICTS</b>	<b>1010</b>	<b>\$7,070,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY TRAFFIC SIGNALS**

HAZARD: NEW MELONES INUNDATION  
Jurisdiction County: New Melones Dam

Location	Cost
Broadway At Salida Blve	\$250,000
Carpenter Road At Paradise Road	\$250,000
CLARIBEL AT OAKDALE	\$250,000
KANSAS AVE AT EMERALD AVE	\$250,000
KIERNAN AVE AT N. HWY99	\$250,000
KIERNAN AVE AT S. HWY99	\$250,000
KIERNAN AVE AT SISK RD	\$250,000
PARADISE RD AT BURBANK	\$250,000
PELANDALE AVE AT SISK RD	\$250,000
PELANDALE RD AT SALIDA BLVD	\$250,000
Stewart Road At McHenry Ave	\$250,000
Woodland Ave At Carpenter Road	\$250,000
<b>GRAND TOTAL TRAFFIC SIGNALS</b>	<b>\$3,000,000</b>

# RISK ASSESSMENT—Plan Update



Pine Flat Reservoir

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: PINE FLAT INUNDATION**

Jurisdiction	Flood Zone	POPULATION		HOUSEHOLDS	
		Total #	% of County	Total #	% of County
County		2691	0.60%	722	0.48%
Patterson		0	0.00%	0	0.00%
<b>GRAND TOTAL</b>		<b>2691</b>	<b>0.60%</b>	<b>722</b>	<b>0.48%</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: PINE FLAT INUNDATION

Jurisdiction County: Pine Flat Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$1,317,471	11	\$0	\$0	\$2,621,540	\$32,065	\$0	\$3,971,076
INDUSTRIAL	\$38,063	1	\$0	\$0	\$54,245	\$0	\$0	\$92,308
NON-ASSESSABLE	\$4,372,075	74	\$0	\$0	\$364,372	\$0	\$0	\$4,736,447
RESIDENTIAL	\$5,395,378	257	\$0	\$0	\$13,325,666	\$0	\$0	\$18,721,044
RESIDENTIAL-INCOME	\$60,170	4	\$0	\$0	\$253,790	\$0	\$0	\$313,960
RURAL, FARM, AGRICULTURE	\$66,264,195	502	\$374,070	\$3,069,345	\$44,759,778	\$4,793,575	\$0	\$119,260,963
VACANT COMMERCIAL	\$296,933	2	\$0	\$0	\$0	\$0	\$0	\$296,933
VACANT RESIDENTIAL	\$554,966	11	\$0	\$0	\$0	\$0	\$0	\$554,966
Total =	\$78,299,251	862	\$374,070	\$3,069,345	\$61,379,391	\$4,825,640	\$0	\$147,947,697
Grand Total	\$78,299,251	862	\$374,070	\$3,069,345	\$61,379,391	\$4,825,640	\$0	\$147,947,697

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: PINE FLAT INUNDATION  
Jurisdiction County: Pine Flat Dam

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
Grayson Community Center	016-034-006		\$1,713,838	\$0	\$0	\$1,713,838
HONOR FARM	016-026-010		\$50,266	\$22,731	\$0	\$72,997
HONOR FARM	017-060-002	REAL/CONTENTS INC	\$818,301	\$268,656	\$0	\$1,086,957
HONOR FARM	016-026-010	REAL/CONTENTS INC	\$41,572	\$19,516	\$0	\$61,088
HONOR FARM	016-026-010	REAL/CONTENTS INC	\$671,811	\$211,413	\$0	\$883,224
HONOR FARM	016-026-010	REAL/CONTENTS INC	\$13,891	\$21,075	\$0	\$34,966
HONOR FARM	016-026-010	REAL/CONTENTS INC	\$82,470	\$65,051	\$0	\$147,521
HONOR FARM	016-026-010	REAL/CONTENTS INC.	\$8,644	\$8,587	\$0	\$17,231
HONOR FARM	017-060-002		\$61,259	\$31,066	\$0	\$92,325
HONOR FARM	016-026-010		\$87,101	\$22,253	\$0	\$109,354
HONOR FARM	016-026-010		\$450,315	\$231,554	\$0	\$681,869
HONOR FARM	016-026-010		\$45,502	\$8,562	\$0	\$54,064
HONOR FARM	017-060-002		\$109,009	\$0	\$0	\$109,009
HONOR FARM	017-060-002		\$29,069	\$0	\$0	\$29,069
HONOR FARM	017-060-002		\$456,829	\$194,629	\$0	\$651,458
HONOR FARM	017-060-002		\$918,192	\$292,845	\$0	\$1,211,037
HONOR FARM	016-026-010		\$145,187	\$40,180	\$0	\$185,367
HONOR FARM	016-026-010		\$52,821	\$17,522	\$0	\$70,343
HONOR FARM	016-026-010		\$0	\$12,793	\$0	\$12,793
HONOR FARM	017-060-002		\$10,338	\$47,682	\$0	\$58,020
HONOR FARM	016-026-010		\$43,378	\$21,101	\$0	\$64,479
HONOR FARM	016-026-010		\$27,732	\$11,683	\$0	\$39,415

**GRAND TOTAL EXISTING FACILITIES**

\$5,837,525

\$1,548,899

\$0

\$7,386,424



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
FUTURE COUNTY FACILITIES**

HAZARD: PINE FLAT INUNDATION

Jurisdiction County: Pine Flat Dam

Description	APN	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
Honor Farm Barracks #4 ( to replace existing bldg #4)	017-060-00	\$0	\$0	\$0	\$2,000,000
Honor Farm Wastewater Facility ( expansion of WW treatment p	017-060-00	\$0	\$0	\$0	\$365,000

**GRAND TOTAL FUTURE FACILITIES**

\$0	\$0	\$0	\$2,365,000
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**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: PINE FLAT INUNDATION

Jurisdiction County: Pine Flat Dam

Crossing	Bridge Number	Road Name	Type	Cost
SAN JOAQUIN RIVER	38C0010	CROWS LANDING	Girder	\$6,857,073
SAN JOAQUIN RIVER	38C0016	GRAYSON	Girder	\$2,610,382
LAIRD SLOUGH	38C0027	GRAYSON	Slab	\$2,942,850
SAN JOAQUIN RIVER	38C0033	LAS PALMAS	Girder	\$7,450,151
ORESTIMBA CREEK	38C0043	RIVER	Slab	\$612,699
MID LATERAL NO.5	38C0116	PARADISE	Slab	\$273,362
PATTERSON IRRIGATION CANAL	38C0184	ELM	Slab	\$156,753
WESTLEY WASTEWAY	38C0219	COX	Slab	\$272,316
SAN JOAQUIN RIVER	39C0001	HILLS FERRY	Girder	\$2,571,456
<b>GRAND TOTAL COUNTY BRIDGES</b>				<b>\$23,747,042</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: PINE FLAT INUNDATION

Jurisdiction County: Pine Flat Dam

Sub Division	Location	Cost
<b>GRAND TOTAL DRAINAGE DISTRICTS</b>		<b>\$0</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: PINE FLAT INUNDATION

Jurisdiction County: Pine Flat Dam

District	Number	Cost
	0	\$0

**GRAND TOTAL LIGHTING DISTRICTS**

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY TRAFFIC SIGNALS**

HAZARD: PINE FLAT INUNDATION  
Jurisdiction County: Pine Flat Dam

Location	Cost
<b>GRAND TOTAL TRAFFIC SIGNALS</b>	
	\$0

# RISK ASSESSMENT—Plan Update



San Luis Reservoir

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: SAN LUIS INUNDATION**

Jurisdiction	Flood Zone	POPULATION		HOUSEHOLDS	
		Total #	% of County	Total #	% of County
County		11040	2.47%	3509	2.33%
Modesto		372	0.08%	86	0.06%
Newman		197	0.04%	70	0.05%
Patterson		0	0.00%	0	0.00%
<b>GRAND TOTAL</b>		<b>11609</b>	<b>2.60%</b>	<b>3665</b>	<b>2.43%</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: SAN LUIS INUNDATION

Jurisdiction County: San Luis Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$4,585,578	39	\$2,266	\$0	\$6,949,953	\$144,560	\$0	\$11,537,797
INDUSTRIAL	\$1,771,284	15	\$2,562,960	\$0	\$7,649,619	\$790,210	\$0	\$11,983,863
NON-ASSESSABLE	\$10,720,139	157	\$0	\$0	\$459,498	\$0	\$0	\$11,179,637
RESIDENTIAL	\$16,035,415	664	\$0	\$0	\$32,744,686	\$18,755	\$0	\$48,780,101
RESIDENTIAL-INCOME	\$1,484,258	22	\$0	\$0	\$1,451,090	\$0	\$0	\$2,935,348
RURAL, FARM, AGRICULTURE	\$371,324,700	2695	\$12,344,293	\$27,225,012	\$357,038,777	\$45,819,276	\$0	\$767,932,782
VACANT COMMERCIAL	\$405,963	5	\$0	\$0	\$0	\$0	\$0	\$405,963
VACANT RESIDENTIAL	\$3,761,745	71	\$0	\$0	\$137,752	\$0	\$0	\$3,899,497
<b>Total =</b>	<b>\$410,089,082</b>	<b>3668</b>	<b>\$14,909,519</b>	<b>\$27,225,012</b>	<b>\$406,431,375</b>	<b>\$46,772,801</b>	<b>\$0</b>	<b>\$858,654,988</b>



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Modesto**

HAZARD: SAN LUIS INUNDATION  
Jurisdiction County: San Luis Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
RESIDENTIAL-INCOME	\$1,215,298	31	\$0	\$0	\$3,406,592	\$0	\$0	\$4,621,890
<b>Total =</b>	<b>\$1,215,298</b>	<b>31</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,406,592</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,621,890</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Newman**

HAZARD: SAN LUIS INUNDATION  
Jurisdiction County: San Luis Dam

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Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
RESIDENTIAL	\$14,845,179	327	\$0	\$0	\$37,860,571	\$0	\$0	\$52,705,750
VACANT RESIDENTIAL	\$3,960,417	259	\$0	\$0	\$0	\$0	\$0	\$3,960,417
<b>Total =</b>	<b>\$18,805,596</b>	<b>586</b>	<b>\$0</b>	<b>\$0</b>	<b>\$37,860,571</b>	<b>\$0</b>	<b>\$0</b>	<b>\$56,666,167</b>
<b>Grand Total</b>	<b>\$430,109,976</b>	<b>4285</b>	<b>\$14,909,519</b>	<b>\$27,225,012</b>	<b>\$447,698,538</b>	<b>\$46,772,801</b>	<b>\$0</b>	<b>\$919,943,045</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: SAN LUIS INUNDATION  
Jurisdiction County: San Luis Dam

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
Grayson Community Center	016-034-006		\$1,713,838	\$0	\$0	\$1,713,838
HONOR FARM	016-026-010		\$50,266	\$22,731	\$0	\$72,997
HONOR FARM	017-060-002	REAL/CONTENTS INCL	\$818,301	\$268,656	\$0	\$1,086,957
HONOR FARM	016-026-010	REAL/CONTENTS INCL	\$41,572	\$19,516	\$0	\$61,088
HONOR FARM	016-026-010	REAL/CONTENTS INCL	\$671,811	\$211,413	\$0	\$883,224
HONOR FARM	016-026-010	REAL/CONTENTS INCL	\$13,891	\$21,075	\$0	\$34,966
HONOR FARM	016-026-010	REAL/CONTENTS INCL	\$82,470	\$65,051	\$0	\$147,521
HONOR FARM	016-026-010	REAL/CONTENTS INC.	\$8,644	\$8,587	\$0	\$17,231
HONOR FARM	017-060-002		\$61,259	\$31,066	\$0	\$92,325
HONOR FARM	016-026-010		\$87,101	\$22,253	\$0	\$109,354
HONOR FARM	016-026-010		\$450,315	\$231,554	\$0	\$681,869
HONOR FARM	016-026-010		\$45,502	\$8,562	\$0	\$54,064
HONOR FARM	017-060-002		\$109,009	\$0	\$0	\$109,009
HONOR FARM	017-060-002		\$29,069	\$0	\$0	\$29,069
HONOR FARM	017-060-002		\$456,829	\$194,629	\$0	\$651,458
HONOR FARM	017-060-002		\$918,192	\$292,845	\$0	\$1,211,037
HONOR FARM	016-026-010		\$145,187	\$40,180	\$0	\$185,367
HONOR FARM	016-026-010		\$52,821	\$17,522	\$0	\$70,343
HONOR FARM	016-026-010		\$0	\$12,793	\$0	\$12,793
HONOR FARM	017-060-002		\$10,338	\$47,682	\$0	\$58,020
HONOR FARM	016-026-010		\$43,378	\$21,101	\$0	\$64,479
HONOR FARM	016-026-010		\$27,732	\$11,683	\$0	\$39,415

**GRAND TOTAL EXISTING FACILITIES**

\$5,837,525	\$1,548,899	\$0	\$7,386,424
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**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
FUTURE COUNTY FACILITIES**

HAZARD: SAN LUIS INUNDATION

Jurisdiction County: San Luis Dam

Description	APN	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
Honor Farm Barracks #4 ( to replace existing bldg #4)	017-060-002	\$0	\$0	\$0	\$2,000,000
Honor Farm Wastewater Facility ( expansion of WW treatment p	017-060-002	\$0	\$0	\$0	\$365,000
<b>GRAND TOTAL FUTURE FACILITIES</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,365,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: SAN LUIS INUNDATION

Jurisdiction County: San Luis Dam

Crossing	Bridge Number	Road Name	Type	Cost
SAN JOAQUIN RIVER	38C0010	CROWS LANDING	Girder	\$6,857,073
SAN JOAQUIN RIVER	38C0016	GRAYSON	Girder	\$2,610,382
TUOLUMNE RIVER	38C0018	SHILOH	Girder	\$4,679,087
LAIRD SLOUGH	38C0027	GRAYSON	Slab	\$2,942,850
SAN JOAQUIN RIVER	38C0033	LAS PALMAS	Girder	\$7,450,151
ORESTIMBA CREEK	38C0043	RIVER	Slab	\$612,699
TID CANAL LATERAL NO.4	38C0098	CROWSLANDING	Slab	\$173,958
MID LATERAL NO.5	38C0107	STONE	Slab	\$133,858
MID LATERAL NO.5	38C0116	PARADISE	Slab	\$273,362
TID LATERAL NO.2	38C0123	CARPENTER	Slab	\$249,736
PATTERSON IRRIGATION CANAL	38C0184	ELM	Slab	\$156,753
TID LATERAL NO. 5.5	38C0186	MORGAN	Slab	\$154,794
WESTLEY WASTEWAY	38C0219	COX	Slab	\$272,316
TID LATERAL NO.2	38C0314	GRIFFIN	Slab	\$115,414
SAN JOAQUIN RIVER	39C0001	HILLS FERRY	Girder	\$2,571,456
<b>GRAND TOTAL COUNTY BRIDGES</b>				<b>\$29,253,889</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: SAN LUIS INUNDATION

Jurisdiction County: San Luis Dam

Sub Division	Location	Cost
<b>GRAND TOTAL DRAINAGE DISTRICTS</b>		<b>\$0</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: SAN LUIS INUNDATION

Jurisdiction County: San Luis Dam

District	Number	Cost
<b>GRAND TOTAL LIGHTING DISTRICTS</b>		<b>\$0</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY TRAFFIC SIGNALS**

HAZARD: SAN LUIS INUNDATION  
Jurisdiction County: San Luis Dam

Location	Cost
<b>GRAND TOTAL TRAFFIC SIGNALS</b>	
	\$0



# RISK ASSESSMENT—Plan Update



Tulloch Reservoir

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: TULLOCH INUNDATION**

Jurisdiction	Flood Zone	POPULATION		HOUSEHOLDS	
		Total #	% of County	Total #	% of County
County		13105	2.93%	4074	2.70%
Oakdale		7672	1.72%	2923	1.94%
Riverbank		1092	0.24%	337	0.22%
<b>GRAND TOTAL</b>		<b>21869</b>	<b>4.89%</b>	<b>7334</b>	<b>4.86%</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: TULLOCH INUNDATION

Jurisdiction County: Tulloch Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$18,712,295	86	\$136,700	\$0	\$61,392,228	\$1,455,140	\$0	\$80,241,223
INDUSTRIAL	\$14,432,324	106	\$2,153,459	\$85,918	\$39,317,948	\$1,870,678	\$0	\$55,989,649
NON-ASSESSABLE	\$66,051	132	\$0	\$0	\$709,139	\$0	\$0	\$775,190
RESIDENTIAL	\$147,966,576	3534	\$0	\$0	\$474,877,567	\$0	\$0	\$622,844,143
RESIDENTIAL-INCOME	\$3,575,053	51	\$0	\$641,769	\$7,935,900	\$597,289	\$0	\$12,152,722
RURAL, FARM, AGRICULTURE	\$151,748,687	971	\$2,109,366	\$10,808,870	\$142,398,950	\$4,012,959	\$0	\$307,065,873
VACANT COMMERCIAL	\$3,405,671	16	\$0	\$0	\$29,810	\$0	\$0	\$3,435,481
VACANT RESIDENTIAL	\$13,541,091	129	\$0	\$0	\$123,853	\$0	\$0	\$13,664,944
Total =	\$353,447,748	5025	\$4,399,525	\$11,536,557	\$726,785,395	\$7,936,066	\$0	\$1,096,169,225

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Oakdale**

HAZARD: TULLOCH INUNDATION

Jurisdiction County: Tulloch Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$59,841,903	280	\$2,368,414	\$0	\$124,949,841	\$1,008,004	\$0	\$187,160,158
INDUSTRIAL	\$2,248,696	19	\$242,529	\$0	\$4,008,455	\$33,460	\$0	\$6,499,680
NON-ASSESSABLE	\$252,089	81	\$0	\$0	\$44,374	\$37,890	\$0	\$296,463
RESIDENTIAL	\$112,061,089	2494	\$0	\$0	\$240,690,897	\$970	\$0	\$352,751,986
RESIDENTIAL-INCOME	\$12,461,755	162	\$0	\$50,000	\$25,254,131	\$95,522	\$0	\$37,765,886
RURAL, FARM, AGRICULTURE	\$283,572	2	\$0	\$0	\$148,787	\$0	\$0	\$432,359
VACANT COMMERCIAL	\$5,038,267	27	\$0	\$0	\$181,270	\$0	\$0	\$5,219,537
VACANT RESIDENTIAL	\$3,483,917	49	\$0	\$11,413	\$911,403	\$0	\$0	\$4,406,733
<b>Total =</b>	<b>\$195,671,288</b>	<b>3114</b>	<b>\$2,610,943</b>	<b>\$61,413</b>	<b>\$396,189,158</b>	<b>\$1,175,846</b>	<b>\$0</b>	<b>\$594,532,802</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Riverbank**

HAZARD: TULLOCH INUNDATION

Jurisdiction County: Tulloch Dam

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
RESIDENTIAL	\$11,354,236	244	\$0	\$0	\$30,818,831	\$0	\$0	\$42,173,067
VACANT RESIDENTIAL	\$132,266	3	\$0	\$0	\$0	\$0	\$0	\$132,266
Total =	\$11,486,502	247	\$0	\$0	\$30,818,831	\$0	\$0	\$42,305,333
Grand Total	\$560,605,538	8386	\$7,010,468	\$11,597,970	\$1,153,793,384	\$9,111,912	\$0	\$1,733,007,360

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: TULLOCH INUNDATION

Jurisdiction County: Tulloch Dam

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
OAKDALE COMM. CARE CTR.	130-003-036	LEASED	\$0	\$26,210	\$0	\$26,210
OAKDALE LIBRARY	130-009-045	BOOKS \$1,226,383	\$990,116	\$1,391,439	\$0	\$2,381,555
SHERIFF SUBSTATION	135-049-005	LEASED	\$0	\$25,226	\$0	\$25,226
<b>GRAND TOTAL EXISTING FACILITIES</b>			<b>\$990,116</b>	<b>\$1,442,875</b>	<b>\$0</b>	<b>\$2,432,991</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
FUTURE COUNTY FACILITIES**

HAZARD: TULLOCH INUNDATION

Jurisdiction County: Tulloch Dam

Description	APN	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
<b>GRAND TOTAL FUTURE FACILITIES</b>		\$0	\$0	\$0	\$0

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: TULLOCH INUNDATION

Jurisdiction County: Tulloch Dam

Crossing	Bridge Number	Road Name	Type	Cost
STANISLAUS RIVER	38C0001	ORANGE BLOSSOM	Girder	\$6,359,977
STANISLAUS RIVER	38C0032	MCHENRY	Girder	\$12,271,516
MID LATERAL NO.6	38C0068	SALIDA BOULEVARD	Slab	\$320,822
MID LATERAL NO.6	38C0069	SALIDA BOULEVARD	Slab	\$228,366
MID LATERAL NO.6	38C0108	FINNEY	Slab	\$275,608
MID LATERAL NO.8	38C0197	HAMMETT	Slab	\$168,252
MID LATERAL NO.6	38C0226	COVERT	Slab	\$265,870
MID LATERAL NO.6	38C0308	WILLIAMS	Slab	\$136,084
MID LATERAL NO.6	38C0309	JACKSON	Slab	\$142,177
MID LATERAL NO.6	38C0310	DUNN	Slab	\$113,742
TUOLUMNE RIVER	38C0317	LAKE	Slab	\$3,552,000
MID LATERAL NO.6	38C0322	HAMMETT	Slab	\$195,941
<b>GRAND TOTAL COUNTY BRIDGES</b>				<b>\$24,030,355</b>



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: TULLOCH INUNDATION

Jurisdiction County: TullochDam

Sub Division	Location	Cost
ALYSSA AVENUE - KIERNAN ESTATES	N/HORACE WAY	\$758,580
DANIEL COURT - SUNNYBROOK VILLAGE WEST	E/DANIEL	\$758,580
DURLEY DRIVE - CLARENDON WOODS NO. 1	AT WESSEX LANE	\$758,580
ELMSBURY DRIVE - BRISTOL GLEN CSA NO. 4	AT KILLIGREW	\$758,580
PARKSIDE PLAZA NO.1	TOOMES RD-WHITESTONE WAY	\$758,580
PIRRONE ROAD - MORGAN GLEN ESTATES	N/KIERNAN AVENUE	\$758,580
STILLWATER DRIVE - SUNNYBROOK VILLAGE	E/OVERLAND PLACE	\$758,580
ZINFANDEL AVENUE - DeARBOLES ESTATES	N/ESCAMILLA AVENUE	\$758,580
ZINFANDEL AVENUE - EDGEWOOD ESTATES	N/PARKS AVENUE	\$758,580
<b>GRAND TOTAL DRAINAGE DISTRICTS</b>		<b>\$6,827,220</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: TULLOCH INUNDATION

Jurisdiction County: Tulloch Dam

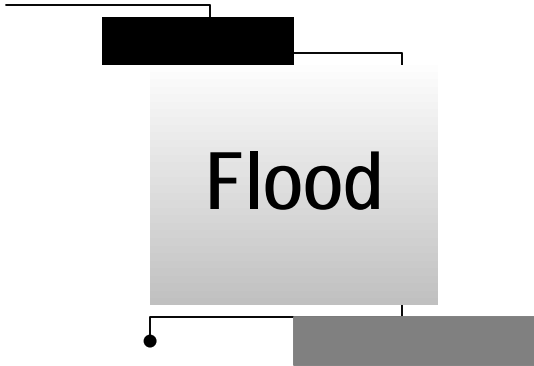
District	Number	Cost
Almond Wood Estates Lighting District	20	\$140,000
Country Club Estates Lighting District	3	\$21,000
Gibbs Ranch Lighting District	7	\$49,000
North Oaks Lighting District	2	\$14,000
Salida Lighting District	502	\$3,514,000
Schwartz-Baize Lighting District	1	\$7,000
Sunset Oaks Lighting District	11	\$77,000
<b>GRAND TOTAL LIGHTING DISTRICTS</b>	<b>546</b>	<b>\$3,822,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY TRAFFIC SIGNALS**

HAZARD: TULLOCH INUNDATION  
Jurisdiction County: Tulloch Dam

Location	Cost
Broadway At Salida Blve	\$250,000
KIERNAN AVE AT N. HWY99	\$250,000
KIERNAN AVE AT S. HWY99	\$250,000
<b>GRAND TOTAL TRAFFIC SIGNALS</b>	<b>\$750,000</b>

# RISK ASSESSMENT—Plan Update



# RISK ASSESSMENT/FLOOD

## FLOOD DESCRIPTION

A flood is the temporary inundation of water or mud on normally dry land. Heavy or prolonged rain or dam collapse can cause inundation, as can flash floods. Urban flooding occurs in developed areas where the amount of water generated from rainfall and runoff exceeds the storm water systems' capacity. As land is converted from agricultural to urban uses, it often loses its ability to absorb rainfall. Rain flows over impervious surfaces such as concrete and asphalt and into nearby storm sewers and streams. This runoff can result in the rapid rise of floodwaters. During urban floods, streets can become inundated, and storm drains often back up because of the volume of water and become blocked by vegetative debris like yard waste, which can cause additional flooding.



Development in or near the floodplain put lives and property at risk. Flood damage can include: structure inundation, erosion of stream banks, road embankments, foundations footings for bridges, impact damage from debris, blockage of infrastructure, cropland destruction, sewage releases from damaged tanks, and economic loss to agriculture.

## PROFILING HAZARDS

NATURAL HAZARD	HOW IDENTIFIED	WHY IDENTIFIED
FLOOD	<ul style="list-style-type: none"> <li>California proclaimed State of Emergency</li> <li>County General Plan Safety Element</li> <li>County Emergency Operations Plan</li> <li>Input from Planning Director</li> <li>Input from Public Works Director</li> <li>Input from MJHMP Planning Team</li> <li>Risk Assessments</li> <li>Feedback from MJHMP partners through submittal of the Hazard Identification Questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>Previous instances</li> <li>Several repetitive loss properties are located in the County.</li> </ul>

## LOCATION

Substantial action has taken place to reduce flood hazards. Construction of Don Pedro Dam on the Tuolumne River and New Melones Dam on the Stanislaus River has permitted officials to monitor the flows of water in those rivers, significantly reducing the chances of flooding. New Melones Dam has, since its completion, prevented flooding above the 8000 cubic feet per second (cfs) level on the Stanislaus River. Regulation of the flows from Don Pedro limits flooding along the Tuolumne River, but does not completely eliminate it.

## EXTENT

Flooding has been a major problem throughout the history of Stanislaus County, particularly with the encroachment of urban growth into flood planes. Major floods have occurred in 1861, 1938, 1950, 1955, 1969, 1983, 1995, 1997, and 1998. The State Reclamation Board has identified and adopted designated floodways, defined in feet per second of flow, along the San Joaquin River, Stanislaus River, Tuolumne River, and portions of Dry Creek.

The Department of Housing and Urban Development (HUD) has also developed flood hazard zones, which are referenced in the County's Flood Control Ordinance and used for insurance purposes. Any non-agricultural encroachment into these areas requires special permits that are difficult to obtain and often costly to implement. Permits for encroachment into the designated floodways must be obtained from the Reclamation Board. The County administers other permits. These measures still do not control flood hazards for existing development. Information regarding flood-prone areas as shown on the HUD maps is available in the Department of Public Works.

Dana Owens at Cal EMA provided Stanislaus County with additional previous flood disaster information:

STANISLAUS COUNTY FLOOD HISTORY	DATE
CA OCD 50-01	11-21-50
CD 47-DR-CA	12-23-55
CD 82-DR-CA	04-04-58
CDO 58-03 Storm and Flood Damage	02-26-58
OEP 183-DR-CA, 1964 Late Winter Storms	12-29-64
DC Heavy Rains 4-80(80-01 through 80-25) not included	04-03-80
FEMA 1155-DR-CA 96-97 Winter Storms	01-04-97
FEMA 1203-DR-CA El Nino '98	02-06-98

## PROBABILITY OF FUTURE EVENTS

Flooding risks are present along several rivers, including Del Puerto Canyon, Dry Creek, Orestimba Creek, Salado Creek, San Joaquin River, Stanislaus River, and the Tuolumne River. Every effort is being made to prevent future flooding events. For Stanislaus County's emergency organization, there are two flood stages.

**WARNING STAGE**—The Stage at which initial action must be taken by concerned interests (livestock warning, removal of equipment from lowest overflow areas, or simply general surveillance of the situation). This level may produce over bank flows sufficient to cause minor flooding of low-lying lands and local roads.

**FLOOD STAGE**—The Stage at which over bank flows are of sufficient magnitude to cause considerable inundation of land and roads and/or threat of significant hazard to life and property.

## NEW OCCURRENCES

There have been no new occurrences since the County's original MJHMP plan was adopted on January 12, 2006.

## ASSESSING VULNERABILITY: OVERVIEW

Stanislaus County took into account the following when updating our vulnerability assessment:

- Updates to inventories of existing structures in hazard areas, including new development, and redeveloped areas or structures;

- Potential impacts of future land development, including areas that may be annexed in the future;
- New buildings; and
- Completed mitigation actions that reduced overall vulnerability.

Several attempts have been made along the San Joaquin River to control flooding. First, the Corps of Engineers has built levees to limit flooding. Nine Reclamation Districts maintain these levees. Since these levees do not extend the full length of the river, flooding still occurs.

Second, there is a statewide flood control program, which monitors, through the use of computers, the levels of various rivers in the State. If the operator at Don Pedro, for example, wants to release water, the release might not cause any flooding on the Tuolumne but might affect the San Joaquin River. The operator informs the State of his/her intentions. The State then feeds this information into its computer along with all other available data to determine the effect of the proposed release. The State then coordinates the release of water from all of the dams so there is as little impact as possible on the rivers downstream. In the case of Don Pedro, it would be the San Joaquin River. Don Pedro may be permitted to release its water while another dam elsewhere along the system may have to temporarily reduce its releases.

Presently, there are two flood control districts in the County, the Orestimba Flood Control District and Sand Creek Flood Control District (Denair). There is some discussion of forming a flood control district for Salado Creek (Patterson) although no specific boundary is yet proposed.

Most flood conditions are from heavy, prolonged rain or rapid snow thaw. Flooding could involve extensive life and property loss, interruption of transportation and communications systems, loss and damage to agricultural land, and interruption of government infrastructure.

The primary flood control concerns for Stanislaus County are the controlled or uncontrolled releases from the New Melones Dam onto the Stanislaus River, Don Pedro Dam onto the Tuolumne River and flood conditions on the San Joaquin River. Additionally, flood conditions can and have developed along the tributary known as Dry Creek, which originates in the watershed of the eastern Stanislaus foothills and terminates where it flows into the Tuolumne River in Modesto.

#### **ASSESSING VULNERABILITY: ADDRESSING REPETITIVE LOSS PROPERTIES**

As of October 1, 2008, all mitigation plans must also address National Flood Insurance Program insured structures that have been repetitively damaged by floods. Repetitive Loss Properties (RLP) are those for which two or more loses of at least \$1,000 each have been paid under the National Flood Insurance Program (NFIP) within any 10 year period since 1978.

The table below shows general data for RLP located within Stanislaus County and includes the unincorporated and incorporated areas. In accordance with the Privacy Act of 1974, specific information regarding the location of RLP is prohibited from public release. However, maps showing areas where claims have been paid can be made public. The GIS Map shows the RLP areas in relationship to Flood Hazard Areas as identified on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM).

## STANISLAUS COUNTY REPETITIVE LOSS PROPERTIES (RLP)

Location	Type of Property	Number of RLP	Number of Claims Since 1978	Total Paid Since 1978	FEMA Flood Zone
Crows Landing	Non-Residential	1	1	\$137,754	100 Year
Modesto	Residential - SF	1	1	\$106,078	100 Year
Newman	Residential - SF	2	2	\$115,676	100 Year

**RLP Source: Michael Hornick, FEMA RIX/MT/RA/NFIP, Oakland, CA – February 11, 2010**

Michael Hornick, FEMA RIX/MT/RA/NFIP, in Oakland, California was the point of contact for Stanislaus County. He ran a historical inquiry for repetitive loss properties in Stanislaus County. The information received from him was used to plot the properties on the GIS map and produce the associated data table. Maps showing areas where claims have been paid are public and will be used for planning purposes by the Planning and Community Development Department as they consider the future development needs of the County. They will be helpful in identifying problem areas that may not be apparent on a floodplain or drainage map. The Planning Department also established a new objective to support programs and activities that will increase the Community Rating System (CRS) premium discounts through the National Flood Insurance Program and added three new actions to the mitigation strategy to help prevent future losses.

### **ASSESSING VULNERABILITY: IDENTIFYING STRUCTURES**

This section is based on an inventory of existing and future buildings, infrastructure, and critical facilities located within the identified flood hazard zones.

#### **For the flood hazard, there are six (6) GIS maps as follows:**

- Two GIS maps of Stanislaus County displaying the 100 and 500 year FEMA floodplain boundaries with a 1% and 0.2% chance of flood;
- GIS map showing the placement and value of all County facilities located in the northern portion;
- GIS map showing the placement and value of all County facilities located in the southern portion; and
- GIS map showing the placement of the planned future facilities in the County and their relation to the floodplain boundaries; and
- GIS map showing repetitive loss areas.

#### **For the flood hazard there are also nine (9) separate data reports as follows:**

- Populations and Housing Units by jurisdiction in the 100 year and 500 year flood zone;
- Populations and Housing Units by river in the 100 year and 500 year flood zone;
- Total Property Value by jurisdiction in the 100 year and 500 year flood zone;
- Existing County facilities in the 100 year and 500 year flood zone;
- Future County Facilities in the 100 year and 500 year flood zone;
- Infrastructure-County Bridges in the 100 year and 500 year flood zone;
- County Drainage Districts in the 100 year and 500 year flood zone;
- County Lighting Districts in the 100 year and 500 year flood zone; and
- County Traffic Signals in the 100 year and 500 year flood zone.



Facilities potentially affected by extensive flooding are:

- Airport
- Schools
- Utilities
- Emergency Services
- Agriculture
- Sanitation
- Residential

### ASSESSING VULNERABILITY: ESTIMATING POTENTIAL LOSSES

This section describes the vulnerability in terms of dollar losses and provides the community and the State of California with a common framework in which to measure the effects of hazards on vulnerable structures. The County has reviewed and revised this new plan to reflect changes in development and updated the inventory of structures.

#### Population and Housing Units by Jurisdiction

The table below lists a summary of the population, properties and values at risk from 100-year and 500-year floods from various source rivers. This exhibit also lists a summary of the housing units, population, and number of parcels and valuation of properties at risk of flooding from various rivers within unincorporated Stanislaus County.

FLOOD RISKS IN STANISLAUS COUNTY				
River	Population	Households	# of Parcels	Total Value
<b>100 Year Flood Zone</b>				
Del Puerto Canyon	248	71	139	\$49,686,842
Dry Creek	747	273	146	\$143,550,227
Orestimba Creek	588	223	189	\$48,685,552
Salado Creek	38	10	31	\$8,795,382
San Joaquin River	2,354	676	630	\$149,520,110
Stanislaus River	2,322	892	268	\$117,176,939
Tuolumne River	4766	1566	974	\$187,806,940
River	Population	Households	# of Parcels	Total Value
<b>500 Year Flood Zone</b>				
Del Puerto Canyon	127	41	55	\$12,977,463
Dry Creek	0	0	3	\$6,093,881
Orestimba Creek	339	115	111	\$29,227,786
Salado Creek	183	60	36	\$7,863,974
San Joaquin River	54	18	38	\$16,730,704
Stanislaus River	138	51	197	\$83,145,821
Tuolumne River	6411	1989	1188	\$390,912,682

### Total Property Value by Jurisdiction

The total value is comprised of the sum of the land value, fixed improvement value, grow improvement value, structural improvement value, personal property value, and mobile home value.

### Interactive Resources

Stanislaus County has incorporated risk data supplied from the State of California Office of Emergency Services, property valuation and land use data, and County facilities data into layers within a secured geographic information system (GIS) database to provide specific risk and value data pertinent to a flooding hazard.

### Existing County Facilities

The Grand Total of all existing facilities in the County in the 100 and 500 year flood zone is \$6,825,261.

### Future County Facilities

There are no future facilities planned in either the 100 year or 500 year flood zone. Sites for any new County occupied facilities will consider the risks from local hazards.

### County Bridges

The table below reflects the value of County Bridges in the event of a flood hazard:

COUNTY BRIDGES FLOOD RISK		
River	# of Bridges	Cost
<b>100 Year Flood Zone</b>		
Del Puerto Canyon	2	\$769,763
Dry Creek	4	\$13,302,744
Orestimba Creek	10	\$5,389,164
Salado Creek	3	\$1,535,277
San Joaquin River	6	\$22,704,228
Stanislaus River	4	\$24,573,405
Tuolumne River	11	\$143,850,015
COUNTY BRIDGES FLOOD RISK		
River	# of Bridges	Cost
<b>500 Year Flood Zone</b>		
Stanislaus River	1	\$113,742
<b>GRAND TOTAL BRIDGES</b>	<b>41</b>	<b>\$212,238,338</b>

### County Drainage Districts

The Grand Total of all County drainage districts is \$403,263.

## **County Lighting Districts**

The Grand Total of all County lighting districts is \$42,000.

## **County Traffic Signals**

The Grand Total of all County traffic signals is \$250,000.

### **ASSESSING VULNERABILITY: ANALYZING DEVELOPMENT TRENDS**

Urban development is discouraged in areas with growth-limiting factors such as a high water table, poor soil percolation and flood plains unless measures to mitigate the problems are included as part of the development application.

Development is not allowed in areas that are within the designated floodway. Development within the 100-year flood boundary shall meet the requirements of Chapter 16.40 Flood Damage Protection of the County Code and within the designated floodway shall obtain Reclamation Board approval.

With several rivers traversing the County, flooding is a concern. The County makes information available to landowners in areas subject to flooding and supports the formation of improvement districts including flood control districts to eliminate safety hazards.

Development, except that which is consistent with the County General Plan at the time the Patterson Agreement is executed, in the area known as the Sperry Avenue Corridor, shall be required to participate in the solution of the Salado Creek flooding problem.

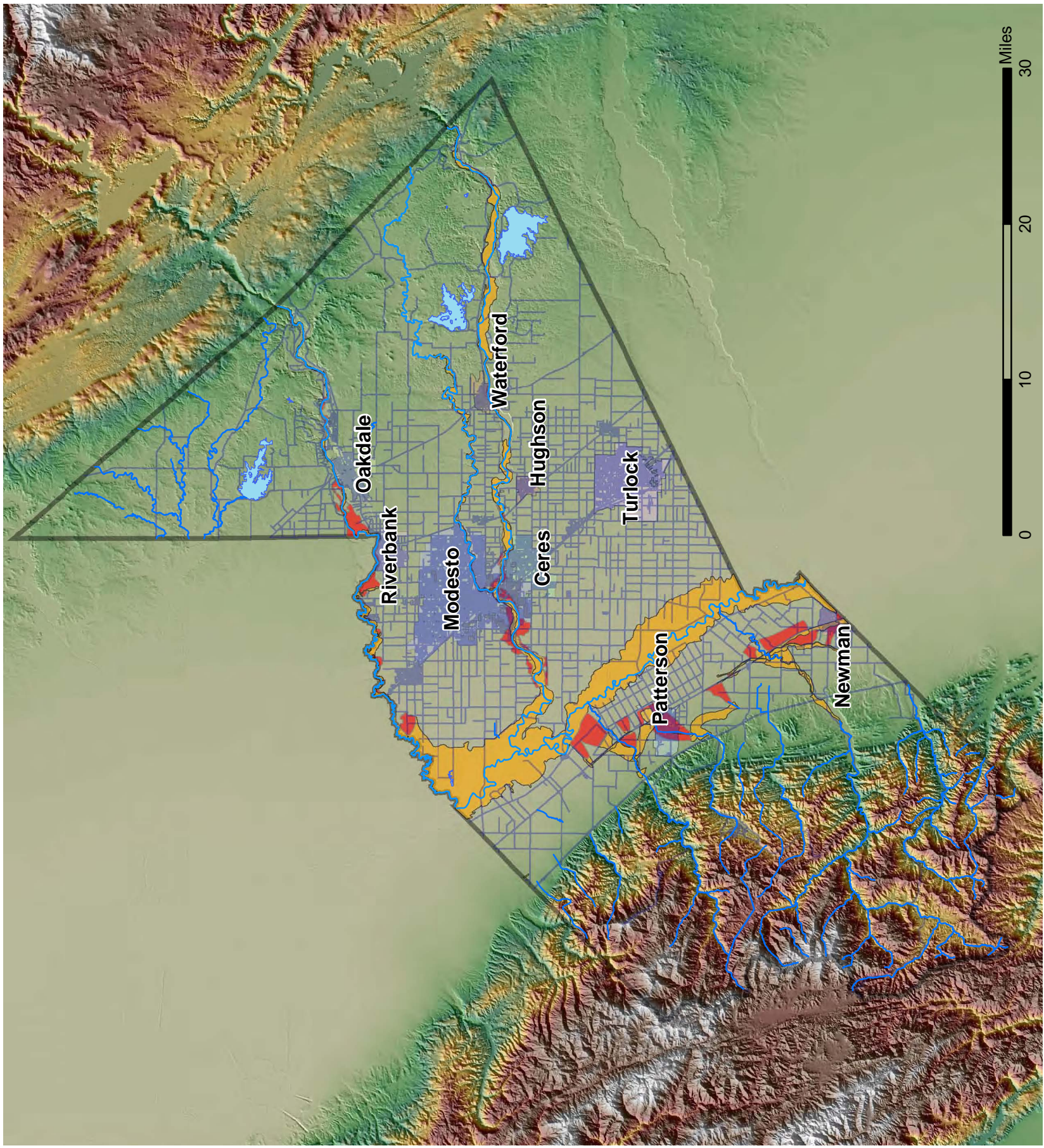
The County also utilizes the California Environmental Quality Act (CEQA) process to ensure that development does not occur that would be especially susceptible to flooding. Most discretionary projects require review for compliance with CEQA. As part of this review, potential impacts must be identified and mitigated.

The County continues to support the Federal Emergency Management Agency (FEMA) Flood Insurance Program so that residents who qualify may purchase such protection.

### **MULTI-JURISDICTIONAL RISK ASSESSMENT**

Each participating jurisdiction has reviewed, updated, and prepared their own risk assessment to identify where their risks vary from the risks facing the entire planning area of the County. See Volumes Two and Three for assessments from participating multi-jurisdictional partners.

# 2010 Stanislaus County -- Flood Hazard

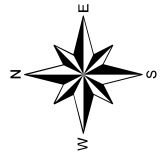


**Map Legend:**

- Rivers
- Streams
- Lakes
- Roads

**FEMA Flood Zones**  
Federal Emergency Mgt Agency

- 100 Year Flood Zone
- 500 Year Flood Zone

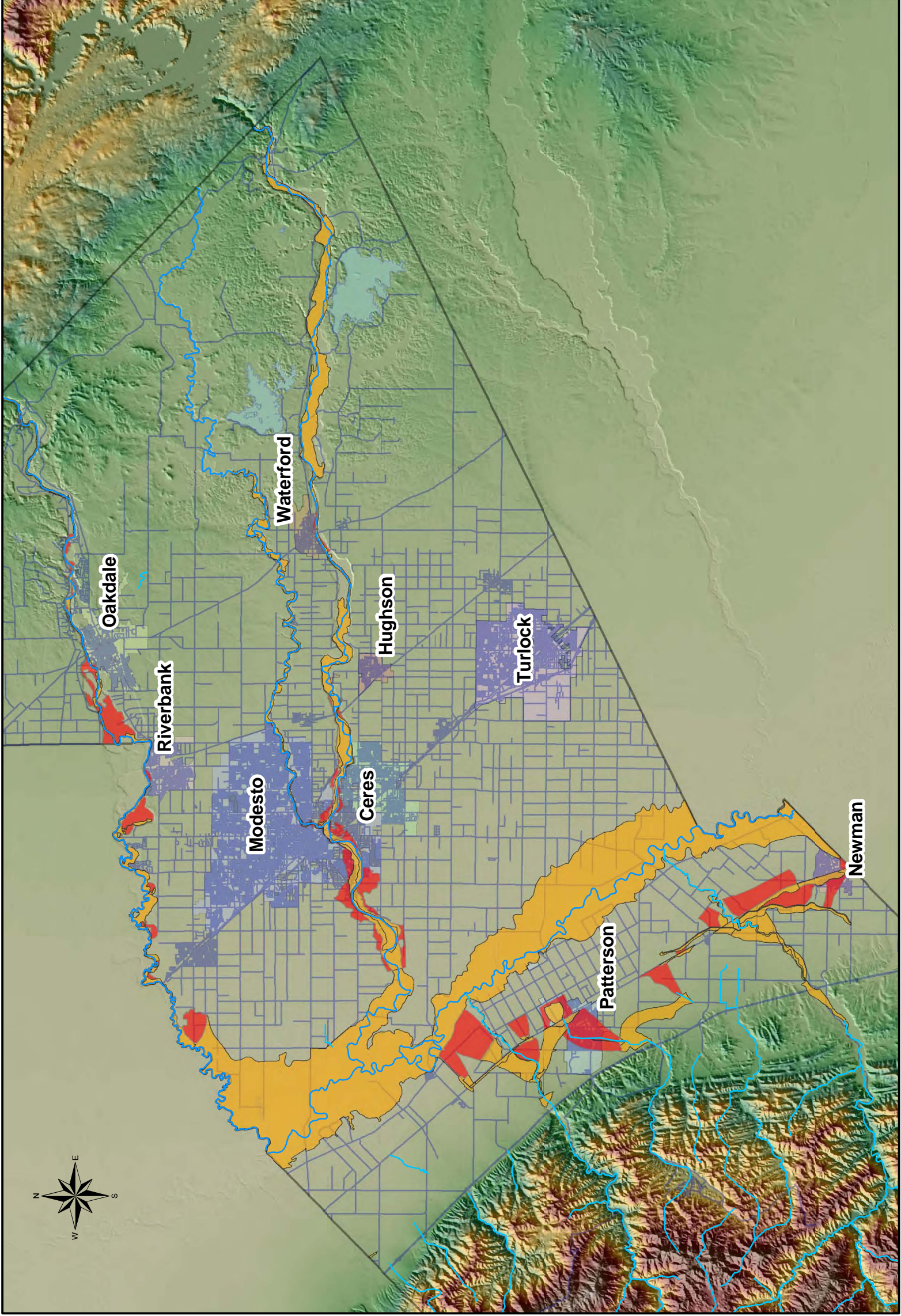


Map displays Stanislaus County with 100 and 500 year FEMA floodplain boundaries. ( 1% and 0.2% chance of flood )

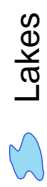
Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009



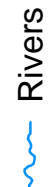
# 2010 Stanislaus County -- Flood Hazard



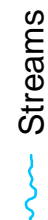
## Map Legend:



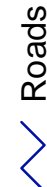
Lakes



Rivers



Streams



Roads

## FEMA Flood Zones

100 & 500 Year Zones



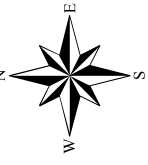
100 Year



500 Year

Map displays Stanislaus County with 100 and 500 year FEMA floodplain boundaries. (1% and 0.2% chance of flood)

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

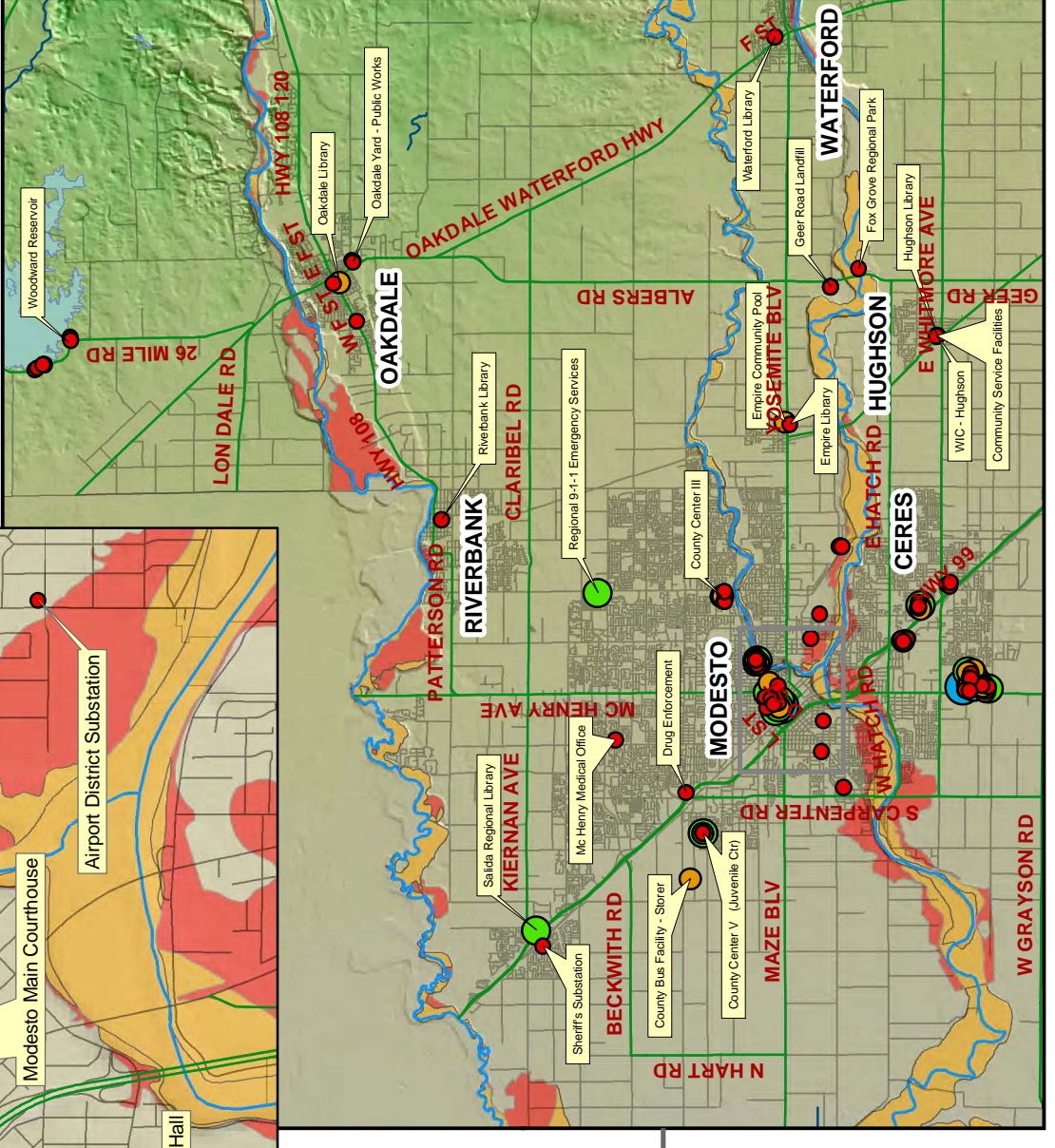
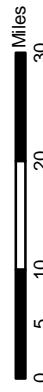
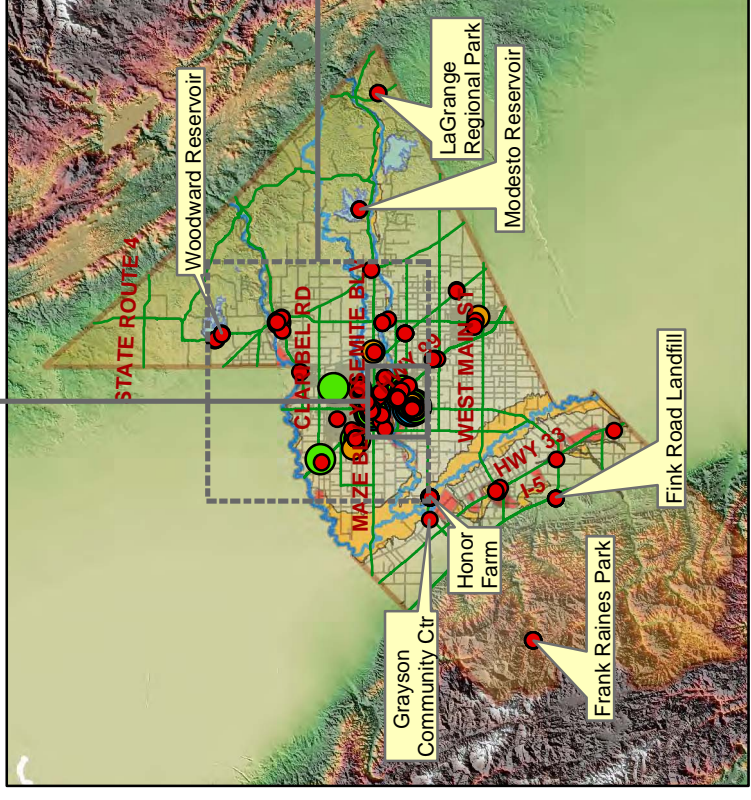
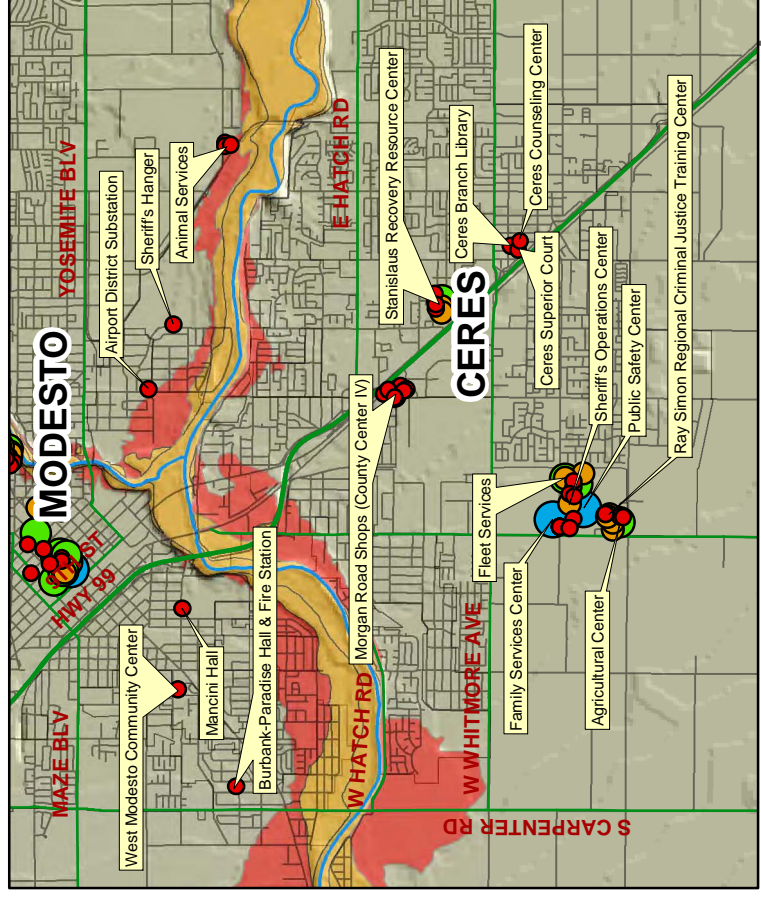
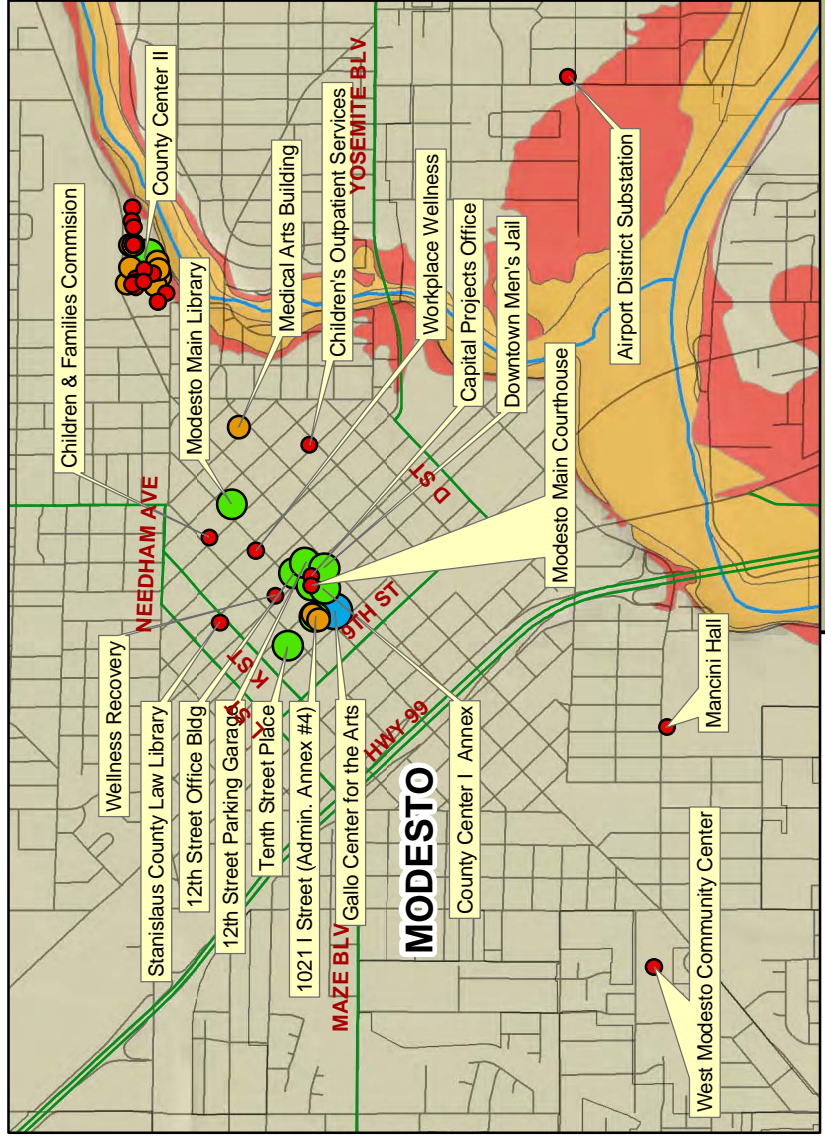


# 2010 Stanislaus County (North) Facilities Map -- Flood Hazard



Map displays Northern Stanislaus County Assets in relation to 100 and 500 year FEMA floodplain boundaries. ( 1% and 0.2% annual chance of flood ).

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009



**Map Legend:**

- Lakes
- Rivers
- Roads

**County Facilities**

**Total Facility Value**

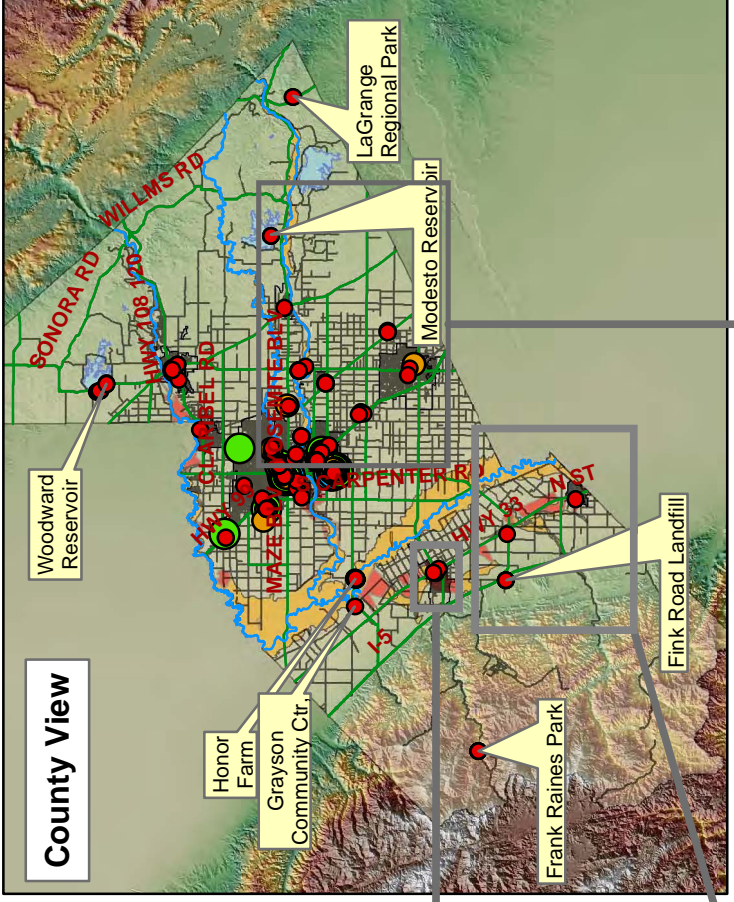
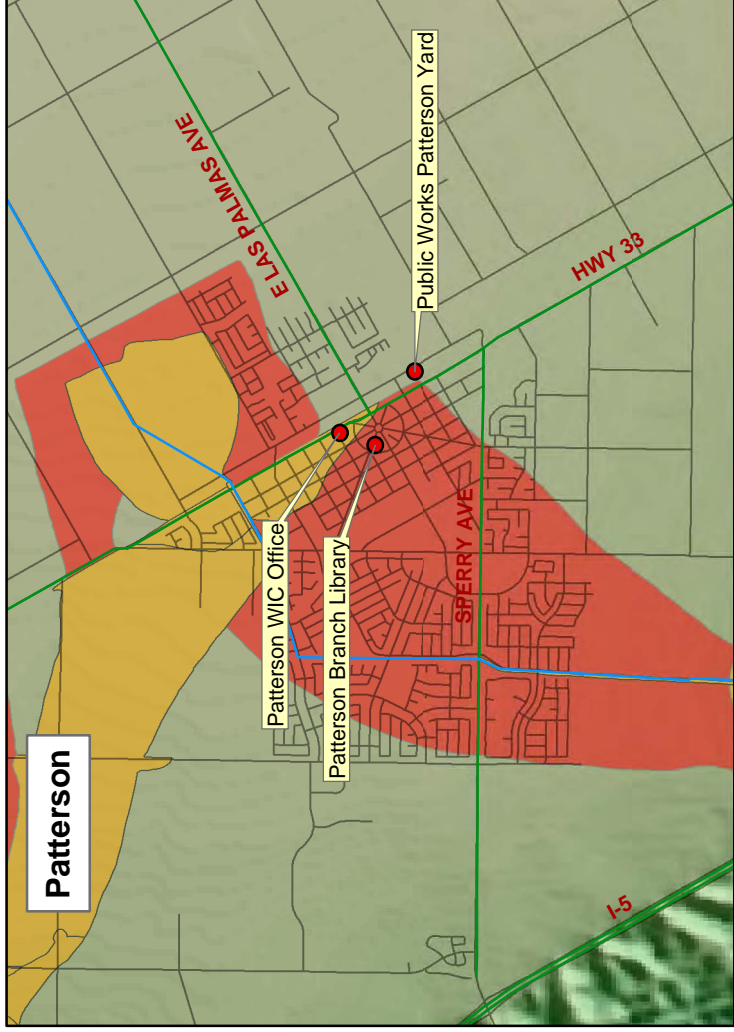
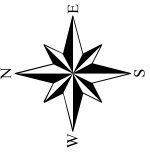
- < \$2,000,000
- 2,000,000 - \$10,000,000
- \$10,000,000 - \$30,000,000
- > \$30,000,000

**FEMA Flood Zones**

**Federal Emergency Mgt Agency**

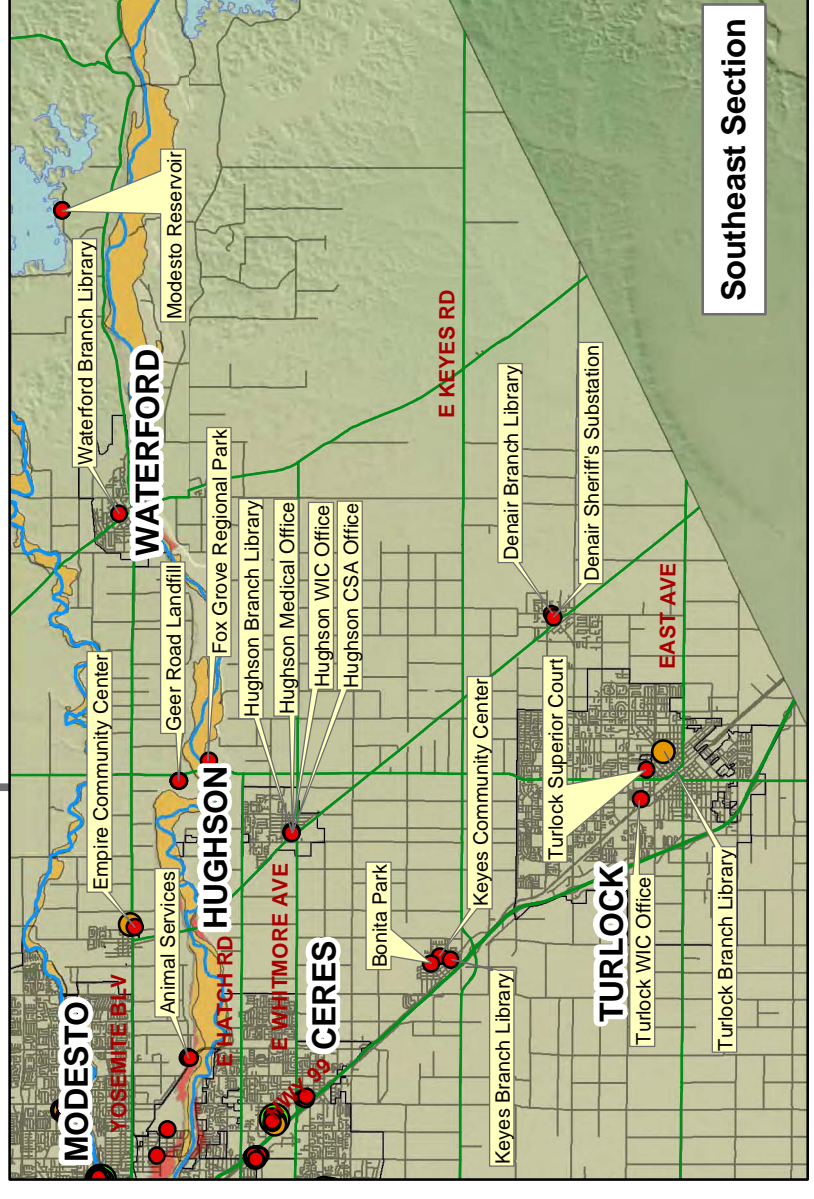
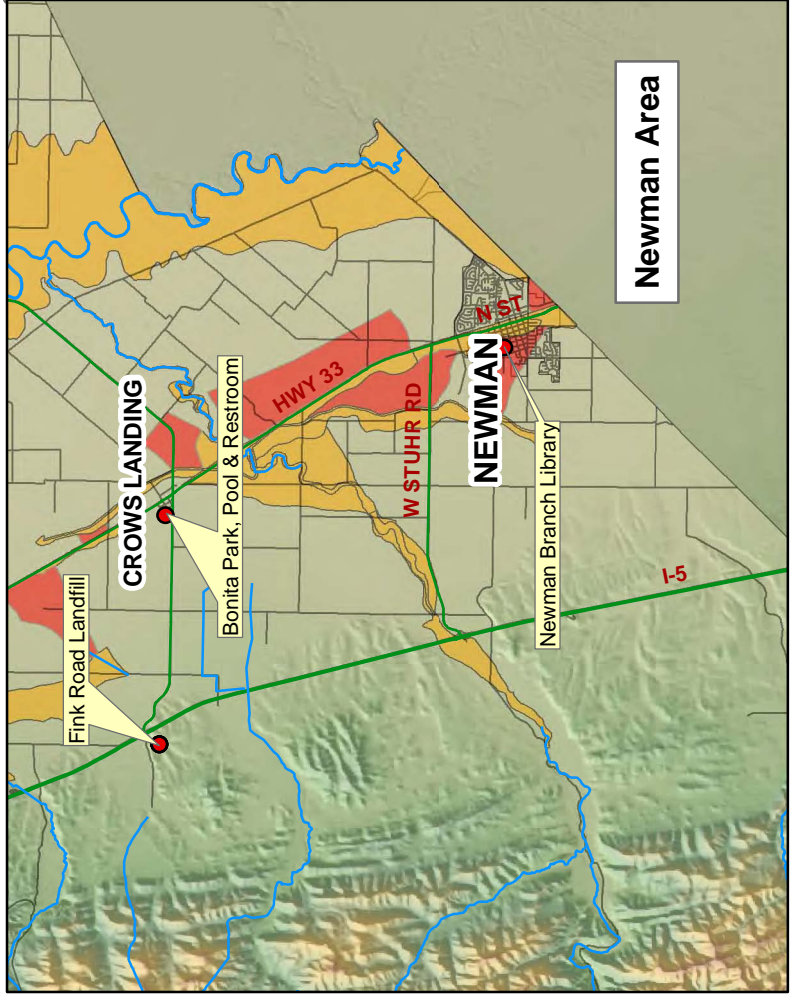
- 100 Year Flood Zone
- 500 Year Flood Zone

# 2010 Stanislaus County (South) Facilities Map -- Flood Hazard



**Map Legend:**

- Lakes
- Rivers
- Roads
- County Facilities
- Total Facility Value
  - < \$2,000,000
  - \$2,000,000 - \$10,000,000
  - \$10,000,000 - \$30,000,000
  - > \$30,000,000
- FEMA Flood Zones
- Federal Emergency Mgt Agency
  - 100 Year Flood Zone
  - 500 Year Flood Zone



Map displays Southern Stanislaus County Assets in relation to 100 and 500 year FEMA floodplain boundaries. (1% and 0.2% annual chance of flood)

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

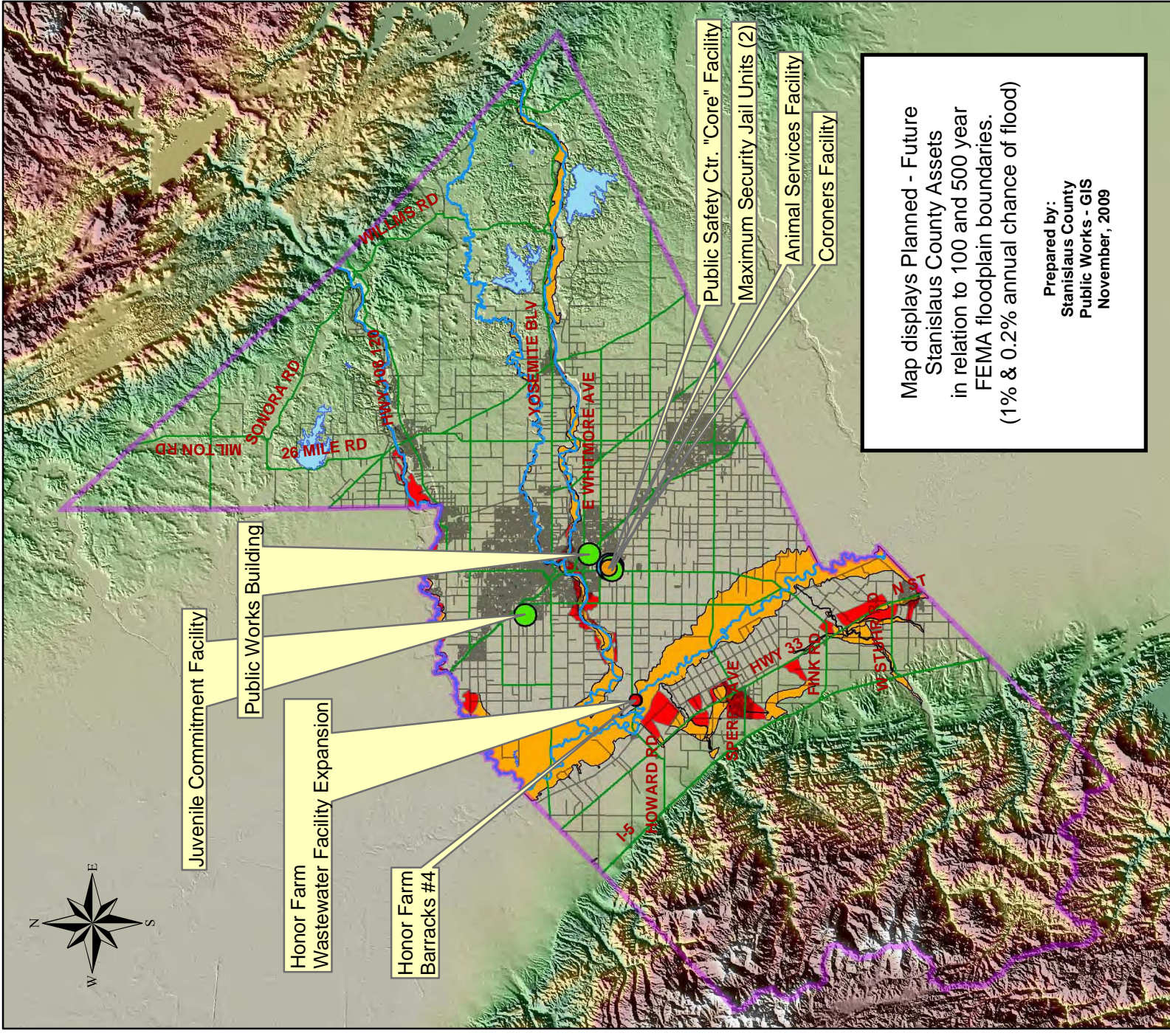
0 5 10 15 20 Miles

0 0.25 0.5 1 1.5 Miles

0 2 4 8 12 Miles

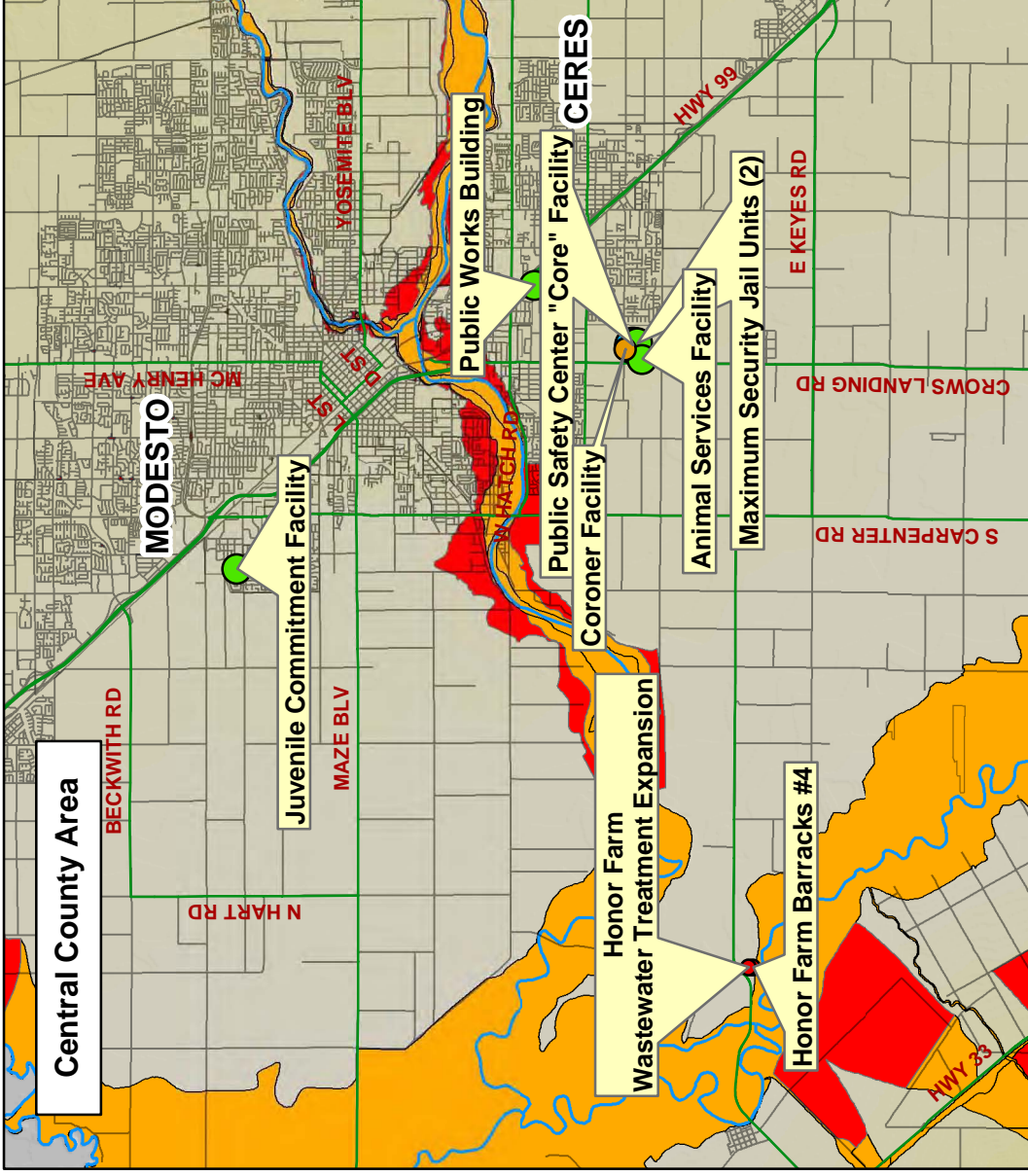
0 1 2 4 6 Miles

# 2010 Future Stanislaus County Facilities -- Flood Hazard



**Map Legend:**

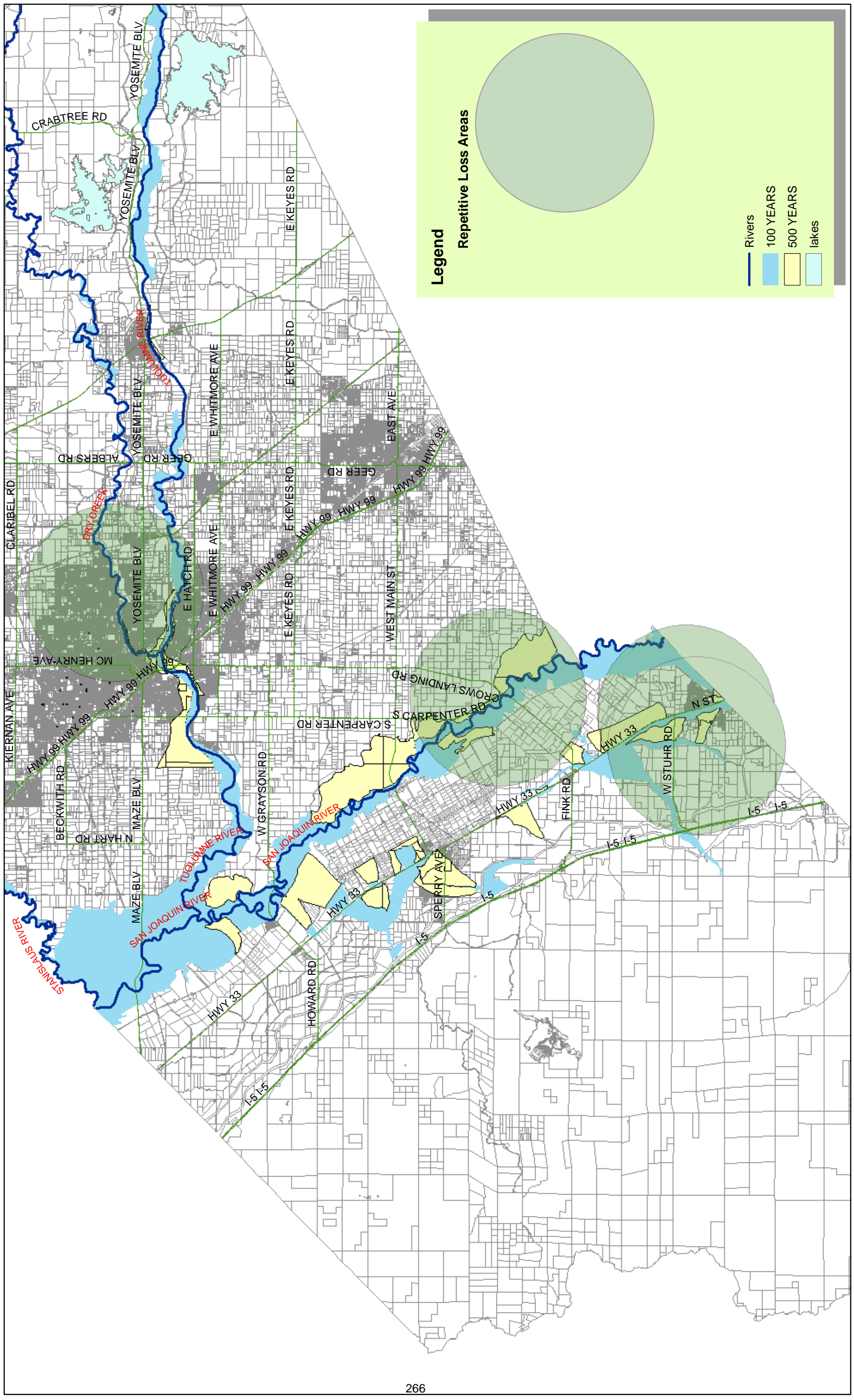
Lakes	<b>County Future Facilities</b>	<b>FEMA Flood Zones</b>
River	<b>Estimated Facility Value</b>	<b>Federal Emergency Mgt Agency</b>
Roads	< \$2,000,000	100 Year Flood Zone
County Line	\$2,000,000 - \$10,000,000	500 Year Flood Zone
	\$10,000,000 - \$30,000,000	
	> \$30,000,000	







# Repetitive Loss Areas



**Legend**

Repetitive Loss Areas

- Rivers
- 100 YEARS
- 500 YEARS
- lakes

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: FLOODING**

Jurisdiction	Flood Zone	POPULATION		HOUSEHOLDS	
		Total #	% of County	Total #	% of County

**Flood ZONE: 100 Year Zone**

Ceres		34	0.01%	15	0.01%
County		11063	2.47%	3711	2.46%
Modesto		3296	0.74%	1158	0.77%
Newman		1589	0.36%	497	0.33%
Oakdale		1205	0.27%	542	0.36%
Patterson		1532	0.34%	501	0.33%
Riverbank		31	0.01%	13	0.01%
Waterford		0	0.00%	0	0.00%

267

**Flood ZONE: 500 Year Zone**

Ceres		1073	0.24%	269	0.18%
County		7252	1.62%	2274	1.51%
Modesto		7948	1.78%	2166	1.44%
Newman		2356	0.53%	725	0.48%
Oakdale		77	0.02%	29	0.02%
Patterson		7997	1.79%	2158	1.43%
Riverbank		1102	0.25%	342	0.23%
Waterford		22	0.00%	12	0.01%

<b>GRAND TOTAL</b>	<b>46577</b>	<b>14412</b>
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**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: FLOODING**

Jurisdiction	Flood River	Total #	% of County	HOUSEHOLDS	Total #	% of County
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**Flood ZONE: 100 Year Zone**

**Ceres**

Tuolumne River		34	0.01%	15	0.01%
<b>Total</b>		34	0.01%	15	0.01%

**County**

Del Puerto Canyon Creek		248	0.06%	71	0.05%
Dry Creek		747	0.17%	273	0.18%
Orestimba Creek		588	0.13%	223	0.15%
Salado Creek		38	0.01%	10	0.01%
San Joaquin River		2354	0.53%	676	0.45%
Stanislaus River		2322	0.52%	892	0.59%
Tuolumne River		4766	1.07%	1566	1.04%
<b>Total</b>		11063	2.47%	3711	2.46%

**Modesto**

Tuolumne River		1169	0.26%	291	0.19%
Dry Creek		2127	0.48%	867	0.57%
<b>Total</b>		3296	0.74%	1158	0.77%

**Newman**

San Joaquin River		4	0.00%	2	0.00%
Orestimba Creek		1585	0.35%	495	0.33%

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: FLOODING**

Jurisdiction	POPULATION		HOUSEHOLDS	
	Total #	% of County	Total #	% of County
<b>Flood River</b>				
Total	1589	0.36%	497	0.33%
<b>Oakdale</b>				
Stanislaus River	1205	0.27%	542	0.36%
Total	1205	0.27%	542	0.36%
<b>Patterson</b>				
San Joaquin River	0	0.00%	0	0.00%
Salado Creek	88	0.02%	27	0.02%
Del Puerto Canyon Creek	1444	0.32%	474	0.31%
Total	1532	0.34%	501	0.33%
<b>Riverbank</b>				
Stanislaus River	31	0.01%	13	0.01%
Total	31	0.01%	13	0.01%
<b>Waterford</b>				
Tuolumne River	0	0.00%	0	0.00%
Total	0	0.00%	0	0.00%
<b>Total of Flood Zone</b>	<b>18750</b>	<b>4.19%</b>	<b>6437</b>	<b>4.27%</b>
<b>Flood ZONE: 500 Year Zone</b>				
<b>Ceres</b>				
Tuolumne River	1073	0.24%	269	0.18%

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: FLOODING**

Jurisdiction	POPULATION		HOUSEHOLDS	
	Total #	% of County	Total #	% of County
<b>Total</b>	1073	0.24%	269	0.18%
<b>County</b>				
San Joaquin River	54	0.01%	18	0.01%
Del Puerto Canyon Creek	127	0.03%	41	0.03%
Dry Creek	0	0.00%	0	0.00%
Salado Creek	183	0.04%	60	0.04%
Stanislaus River	138	0.03%	51	0.03%
Tuolumne River	6411	1.43%	1989	1.32%
Orestimba Creek	339	0.08%	115	0.08%
<b>Total</b>	7252	1.62%	2274	1.51%
<b>Modesto</b>				
Dry Creek	638	0.14%	355	0.24%
Tuolumne River	7310	1.64%	1811	1.20%
<b>Total</b>	7948	1.78%	2166	1.44%
<b>Newman</b>				
Orestimba Creek	2151	0.48%	664	0.44%
San Joaquin River	205	0.05%	61	0.04%
<b>Total</b>	2356	0.53%	725	0.48%
<b>Oakdale</b>				
Stanislaus River	77	0.02%	29	0.02%

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: FLOODING**

Jurisdiction	POPULATION		HOUSEHOLDS	
	Total #	% of County	Total #	% of County
Flood River				
Total	77	0.02%	29	0.02%
<b>Patterson</b>				
Del Puerto Canyon Creek	2878	0.64%	611	0.41%
Salado Creek	5119	1.15%	1547	1.03%
Total	7997	1.79%	2158	1.43%
<b>Riverbank</b>				
Stanislaus River	1102	0.25%	342	0.23%
Total	1102	0.25%	342	0.23%
<b>Waterford</b>				
Tuolumne River	22	0.00%	12	0.01%
Total	22	0.00%	12	0.01%
Total of Flood Zone	27827	6.23%	7975	5.29%
<b>GRAND TOTAL</b>	<b>46577</b>	<b>10.42%</b>	<b>14412</b>	<b>9.56%</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION--  
Ceres**

HAZARD: FLOOD

Jurisdiction County: Flood = 100 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Tuolumne River</u>								
COMMERCIAL	\$240,519	3	\$0	\$0	\$758,074	\$0	\$0	\$998,593
NON-ASSESSABLE	\$0	2	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$1,584,323	18	\$0	\$0	\$3,549,766	\$0	\$0	\$5,134,089
RESIDENTIAL-INCOME	\$654,053	1	\$0	\$148,942	\$26,254	\$0	\$0	\$680,307
VACANT RESIDENTIAL	\$321,634	3	\$0	\$0	\$0	\$0	\$0	\$321,634
<b>Total for Tuolumne River</b>	<b>\$2,800,529</b>	<b>27</b>	<b>\$0</b>	<b>\$148,942</b>	<b>\$4,334,094</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,134,623</b>
<b>Total for Ceres</b>	<b>\$2,800,529</b>	<b>27</b>	<b>\$0</b>	<b>\$148,942</b>	<b>\$4,334,094</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,134,623</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION--  
County**

HAZARD: FLOOD

Jurisdiction County: Flood = 100 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Del Puerto Canyon Creek</u>								
INDUSTRIAL	\$930,157	3	\$1,100	\$0	\$1,312,752	\$466,890	\$0	\$2,710,899

RESIDENTIAL	\$592,184	10	\$0	\$15,311	\$979,544	\$40,640	\$0	\$1,612,368
RESIDENTIAL-INCOME	\$655,093	4	\$830	\$0	\$480,811	\$66,360	\$0	\$1,203,094
RURAL, FARM, AGRICULTURE	\$23,664,059	111	\$0	\$2,138,517	\$8,690,080	\$541,976	\$0	\$32,896,115
VACANT RESIDENTIAL	\$11,264,366	11	\$0	\$0	\$0	\$0	\$0	\$11,264,366
Total for Del Puerto Canyon	\$37,105,859	139	\$1,930	\$2,153,828	\$11,463,187	\$1,115,866	\$0	\$49,686,842

Dry Creek

COMMERCIAL	\$35,624	1	\$0	\$0	\$30,972	\$0	\$0	\$66,596
INDUSTRIAL	\$1,796,064	3	\$10,611,275	\$0	\$21,310,032	\$55,324,620	\$0	\$89,041,991
NON-ASSESSABLE	\$173,662	1	\$0	\$0	\$134,000	\$0	\$0	\$307,662
RESIDENTIAL	\$737,088	6	\$0	\$0	\$1,221,880	\$0	\$0	\$1,958,968
RESIDENTIAL-INCOME	\$1,435,995	2	\$0	\$12,000	\$255,017	\$0	\$0	\$1,691,012
RURAL, FARM, AGRICULTURE	\$24,534,270	132	\$275,570	\$4,196,560	\$24,490,507	\$1,023,346	\$0	\$50,323,693
VACANT RESIDENTIAL	\$160,305	1	\$0	\$0	\$0	\$0	\$0	\$160,305
Total for Dry Creek	\$28,873,008	146	\$10,886,845	\$4,208,560	\$47,442,408	\$56,347,966	\$0	\$143,550,227

Orestimba Creek

COMMERCIAL	\$149,657	2	\$1,540	\$0	\$226,240	\$1,140	\$0	\$378,577
INDUSTRIAL	\$688,310	1	\$0	\$0	\$229,435	\$0	\$0	\$917,745
NON-ASSESSABLE	\$0	12	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$806,298	21	\$0	\$0	\$1,603,497	\$0	\$0	\$2,409,795
RESIDENTIAL-INCOME	\$342,864	5	\$0	\$23,399	\$319,142	\$3,080	\$0	\$665,086
RURAL, FARM, AGRICULTURE	\$26,970,718	141	\$4,800	\$2,486,702	\$12,339,621	\$2,119,736	\$0	\$41,434,875



VACANT COMMERCIAL	\$153,518	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$153,518
VACANT RESIDENTIAL	\$2,725,956	6	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,725,956
Total for Orestimba Creek	\$31,837,321	189	\$6,340	\$2,510,101	\$14,717,935	\$2,123,956	\$0	\$0	\$0	\$48,685,552

Salado Creek

NON-ASSESSABLE	\$149,154	3	\$0	\$0	\$14,000	\$0	\$0	\$0	\$0	\$163,154
RURAL, FARM, AGRICULTURE	\$6,883,085	28	\$0	\$583,116	\$1,749,143	\$0	\$0	\$0	\$0	\$8,632,228
Total for Salado Creek	\$7,032,239	31	\$0	\$583,116	\$1,763,143	\$0	\$0	\$0	\$0	\$8,795,382

San Joaquin River

COMMERCIAL	\$943,048	8	\$0	\$0	\$985,157	\$32,065	\$0	\$0	\$0	\$1,960,270
INDUSTRIAL	\$561,126	2	\$0	\$0	\$1,332,011	\$0	\$0	\$0	\$0	\$1,893,137
NON-ASSESSABLE	\$9,975,149	89	\$0	\$0	\$252,645	\$0	\$0	\$0	\$0	\$10,227,794
RESIDENTIAL	\$371,358	23	\$0	\$0	\$1,024,761	\$0	\$0	\$0	\$0	\$1,396,119
RURAL, FARM, AGRICULTURE	\$75,004,712	505	\$3,334,670	\$1,488,138	\$49,254,968	\$6,259,825	\$0	\$0	\$0	\$133,854,175
VACANT RESIDENTIAL	\$188,615	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$188,615
Total for San Joaquin River	\$87,044,008	630	\$3,334,670	\$1,488,138	\$52,849,542	\$6,291,890	\$0	\$0	\$0	\$149,520,110

Stanislaus River

COMMERCIAL	\$2,448,551	5	\$104,480	\$0	\$13,480,790	\$2,487,960	\$0	\$0	\$0	\$18,521,781
INDUSTRIAL	\$324,046	1	\$0	\$0	\$582,703	\$0	\$0	\$0	\$0	\$906,749
NON-ASSESSABLE	\$29,647	36	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$29,647
RESIDENTIAL	\$9,893,249	38	\$0	\$0	\$20,065,439	\$0	\$0	\$0	\$0	\$29,958,688
RESIDENTIAL-INCOME	\$588,746	1	\$0	\$434,166	\$444,992	\$509,530	\$0	\$0	\$0	\$1,543,268

RURAL, FARM, AGRICULTURE	\$31,604,388	166	\$1,523,280	\$1,890,281	\$28,603,358	\$1,102,592	\$0	\$62,833,618
VACANT COMMERCIAL	\$130,642	1	\$0	\$0	\$0	\$0	\$0	\$130,642
VACANT RESIDENTIAL	\$3,245,405	20	\$0	\$0	\$7,141	\$0	\$0	\$3,252,546
<b>Total for Stanislaus River</b>	<b>\$48,264,674</b>	<b>268</b>	<b>\$1,627,760</b>	<b>\$2,324,447</b>	<b>\$63,184,423</b>	<b>\$4,100,082</b>	<b>\$0</b>	<b>\$117,176,939</b>
<b>Tuolumne River</b>								
COMMERCIAL	\$30,065,309	26	\$65,338	\$0	\$8,676,692	\$582,726	\$0	\$39,390,065
INDUSTRIAL	\$3,543,996	16	\$1,106,120	\$0	\$8,628,564	\$1,702,350	\$0	\$14,981,030
NON-ASSESSABLE	\$116,934	59	\$0	\$0	\$0	\$0	\$0	\$116,934
RESIDENTIAL	\$14,481,583	555	\$0	\$0	\$27,321,616	\$0	\$0	\$41,803,199
RESIDENTIAL-INCOME	\$1,092,432	28	\$0	\$0	\$1,504,869	\$0	\$0	\$2,597,301
RURAL, FARM, AGRICULTURE	\$41,050,175	226	\$3,861,316	\$4,645,444	\$34,400,452	\$5,123,344	\$0	\$84,435,287
VACANT COMMERCIAL	\$1,216,485	16	\$0	\$0	\$792,807	\$0	\$0	\$2,009,292
VACANT RESIDENTIAL	\$2,370,309	48	\$0	\$0	\$103,523	\$0	\$0	\$2,473,832
<b>Total for Tuolumne River</b>	<b>\$93,937,223</b>	<b>974</b>	<b>\$5,032,774</b>	<b>\$4,645,444</b>	<b>\$81,428,523</b>	<b>\$7,408,420</b>	<b>\$0</b>	<b>\$187,806,940</b>
<b>Total for County</b>	<b>\$334,094,332</b>	<b>2377</b>	<b>\$20,890,319</b>	<b>\$17,913,634</b>	<b>\$272,849,161</b>	<b>\$77,388,180</b>	<b>\$0</b>	<b>\$705,221,992</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Modesto**

HAZARD: FLOOD

Jurisdiction County: Flood = 100 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
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Dry Creek

COMMERCIAL	\$2,815,451	5	\$0	\$0	\$9,693,761	\$0	\$0	\$12,509,212
NON-ASSESSABLE	\$0	32	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$12,133,460	134	\$0	\$0	\$29,331,452	\$0	\$0	\$41,464,912
RESIDENTIAL-INCOME	\$1,077,804	5	\$0	\$0	\$5,762,406	\$104,000	\$0	\$6,944,210
RURAL, FARM, AGRICULTURE	\$657	1	\$0	\$0	\$0	\$0	\$0	\$657
VACANT COMMERCIAL	\$687,510	7	\$0	\$0	\$0	\$0	\$0	\$687,510
VACANT RESIDENTIAL	\$1,322,153	14	\$0	\$0	\$0	\$0	\$0	\$1,322,153
<b>Total for Dry Creek</b>	<b>\$18,037,035</b>	<b>198</b>	<b>\$0</b>	<b>\$0</b>	<b>\$44,787,619</b>	<b>\$104,000</b>	<b>\$0</b>	<b>\$62,928,654</b>

Tuolumne River

INDUSTRIAL	\$306,060	6	\$0	\$0	\$2,888,175	\$0	\$0	\$3,194,235
NON-ASSESSABLE	\$2,196	52	\$0	\$0	\$163	\$0	\$0	\$2,359
RESIDENTIAL	\$4,013,532	150	\$0	\$0	\$10,571,542	\$0	\$0	\$14,585,074
RESIDENTIAL-INCOME	\$39,309	2	\$0	\$0	\$45,640	\$0	\$0	\$84,949
VACANT COMMERCIAL	\$7,992	2	\$0	\$0	\$16,528	\$0	\$0	\$24,520
VACANT RESIDENTIAL	\$127,432	3	\$0	\$0	\$0	\$0	\$0	\$127,432
<b>Total for Tuolumne River</b>	<b>\$4,496,521</b>	<b>215</b>	<b>\$0</b>	<b>\$0</b>	<b>\$13,522,048</b>	<b>\$0</b>	<b>\$0</b>	<b>\$18,018,569</b>
<b>Total for Modesto</b>	<b>\$22,533,556</b>	<b>413</b>	<b>\$0</b>	<b>\$0</b>	<b>\$58,309,667</b>	<b>\$104,000</b>	<b>\$0</b>	<b>\$80,947,223</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Newman**

HAZARD: FLOOD

Jurisdiction County: Flood = 100 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Orestimba Creek</u>								
COMMERCIAL	\$7,746,540	96	\$483,379	\$0	\$24,863,088	\$754,803	\$0	\$33,847,810
INDUSTRIAL	\$743,498	8	\$0	\$0	\$4,292,975	\$0	\$0	\$5,036,473
NON-ASSESSABLE	\$0	19	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$8,354,445	305	\$0	\$0	\$15,428,084	\$0	\$0	\$23,782,529
RESIDENTIAL-INCOME	\$2,533,164	27	\$0	\$0	\$11,336,549	\$51,000	\$0	\$13,920,713
RURAL, FARM, AGRICULTURE	\$61,782	1	\$0	\$0	\$74,445	\$0	\$0	\$136,227
VACANT COMMERCIAL	\$1,597,770	17	\$23,350	\$0	\$252,376	\$5,990	\$0	\$1,879,486
VACANT RESIDENTIAL	\$925,899	30	\$0	\$0	\$0	\$0	\$0	\$925,899
<b>Total for Orestimba Creek</b>	<b>\$21,963,098</b>	<b>503</b>	<b>\$506,729</b>	<b>\$0</b>	<b>\$56,247,517</b>	<b>\$811,793</b>	<b>\$0</b>	<b>\$79,529,137</b>
<u>San Joaquin River</u>								
RESIDENTIAL	\$400,000	8	\$0	\$0	\$1,067,000	\$0	\$0	\$1,467,000
VACANT RESIDENTIAL	\$176,311	1	\$0	\$0	\$0	\$0	\$0	\$176,311
<b>Total for San Joaquin River</b>	<b>\$576,311</b>	<b>9</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,067,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,643,311</b>
<b>Total for Newman</b>	<b>\$22,539,409</b>	<b>512</b>	<b>\$506,729</b>	<b>\$0</b>	<b>\$57,314,517</b>	<b>\$811,793</b>	<b>\$0</b>	<b>\$81,172,448</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Oakdale**

HAZARD: FLOOD

Jurisdiction County: Flood = 100 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Stanislaus River</u>								
NON-ASSESSABLE	\$0	2	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$145,959	2	\$0	\$0	\$333,833	\$0	\$0	\$479,792
VACANT RESIDENTIAL	\$3,293	1	\$0	\$0	\$0	\$0	\$0	\$3,293
Total for Stanislaus River	\$149,252	5	\$0	\$0	\$333,833	\$0	\$0	\$483,085
<b>Total for Oakdale</b>	\$149,252	5	\$0	\$0	\$333,833	\$0	\$0	\$483,085

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Patterson**

HAZARD: FLOOD

Jurisdiction County: Flood = 100 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Del Puerto Canyon Creek</u>								
COMMERCIAL	\$2,341,403	18	\$132,718	\$0	\$5,355,798	\$70,020	\$0	\$7,899,939
INDUSTRIAL	\$371,434	3	\$0	\$0	\$430,568	\$0	\$0	\$802,002
NON-ASSESSABLE	\$0	5	\$0	\$0	\$0	\$0	\$0	\$0

RESIDENTIAL	\$12,419,147	348	\$0	\$0	\$26,811,490	\$0	\$0	\$39,230,637
RESIDENTIAL-INCOME	\$2,500,969	23	\$0	\$0	\$2,712,325	\$0	\$0	\$5,213,294
RURAL, FARM, AGRICULTURE	\$1,634,510	14	\$0	\$101,689	\$526,551	\$230	\$0	\$2,161,291
VACANT COMMERCIAL	\$423,482	4	\$0	\$0	\$0	\$0	\$0	\$423,482
VACANT RESIDENTIAL	\$1,659,963	9	\$0	\$0	\$469,000	\$0	\$0	\$2,128,963
<b>Total for Del Puerto Canyon</b>	<b>\$21,350,908</b>	<b>424</b>	<b>\$132,718</b>	<b>\$101,689</b>	<b>\$36,305,732</b>	<b>\$70,250</b>	<b>\$0</b>	<b>\$57,859,608</b>

Salado Creek

NON-ASSESSABLE	\$0	1	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total for Salado Creek</b>	<b>\$0</b>	<b>1</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

San Joaquin River

NON-ASSESSABLE	\$0	1	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total for San Joaquin River</b>	<b>\$0</b>	<b>1</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total for Patterson</b>	<b>\$21,350,908</b>	<b>426</b>	<b>\$132,718</b>	<b>\$101,689</b>	<b>\$36,305,732</b>	<b>\$70,250</b>	<b>\$0</b>	<b>\$57,859,608</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Riverbank**

HAZARD: FLOOD

Jurisdiction County: Flood = 100 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Stanislaus River</u>								
NON-ASSESSABLE	\$0	1	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$603,527	8	\$0	\$0	\$1,772,919	\$0	\$0	\$2,376,446

VACANT RESIDENTIAL	\$136,269	4	\$0	\$0	\$0	\$0	\$0	\$0	\$136,269
Total for Stanislaus River	\$739,796	13	\$0	\$0	\$1,772,919	\$0	\$0	\$0	\$2,512,715
<b>Total for Riverbank</b>	\$739,796	13	\$0	\$0	\$1,772,919	\$0	\$0	\$0	\$2,512,715

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Ceres**

HAZARD: FLOOD

Jurisdiction County: Flood = 500 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Tuolumne River</u>								
COMMERCIAL	\$187,272	1	\$0	\$0	\$202,878	\$0	\$0	\$390,150
NON-ASSESSABLE	\$0	3	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$5,942,440	164	\$0	\$0	\$15,251,126	\$0	\$0	\$21,193,566
VACANT RESIDENTIAL	\$220,988	2	\$0	\$0	\$0	\$0	\$0	\$220,988
Total for Tuolumne River	\$6,350,700	170	\$0	\$0	\$15,454,004	\$0	\$0	\$21,804,704
<b>Total for Ceres</b>	\$6,350,700	170	\$0	\$0	\$15,454,004	\$0	\$0	\$21,804,704

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: FLOOD

Jurisdiction County: Flood = 500 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Del Puerto Canyon Creek</u>								
INDUSTRIAL	\$1	1	\$0	\$0	\$1	\$0	\$0	\$2
RESIDENTIAL	\$130,000	1	\$0	\$0	\$199,000	\$0	\$0	\$329,000



RURAL, FARM, AGRICULTURE	\$7,805,398	53	\$31,620	\$1,270,544	\$4,671,857	\$139,586	\$0	\$12,648,461
Total for Del Puerto Canyon	\$7,935,399	55	\$31,620	\$1,270,544	\$4,870,858	\$139,586	\$0	\$12,977,463
<u>Dry Creek</u>								
INDUSTRIAL	\$898,799	2	\$0	\$0	\$5,195,082	\$0	\$0	\$6,093,881
NON-ASSESSABLE	\$0	1	\$0	\$0	\$0	\$0	\$0	\$0
Total for Dry Creek	\$898,799	3	\$0	\$0	\$5,195,082	\$0	\$0	\$6,093,881
<u>Orestimba Creek</u>								
NON-ASSESSABLE	\$122,044	2	\$0	\$0	\$0	\$0	\$0	\$122,044
RESIDENTIAL	\$1,410,636	32	\$0	\$0	\$2,308,530	\$0	\$0	\$3,719,166
RESIDENTIAL-INCOME	\$957,927	6	\$0	\$39,391	\$190,082	\$2,600	\$0	\$1,150,609
RURAL, FARM, AGRICULTURE	\$18,313,980	65	\$0	\$615,731	\$5,146,855	\$76,888	\$0	\$23,537,723
VACANT COMMERCIAL	\$465,445	1	\$0	\$0	\$0	\$0	\$0	\$465,445
VACANT RESIDENTIAL	\$220,531	5	\$0	\$0	\$12,268	\$0	\$0	\$232,799
Total for Orestimba Creek	\$21,490,563	111	\$0	\$655,122	\$7,657,735	\$79,488	\$0	\$29,227,786
<u>Salado Creek</u>								
NON-ASSESSABLE	\$0	7	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$306,265	5	\$0	\$0	\$498,924	\$0	\$0	\$805,189
RESIDENTIAL-INCOME	\$65,967	1	\$0	\$13,442	\$7,202	\$0	\$0	\$73,169
RURAL, FARM, AGRICULTURE	\$4,710,678	22	\$0	\$73,837	\$1,892,170	\$4,674	\$0	\$6,607,522
VACANT RESIDENTIAL	\$376,556	1	\$0	\$0	\$1,538	\$0	\$0	\$378,094
Total for Salado Creek	\$5,459,466	36	\$0	\$87,279	\$2,399,834	\$4,674	\$0	\$7,863,974

San Joaquin River

RURAL, FARM, AGRICULTURE	\$9,292,172	38	\$0	\$196,151	\$7,425,512	\$13,020	\$0	\$16,730,704
Total for San Joaquin River	\$9,292,172	38	\$0	\$196,151	\$7,425,512	\$13,020	\$0	\$16,730,704

Stanislaus River

COMMERCIAL	\$312,506	2	\$480	\$0	\$1,753,475	\$15,840	\$0	\$2,082,301
NON-ASSESSABLE	\$0	5	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$1,564,274	5	\$0	\$0	\$2,734,335	\$0	\$0	\$4,298,609
RESIDENTIAL-INCOME	\$311,923	1	\$0	\$207,603	\$96,645	\$66,759	\$0	\$475,327
RURAL, FARM, AGRICULTURE	\$40,746,820	168	\$214,450	\$4,444,478	\$31,739,943	\$1,260,343	\$0	\$73,961,556
VACANT RESIDENTIAL	\$2,328,028	16	\$0	\$0	\$0	\$0	\$0	\$2,328,028
Total for Stanislaus River	\$45,263,551	197	\$214,930	\$4,652,081	\$36,324,398	\$1,342,942	\$0	\$83,145,821



Tuolumne River

COMMERCIAL	\$8,244,816	69	\$28,378	\$0	\$9,237,016	\$152,117	\$0	\$17,662,327
INDUSTRIAL	\$15,356,264	60	\$99,017,066	\$0	\$84,467,873	\$63,284,788	\$0	\$262,125,991
NON-ASSESSABLE	\$0	14	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$24,084,066	820	\$0	\$14,605	\$41,814,043	\$22,695	\$0	\$65,920,804
RESIDENTIAL-INCOME	\$4,286,539	63	\$0	\$151,735	\$5,159,663	\$14,400	\$0	\$9,460,602
RURAL, FARM, AGRICULTURE	\$16,510,449	103	\$17,600	\$1,803,489	\$14,337,887	\$661,178	\$0	\$31,527,114
VACANT COMMERCIAL	\$2,488,324	29	\$0	\$0	\$184,678	\$0	\$0	\$2,673,002
VACANT RESIDENTIAL	\$1,485,027	30	\$0	\$175,739	\$45,033	\$12,782	\$0	\$1,542,842
Total for Tuolumne River	\$72,455,485	1188	\$99,063,044	\$2,145,568	\$155,246,193	\$64,147,960	\$0	\$390,912,682

**Total for County**

\$162,795,435	1628	\$99,309,594	\$9,006,745	\$219,119,612	\$65,727,670	\$0	\$546,952,311
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**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Modesto**

HAZARD: FLOOD

Jurisdiction County: Flood = 500 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
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Dry Creek

COMMERCIAL	\$903,729	3	\$0	\$0	\$1,505,065	\$0	\$0	\$2,408,794
INDUSTRIAL	\$3,222,719	7	\$0	\$0	\$20,168,444	\$0	\$0	\$23,391,163
NON-ASSESSABLE	\$0	3	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$7,809,209	155	\$0	\$0	\$21,564,747	\$0	\$0	\$29,373,956
RESIDENTIAL-INCOME	\$2,011,021	15	\$0	\$0	\$3,356,686	\$95,778	\$0	\$5,463,485
VACANT COMMERCIAL	\$3,302,831	11	\$0	\$0	\$457,112	\$0	\$0	\$3,759,943
VACANT RESIDENTIAL	\$638,025	5	\$67,100	\$0	\$0	\$35,990	\$0	\$741,115
<b>Total for Dry Creek</b>	<b>\$17,887,534</b>	<b>199</b>	<b>\$67,100</b>	<b>\$0</b>	<b>\$47,052,054</b>	<b>\$131,768</b>	<b>\$0</b>	<b>\$65,138,456</b>

Tuolumne River

COMMERCIAL	\$619,645	5	\$105,380	\$0	\$1,111,893	\$242,355	\$0	\$2,079,273
INDUSTRIAL	\$1,764,881	5	\$169,950	\$0	\$1,015,734	\$315,190	\$0	\$3,265,755
NON-ASSESSABLE	\$7,603	32	\$0	\$0	\$1,500	\$0	\$0	\$9,103
RESIDENTIAL	\$28,198,312	966	\$0	\$0	\$62,594,460	\$0	\$0	\$90,792,772
RESIDENTIAL-INCOME	\$6,053,718	117	\$0	\$0	\$14,188,126	\$94,000	\$0	\$20,335,844

VACANT COMMERCIAL	\$575,330	5	\$0	\$0	\$5,000	\$0	\$0	\$0	\$580,330
VACANT RESIDENTIAL	\$1,470,351	23	\$0	\$44,764	\$7,067	\$0	\$0	\$0	\$1,477,418
Total for Tuolumne River	\$38,689,840	1153	\$275,330	\$44,764	\$78,923,780	\$651,545	\$0	\$0	\$118,540,495
<b>Total for Modesto</b>	\$56,577,374	1352	\$342,430	\$44,764	\$125,975,834	\$783,313	\$0	\$0	\$183,678,951

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Newman**

HAZARD: FLOOD  
Jurisdiction County: Flood = 500 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
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Orestimba Creek

COMMERCIAL	\$224,401	5	\$1,580	\$0	\$1,001,649	\$41,695	\$0	\$1,269,325
INDUSTRIAL	\$1,971,327	14	\$0	\$0	\$4,207,382	\$4,240	\$0	\$6,182,949
NON-ASSESSABLE	\$0	17	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$15,443,995	522	\$0	\$0	\$28,321,122	\$0	\$0	\$43,765,117
RESIDENTIAL-INCOME	\$602,272	12	\$0	\$0	\$1,229,392	\$0	\$0	\$1,831,664
RURAL, FARM, AGRICULTURE	\$14,430	2	\$480	\$2,084	\$17,081	\$0	\$0	\$31,991
VACANT COMMERCIAL	\$1,008,600	7	\$0	\$0	\$0	\$0	\$0	\$1,008,600
VACANT RESIDENTIAL	\$177,117	8	\$0	\$0	\$3,559	\$0	\$0	\$180,676
Total for Orestimba Creek	\$19,442,142	587	\$2,060	\$2,084	\$34,780,185	\$45,935	\$0	\$54,270,322
<b>Total for Newman</b>	\$19,442,142	587	\$2,060	\$2,084	\$34,780,185	\$45,935	\$0	\$54,270,322

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Oakdale**

HAZARD: FLOOD

Jurisdiction County: Flood = 500 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Stanislaus River</u>								
COMMERCIAL	\$1,923,223	1	\$0	\$0	\$668,628	\$5,000	\$0	\$2,596,851
NON-ASSESSABLE	\$0	8	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$6,613,703	109	\$0	\$0	\$21,216,264	\$0	\$0	\$27,829,967
RESIDENTIAL-INCOME	\$487,549	1	\$0	\$0	\$195,132	\$16,322	\$0	\$699,003
VACANT COMMERCIAL	\$180,507	2	\$0	\$0	\$0	\$0	\$0	\$180,507
VACANT RESIDENTIAL	\$94,337	4	\$0	\$11,413	\$0	\$0	\$0	\$94,337
Total for Stanislaus River	\$9,299,319	125	\$0	\$11,413	\$22,080,024	\$21,322	\$0	\$31,400,665
<b>Total for Oakdale</b>	<b>\$9,299,319</b>	<b>125</b>	<b>\$0</b>	<b>\$11,413</b>	<b>\$22,080,024</b>	<b>\$21,322</b>	<b>\$0</b>	<b>\$31,400,665</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Patterson**

HAZARD: FLOOD

Jurisdiction County: Flood = 500 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Del Puerto Canyon Creek</u>								

COMMERCIAL	\$72,831	1	\$0	\$0	\$266,550	\$0	\$0	\$339,381
INDUSTRIAL	\$855,303	8	\$0	\$0	\$2,730,384	\$0	\$0	\$3,585,687
NON-ASSESSABLE	\$0	13	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$16,529,383	463	\$0	\$0	\$34,053,350	\$0	\$0	\$50,582,733
RESIDENTIAL-INCOME	\$2,720,618	12	\$0	\$0	\$2,070,819	\$0	\$0	\$4,791,437
RURAL, FARM, AGRICULTURE	\$2,197,161	12	\$0	\$72,493	\$903,003	\$42,610	\$0	\$3,142,774
VACANT COMMERCIAL	\$394,952	6	\$0	\$0	\$330,556	\$0	\$0	\$725,508
VACANT RESIDENTIAL	\$1,830,637	54	\$0	\$0	\$0	\$0	\$0	\$1,830,637
Total for Del Puerto Canyon	\$24,600,885	569	\$0	\$72,493	\$40,354,662	\$42,610	\$0	\$64,998,157

Salado Creek

COMMERCIAL	\$14,067,994	104	\$662,203	\$0	\$44,030,905	\$576,586	\$0	\$59,337,688
INDUSTRIAL	\$489,084	5	\$0	\$0	\$826,929	\$0	\$0	\$1,316,013
NON-ASSESSABLE	\$0	52	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$136,921,924	3483	\$0	\$0	\$444,814,498	\$277,484	\$0	\$582,013,906
RESIDENTIAL-INCOME	\$3,422,883	63	\$0	\$1,049	\$7,425,055	\$28,000	\$0	\$10,875,938
VACANT COMMERCIAL	\$3,813,372	14	\$0	\$0	\$218,401	\$63,410	\$0	\$4,095,183
VACANT RESIDENTIAL	\$3,100,908	206	\$0	\$0	\$342,303	\$0	\$0	\$3,443,211
Total for Salado Creek	\$161,816,165	3927	\$662,203	\$1,049	\$497,658,091	\$945,480	\$0	\$661,081,939
<b>Total for Patterson</b>	\$186,417,050	4496	\$662,203	\$73,542	\$538,012,753	\$988,090	\$0	\$726,080,096

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Riverbank**

HAZARD: FLOOD

Jurisdiction County: Flood = 500 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Stanislaus River</u>								
NON-ASSESSABLE	\$0	4	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$10,476,091	223	\$0	\$0	\$28,846,059	\$0	\$0	\$39,322,150
VACANT RESIDENTIAL	\$128,000	2	\$0	\$0	\$0	\$0	\$0	\$128,000
Total for Stanislaus River	\$10,604,091	229	\$0	\$0	\$28,846,059	\$0	\$0	\$39,450,150
<b>Total for Riverbank</b>	\$10,604,091	229	\$0	\$0	\$28,846,059	\$0	\$0	\$39,450,150

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Waterford**

HAZARD: FLOOD

Jurisdiction County: Flood = 500 Year Zone

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
<u>Tuolumne River</u>								
COMMERCIAL	\$515,445	2	\$0	\$0	\$472,550	\$0	\$0	\$987,995
INDUSTRIAL	\$420,240	1	\$0	\$0	\$617,210	\$0	\$0	\$1,037,450
NON-ASSESSABLE	\$0	5	\$0	\$0	\$0	\$0	\$0	\$0

RESIDENTIAL	\$4,876,500	113	\$0	\$0	\$17,378,500	\$0	\$0	\$22,255,000
RESIDENTIAL-INCOME	\$176,651	1	\$0	\$0	\$429,184	\$0	\$0	\$605,835
Total for Tuolumne River	\$5,988,836	122	\$0	\$0	\$18,897,444	\$0	\$0	\$24,886,280
<b>Total for Waterford</b>	\$5,988,836	122	\$0	\$0	\$18,897,444	\$0	\$0	\$24,886,280
Grand Total	\$861,682,729	12482	\$121,846,053	\$27,302,813	\$1,434,385,838	\$145,940,553	\$0	\$2,563,855,173



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: FLOOD

Jurisdiction County: Flood = 100 Year Zone

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
<u>Dell Puerto Canyo</u>						
W.I.C.	131-009-001	LEASED	\$0	\$25,586	\$0	\$25,586
TOTAL for = Dell Puerto Canyon Creek			\$0	\$25,586	\$0	\$25,586
<u>San Joaquin River</u>						
HONOR FARM	016-026-010		\$45,502	\$8,562	\$0	\$54,064
HONOR FARM	016-026-010		\$450,315	\$231,554	\$0	\$681,869
HONOR FARM	016-026-010	REAL/CONTENTS INCL.	\$41,572	\$19,516	\$0	\$61,088
HONOR FARM	016-026-010	REAL/CONTENTS INCL.	\$671,811	\$211,413	\$0	\$883,224
HONOR FARM	016-026-010	REAL/CONTENTS INCL.	\$13,891	\$21,075	\$0	\$34,966
HONOR FARM	016-026-010	REAL/CONTENTS INCL.	\$82,470	\$65,051	\$0	\$147,521
HONOR FARM	016-026-010	REAL/CONTENTS INC. L	\$8,644	\$8,587	\$0	\$17,231
HONOR FARM	016-026-010		\$27,732	\$11,683	\$0	\$39,415
HONOR FARM	016-026-010		\$50,266	\$22,731	\$0	\$72,997
HONOR FARM	016-026-010		\$145,187	\$40,180	\$0	\$185,367
HONOR FARM	016-026-010		\$0	\$12,793	\$0	\$12,793
HONOR FARM	016-026-010		\$43,378	\$21,101	\$0	\$64,479
HONOR FARM	016-026-010		\$87,101	\$22,253	\$0	\$109,354
TOTAL for = San Joaquin River			\$1,667,869	\$696,499	\$0	\$2,364,368
<u>Tuolumne River</u>						
FOX GROVE REG. PARK	018-005-003		\$60,296	\$0	\$0	\$60,296

TOTAL for =	Tuolumne River	\$60,296	\$0	\$60,296
TOTAL COUNTY FLOOD =	100 Year Zone	\$1,728,165	\$722,085	\$2,450,250

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: FLOOD  
Jurisdiction County: Flood = 500 Year Zone

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
<u>Orestimba Creek</u>						
NEWMAN LIBRARY	128-005-044	BOOKS \$467,843	\$472,381	\$554,434	\$0	\$1,026,815
TOTAL for =	Orestimba Creek		\$472,381	\$554,434	\$0	\$1,026,815
<u>Salado Creek</u>						
PATTERSON LIBRARY	131-014-021	BOOKS \$744,333	\$1,079,971	\$910,872	\$0	\$1,990,843
TOTAL for =	Salado Creek		\$1,079,971	\$910,872	\$0	\$1,990,843
<u>Tuolumne River</u>						
ANIMAL SERVICES	039-010-002		\$1,122,739	\$160,975	\$0	\$1,283,714
ANIMAL SERVICES	039-010-002		\$30,599	\$43,040	\$0	\$73,639
TOTAL for =	Tuolumne River		\$1,153,338	\$204,015	\$0	\$1,357,353
TOTAL COUNTY FLOOD =	500 Year Zone		\$2,705,690	\$1,669,321	\$0	\$4,375,011
<b>GRAND TOTAL EXISTING FACILITIES</b>			\$4,433,855	\$2,391,406	\$0	\$6,825,261

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
FUTURE COUNTY FACILITIES**

HAZARD: FLOOD

Jurisdiction County: Flood =

Description	APN	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
		\$0	\$0	\$0	\$0
<b>TOTAL COUNTY FLOOD =</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>GRAND TOTAL FUTURE FACILITIES</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: FLOOD

Jurisdiction County: Flood = 100 Year Zone

Crossing	Bridge Number	Road Name	Type	Cost
<u>Del Puerto Canyon Cree</u>				
DEL PUERTO CREEK	38C0215	ROGERS	Slab	\$496,783
DEL PUERTO CREEK	38C0217	VINEYARD	Slab	\$272,980
Total for Del Puerto Canyon Creek				\$769,763
<u>Dry Creek</u>				
DRY CREEK	38C0025	ALBERS	Girder	\$2,577,613
DRY CREEK	38C0038	WELLSFORD	Girder	\$2,633,701
DRY CREEK	38C0047	CHURCH	Girder	\$3,908,029
DRY CREEK	38C0055	OAKDALE/WATERFORD HWY	Girder	\$4,183,401
Total for Dry Creek				\$13,302,744
<u>Orestimba Creek</u>				
ORESTIMBA CREEK	38C0011	ORESTIMBA	Slab	\$1,224,969
ORESTIMBA CREEK	38C0012	ANDERSON	Slab	\$0
CCID MAIN CANAL (SAN JOAQUIN & KINGS RIVE	38C0031	STUHR	Girder	\$660,940
ORESTIMBA CREEK	38C0042	MORRIS	Slab	\$0
ORESTIMBA CREEK	38C0043	RIVER	Slab	\$612,699
SAN JOAQUIN & KINGS RIVER CANAL (CCID MAI	38C0096	CROWS LANDING	Girder	\$726,440
SAN JOAQUIN & KINGS RIVER CANAL	38C0183	ANDERSON	Girder	\$430,453
SAN JOAQUIN & KINGS RIVER CANAL	38C0203	DRAPER	Girder	\$671,076
SAN JOAQUIN & KINGS RIVER CANAL	38C0204	ORESTIMBA	Girder	\$632,134

SAN JOAQUIN & KINGS RIVER CANAL	38C0208	FIFTH	Girder	\$430,453
Total for Orestimba Creek				
				\$5,389,164

Salado Creek

SALADO CREEK	38C0189	WARD	Slab	\$173,604
DELTA MENDOTA CANAL	38C0212	MARSHALL	Slab	\$677,718
DELTA MENDOTA CANAL	38C0213	WARD	Slab	\$683,955
Total for Salado Creek				
				\$1,535,277

San Joaquin River

SAN JOAQUIN RIVER	38C0010	CROWS LANDING	Girder	\$6,857,073
SAN JOAQUIN RIVER	38C0016	GRAYSON	Girder	\$2,610,382
LAIRD SLOUGH	38C0027	GRAYSON	Slab	\$2,942,850
SAN JOAQUIN RIVER	38C0033	LAS PALMAS	Girder	\$7,450,151
WESTLEY WASTEWAY	38C0219	COX	Slab	\$272,316
SAN JOAQUIN RIVER	39C0001	HILLS FERRY	Girder	\$2,571,456
Total for San Joaquin River				
				\$22,704,228

Stanislaus River

STANISLAUS RIVER	38C0001	ORANGE BLOSSOM	Girder	\$6,359,977
DRY SLOUGH	38C0002	MCHENRY	Slab	\$2,389,912
STANISLAUS RIVER	38C0032	MCHENRY	Girder	\$12,271,516
TUOLUMNE RIVER	38C0317	LAKE	Slab	\$3,552,000
Total for Stanislaus River				
				\$24,573,405

Tuolumne River

TUOLUMNE RIVER	38C0003	SANTE FE	Girder	\$4,944,820
TUOLUMNE RIVER	38C0004	HICKMAN	Girder	\$7,734,211

TUOLUMNE RIVER	38C0005	ROBERTS FERRY	Girder	\$4,956,000
TUOLUMNE RIVER	38C0018	SHILOH	Girder	\$4,679,087
TUOLUMNE RIVER	38C0023	SEVENTH STREET	Girder	\$18,585,000
TUOLUMNE RIVER	38C0044	MITCHELL	Girder	\$20,454,013
TUOLUMNE RIVER	38C0048	GEER	Girder	\$7,769,190
TUOLUMNE RIVER	38C0050	CARPENTER	Girder	\$7,485,473
TUOLUMNE RIVER	38C0061	9TH ST.	Girder	\$60,180,000
RIVER ROAD UNDERPASS	38C0129	RIVER ROAD	Slab	\$0
TUOLUMNE RIVER	38C0145	LA GRANGE (OLD)	Girder	\$7,062,221
Total for Tuolumne River				\$143,850,015
TOTAL COUNTY FLOOD = 100 Year Zone				\$212,124,596

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**COUNTY BRIDGES**

HAZARD: FLOOD

Jurisdiction County: Flood = 500 Year Zone

Crossing	Bridge Number	Road Name	Type	Cost
Stanislaus River				
MID LATERAL NO.6	38C0310	DUNN	Slab	\$113,742
Total for Stanislaus River				\$113,742
TOTAL COUNTY FLOOD = 500 Year Zone				\$113,742
<b>GRAND TOTAL COUNTY BRIDGES</b>				<b>\$212,238,338</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: FLOOD

Jurisdiction County: Flood = 500 Year Zone

Sub Division	Location	Cost
SOLAR AVENUE - HERNDON ESTATES	ORBIT LANE (CERES)	\$403,263
TOTAL COUNTY FLOOD = 500 Year Zone		\$403,263
<b>GRAND TOTAL DRAINAGE DISTRICTS</b>		<b>\$403,263</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: FLOOD

Jurisdiction County: Flood = 500 Year Zone

District	Number	Cost
<u>Stanislaus River</u>		
Almond Wood Estates Lighting District	2	\$14,000
<u>Tuolumne River</u>		
Tempo Park Lighting District	4	\$28,000
	6	\$42,000
TOTAL COUNTY FLOOD = 500 Year Zone		
		\$42,000
<b>GRAND TOTAL LIGHTING DISTRICTS</b>		



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY TRAFFIC SIGNALS**

HAZARD: FLOOD

Jurisdiction County: Flood = 500 Year Zone

Location	Cost
Carpenter Road At Paradise Road	\$250,000
TOTAL COUNTY FLOOD = 500 Year Zone	\$250,000
<b>GRAND TOTAL TRAFFIC SIGNALS</b>	<b>\$250,000</b>

# RISK ASSESSMENT—Plan Update



# RISK ASSESSMENT/WILDFIRE

## WILDFIRE DESCRIPTION

A wildfire is an uncontrolled fire burning in an area of vegetative fuels such as grasslands, brush, or woodlands. Wildfires can occur in areas essentially void of development, or in areas where development intermingles with this natural area known as the urban-wild land interface. Many wildfires occur in locations that abound in grasslands and shrubs. Heavier fuels with high temperatures, low humidity, low rainfall, and high winds all work to increase risk.



Wildfires can occur at any time of the year, but will usually occur during warmer and dryer months. Wildfires are most commonly caused by people through arson, debris, burns, and carelessness. Areas that are typically considered to be safe from wildfires include highly urbanized, developed areas that are not contiguous with vast areas of wild lands. Areas typically considered to be prone to wildfires include large tracks of wild lands.

## PROFILING HAZARDS

NATURAL HAZARD	HOW IDENTIFIED	WHY IDENTIFIED
WILDFIRE	<ul style="list-style-type: none"> <li>County General Plan Safety Element</li> <li>County Emergency Operations Plan</li> <li>Input from MJHMP Planning Team</li> <li>Feedback from MJHMP partners through submittal of the Hazard Identification Questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>Potential to cause devastation.</li> </ul>

## LOCATION

Generally from May to October of each year, Stanislaus County experiences its wildfire season. Most of the fire susceptible areas are located in the extreme eastern and western portion of the County. This is due to the underdeveloped, rugged terrain and the highly flammable, grass and brush covered land. High temperatures, low humidity, and strong winds may exacerbate the potential for wild land fires.

Within Stanislaus County, the areas of potential brush fires are the Diablo Range, generally located west of Interstate 5, and the Sierra Nevada foothills in the eastern portions of the County. According to the California State Division of Forestry, the majority of these areas are rated as having the highest possible critical fire weather frequency on an annual basis. This factor, combined with vegetation and slope percentage, produce overall fire ratings of moderate to high throughout the fire hazardous areas.

The urban areas of Stanislaus County are not normally susceptible to wildfires, however, there is still potential for smaller fires in and around the less developed areas where patches of vegetation are present.

## **EXTENT**

Brush fire hazards can be traced to four causes: topography, vegetation, climate, and people. Chaparral, grasslands and other wild plant life provide the major sources of fire fuel. Stanislaus County has a Mediterranean type of climate with cool, wet winters and hot, dry summers. The hot, dry summers in Stanislaus County produce large areas of extremely dry vegetation often located on topography which enhance the spread of flames and prohibits access of fire fighting equipment. When people are added to the above situation, the chances of fires are greatly increased.

Brush fires have a secondary effect on erosion, which can occur due to loss of vegetation. This erosion affects not only the burned land, but also land below it where eroded material may be deposited. It should be noted that some wild land fires are necessary as an integral part of the ecosystem and are allowed to burn even after a fire suppression agency is capable of control. These areas are limited, however, and not permitted to endanger life or property.

## **PROBABILITY OF FUTURE EVENTS**

Urban fires are generally man-caused fires that can be mitigated through proper building code requirements, fire flow minimums and zoning or subdivision ordinance requirements. Although the County has no single unified set of safety standards, there are a number of standards, specifications, and regulations, which apply to fire safety. These include Building Code Standards, zoning, and subdivision regulations that specify building material quality, setbacks, and relationships between land uses, land use density, and preservation of open space lands. The major impact of these standards has been directed towards current and future development. They do little to alleviate urban fire problems in older areas. The social and economic ramifications of attempting to mitigate the potential threat of fire hazardous structures are great. Vulnerability to wildfires is increased because much of the land area of the County is serviced by Volunteer Fire Departments and a portion of the County north of Woodward Reservoir is not covered by any fire district.

## **NEW OCCURRENCES**

There have been no new occurrences since the County's original MJHMP plan was adopted on January 12, 2006.

## **ASSESSING VULNERABILITY: OVERVIEW**

Stanislaus County took into account the following when updating our vulnerability assessment:

- Updates to inventories of existing structures in hazard areas, including new development, and redeveloped areas or structures;
- Potential impacts of future land development, including areas that may be annexed in the future;
- New buildings; and
- Completed mitigation actions that reduced overall vulnerability.

Wild land fires are generally limited to the foothills on either side of the County. Although there is less of a hazard to structures and people, controlling such fires is more difficult because of their inaccessibility. While urban fires result in injuries and loss of property, brush fires may result in loss of natural vegetation, loss of agricultural crops, erosion of the soil, and intrusion of the eroded soil into lower lying areas where it may be deposited.

The County has developed several mechanisms for dealing with fire hazards. Building Code Standards require use of the safest electrical methods and separation between buildings for fire reasons. When separations are not maintained, walls must be built (commonly called fire walls), through which fire cannot burn for a specified time, usually one to four hours. This helps prevent the spread of urban fires. Some buildings whose use would be more susceptible to fire must have automatic sprinkler systems installed. Numerous other safety measures can be found in the Building Code.

The County Fire Warden's Office enforces a section of the County Code which requires removal of "all dirt, rubbish, weeds, ... which constitute a fire menace or which is otherwise a menace to health or safety..." in urban areas. If the property owner does not remove the material, the Fire Warden's Office can do so and charge the cost of removal to the property owner.

### **ASSESSING VULNERABILITY: IDENTIFYING STRUCTURES**

This section is based on an inventory of existing and future buildings, infrastructure, and critical facilities located within the identified wildfire hazard area boundaries.

#### **For the wildfire hazard, there are five (5) GIS maps as follows:**

- GIS map of Stanislaus County that indicates distances from regions where wildfires have historically occurred, suggesting the degree of likelihood of future fire threats;
- GIS map showing the placement and value of all County facilities located in the western and southern portion in relation to historical wildfire areas with proximity radiating out five miles;
- Two GIS maps showing the placement and value of all County facilities located in the eastern portion of the County in relation to historical wildfire areas with proximity zones radiating out to five miles; and
- GIS map showing the placement of the planned future facilities in the County in relation to historical wildfire areas with proximity radiating out to five miles. Those facilities to be sited in the future will consider mitigation of local hazard risks. The highest risk areas are located in the west hills and in the Sierra Nevada foothills at the eastern edge of the County.

#### **For the wildfire hazard there are also eight (8) separate data reports as follows:**

- Populations/Housing Units by jurisdiction and by wildfire zone including areas previously burnt;
- Total Property Value by jurisdiction and by wildfire zone;
- Existing County facilities by wildfire zone;
- Future County Facilities by wildfire zone;
- Infrastructure-County Bridges by wildfire zone;
- County Drainage Districts by wildfire zone;
- County Lighting Districts by wildfire zone; and
- County Traffic Signals by wildfire zone.

The majority of areas threatened by potential wildfire losses within Stanislaus County are in the foothills at the far eastern and western edges of Stanislaus County where little population or development presently exist. Exceptions include:

- Pockets of development west of Interstate 5 (Diablo Grande; Fink Road Landfill)
- Frank Raines Regional Park (restrooms, well/pump facilities)
- Radio communications facilities (Mt. Oso)
- Woodward, Turlock Lake and Modesto Reservoir park improvements
- La Grange Regional Park improvements

Wildfires can threaten any improvements, particularly those which are not protected by buffer zones or which are constructed of combustible materials. The highest risk areas are also those with the least density of development, but may include ranches, farmland and pasture properties and their associated structures and fences. Most of the County's infrastructure facilities are less vulnerable to wildfire due to the materials used in their construction. Wildfires may threaten infrastructure of other utilities, such as power and telecommunications lines.

**ASSESSING VULNERABILITY: ESTIMATING POTENTIAL LOSSES**

This section describes the vulnerability in terms of dollar losses and provides the community and the State of California with a common framework in which to measure the effects of hazards on vulnerable structures. The County has reviewed and revised this new plan to reflect changes in development and updated the inventory of structures.

**Population and Housing Units by Jurisdiction**

<b>POPULATION AND PROPERTY VALUE ANALYSIS FOR WILDFIRE</b>			
<b>Wildfire Zone</b>	<b>Population</b>	<b>Households</b>	<b>Total Value</b>
Fire Zone <1 Mile	887	345	\$265,451,245
Fire Zone >1Mile <2 Miles	1,113	417	\$384,080,977
Fire Zone >2 Miles < 3 Miles	1,697	500	\$253,102,790
Fire Zone > 3 Miles < 4 Miles	2,807	991	\$414,551,607
Fire Zone >4 Miles < 5 Miles	4,011	1,345	\$488,233,170
Previously Burnt	64	33	\$26,086,639

**Interactive Resources**

Stanislaus County has developed layers within a geographic information system (GIS) to map the wildfire risk areas, property land uses and values, housing and population as presented in this section. The GIS system provides the capability to quickly identify specific uses and values of properties at risk during an actual event where a specific geographical area can be identified. Areas at risk and potentially at risk due to wind patterns can be quickly identified.

**Existing County Facilities**

The table below reflects the value of existing County Facilities by wildfire zone. There are no future facilities impacted by the wildfire hazard.

EXISTING FACILITIES PROPERTY VALUE BY FIRE ZONE		
Wildfire Zone	Existing Facilities	Total Value
Fire Zone <1 Mile	0	\$0
Fire Zone >1Mile <2 Miles	4	\$1,340,597
Fire Zone >2 Miles < 3 Miles	14	\$3,456,344
Fire Zone > 3 Miles < 4 Miles	4	\$1,860,754
Fire Zone >4 Miles < 5 Miles	1	\$1,713,838
Previously Burnt	5	\$1,659,873

### County Bridges

The table below reflects the cost of County Bridges in the event of a wildfire hazard. The associated data reports further break out the following information: crossing name, bridge number, road name, and type of bridge such as slab or girder.

COUNTY BRIDGES BY WILDFIRE ZONE		
Wildfire Zone	# of Bridges	Cost
Fire Zone <1 Mile	30	\$31,230,009
Fire Zone >1Mile <2 Miles	27	\$22,989,786
Fire Zone >2 Miles < 3 Miles	11	\$4,967,814
Fire Zone > 3 Miles < 4 Miles	16	\$11,723,343
Fire Zone >4 Miles < 5 Miles	16	\$10,228,600
Previously Burnt	3	\$281,315

### County Drainage Districts

The data report breaks out drainage districts by sub division name, and location and reflects a Grand Total of \$2,016,315 for the cost of County Drainage Districts in the event of a wildfire hazard.

### County Lighting Districts

The data table reflects the value of County Lighting Districts in the event of a wildfire hazard for a Grand Total of \$1,393,000.

### County Traffic Signals

The data table shows there are zero County Traffic Signals that would be impacted in the event of a wildfire hazard.

### ASSESSING VULNERABILITY: ANALYZING DEVELOPMENT TRENDS

The Fire Warden's Office has developed minimum fire flow requirements for new development. The General Plan lists the requirements in existence as of April 1, 1986. The requirements are:

**Minimum Fire Flow Requirements:** Fire flow shall be determined in accordance with the fire protection agency of the area and the design engineer shall check with the involved agency prior to design.

**Existing Water Systems:** Where an established water system is present which may be extended, and where the system is not substandard to these regulations, the fire flow shall not be less than:

<b>Lot density of three or more single family residential units per acre.</b>	1,000 gpm
<b>Duplex residential units, neighborhood business of one story.</b>	1,500 gpm
<b>Multiple residential, one and two stories; light commercial or light industrial.</b>	2,000 gpm
<b>Multiple residential, three stories or higher; heavy commercial or heavy industrial.</b>	2,500 gpm

Exception: With the installation of an approved, supervised, automatic sprinkler system, in accordance with the National Fire Protection Association Pamphlet #13, throughout the building, a 50% reduction may be granted. In no case shall there be less than 500 gpm provided on site.

**No Existing Water System.** Where there is no established water system, in the rural areas of Stanislaus County, the following guidelines shall apply:

The installation of reservoirs, pressure tanks, elevator tanks, or other fixed systems capable of supplying the required fire flow and/or static source shall be in accordance with the National Fire Protection Association Pamphlet #1231, "Water Supplies for Rural and Suburban Fire Fighting."

The Land Use Element of the County General Plan requires that urban development occur through logical expansion of existing urban areas so that urban services (such as fire protection, public water, etc.), can be provided. One reason for this requirement is that provision of public water reduces the effects of urban fires. The Circulation Element proposes road widths and standards that will provide adequate access for fire fighting equipment.

The Zoning Ordinance and Subdivision Ordinance also contains standards to minimize fire hazards. Among these provisions are minimum setbacks between dwellings and between buildings and streets, as well as a prohibition on the creation of parcels without adequate access. The minimum width road, without special approval, is 50 feet.

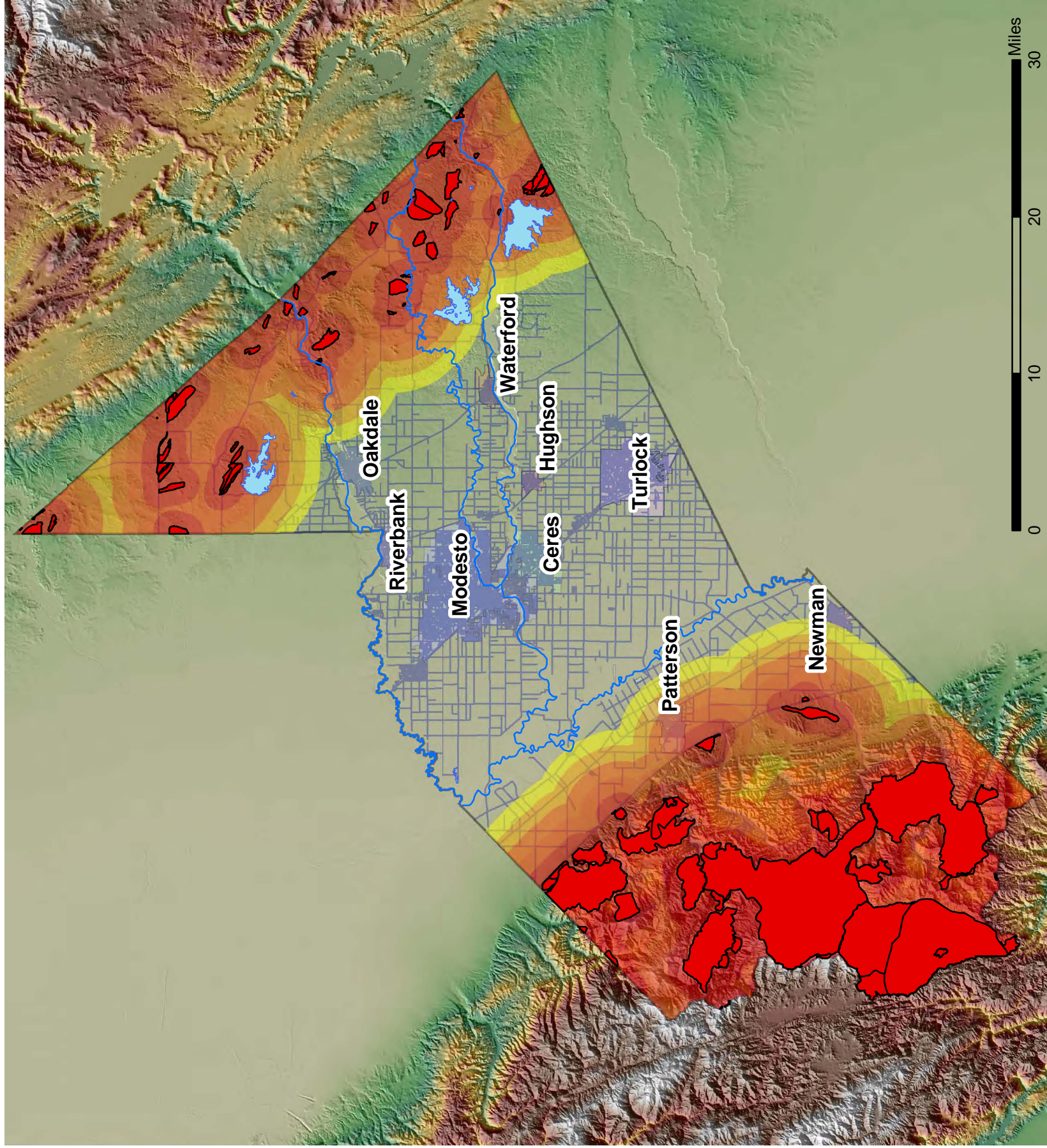
The major impact of these measures has been directed towards current and future development. They do little to alleviate urban fire problems in older areas. The social and economic ramifications of attempting to mitigate the potential threat of fire hazardous structures are great. Issues to be faced include occupant safety and welfare, equitable treatment of building owners, possible relocation of occupants, and minimization of overall adverse effects on the local economy. Both the Stanislaus County Building Department and the Department of Environmental Resources attempt to upgrade older buildings through the use of the Uniform Building Code, Uniform Housing Code, and health and safety laws. Both the legal authority and the available staff time is limited for this type of activity.

**MULTI-JURISDICTIONAL RISK ASSESSMENT**

Each participating jurisdiction has reviewed, updated, and prepared their own risk assessment to identify where their risks vary from the risks facing the entire planning area of the County. See Volumes Two and Three for assessments from participating multi-jurisdictional partners.

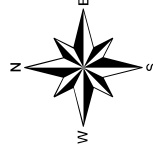


# 2010 Stanislaus County -- Historical Wildfire Hazard



## Map Legend:

- Lakes
  - Rivers
  - Roads
  - Historical Burn Areas
- Distance From Actual Wildfires**
- < 1 Mile
  - < 2 Miles
  - < 3 Miles
  - < 4 Miles
  - < 5 Miles

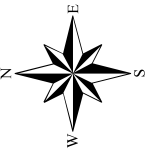


Map displays Stanislaus County  
Historical Wildfire Areas with  
proximity zones radiating out five miles.

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

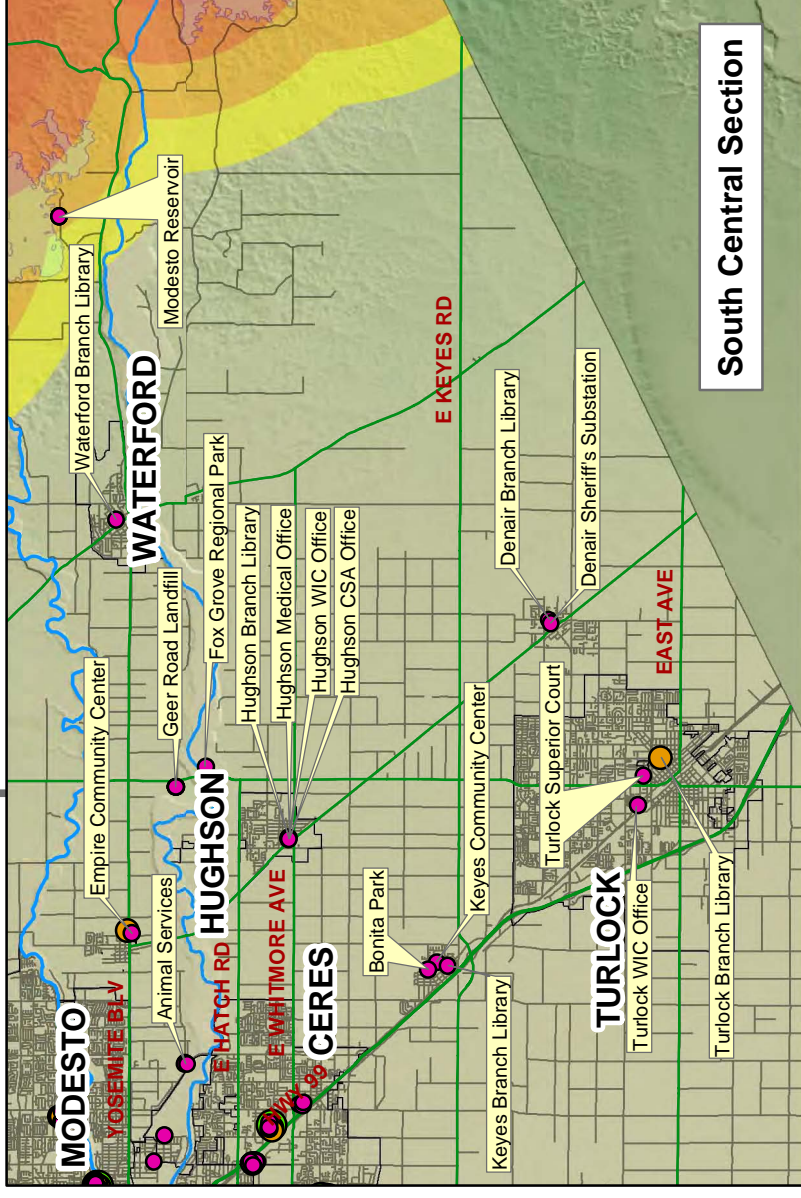
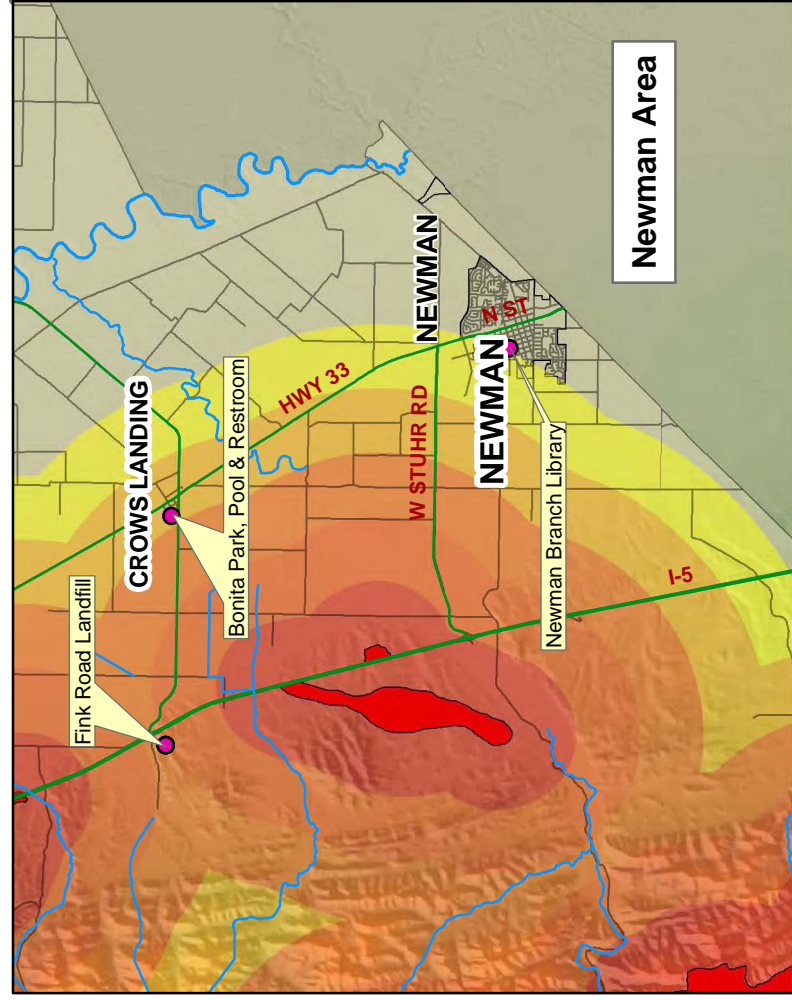
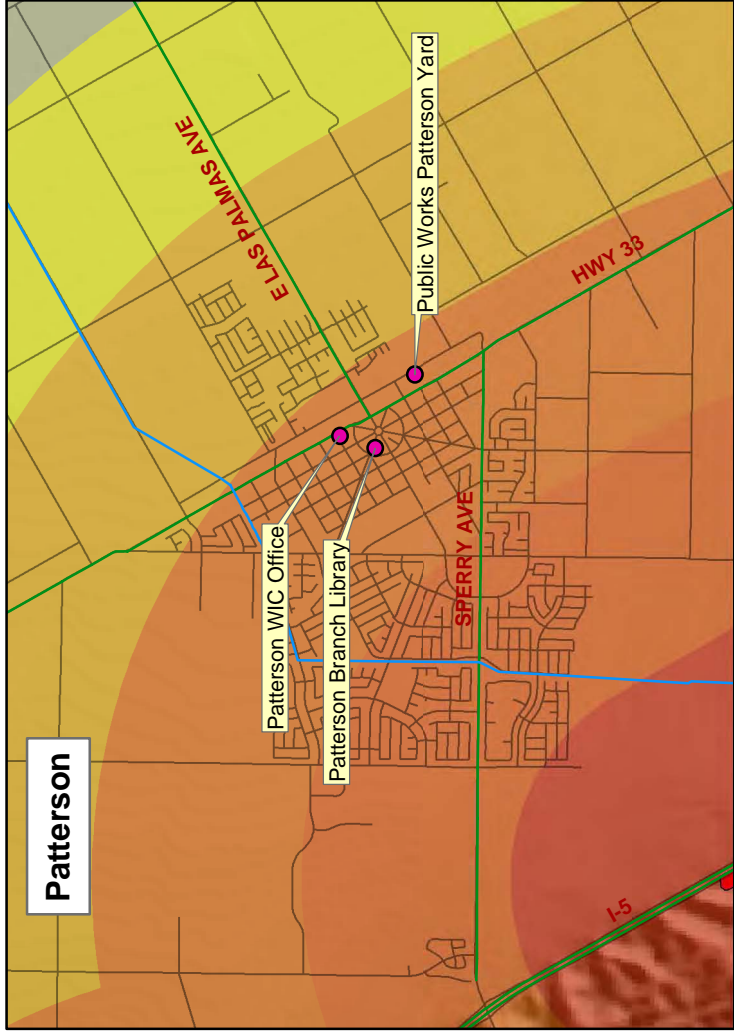
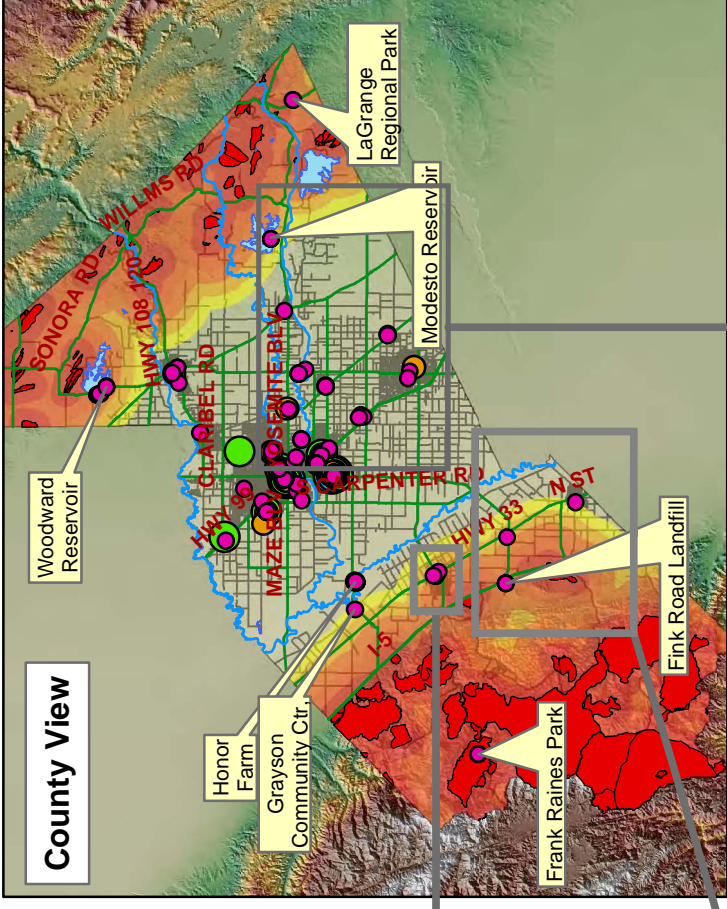


# 2010 Stanislaus County (West & South) Facilities Map -- Wildfire Hazard



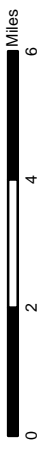
Map of Stanislaus County Assets in Southern and Western County in relation to Historical Wildfire Areas with proximity radiating out five miles.

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009



### Map Legend:




- Lakes
- Rivers
- Roads
- County Facilities
- Total Facility Value**
- < \$2,000,000
- \$2,000,000 - \$10,000,000
- \$10,000,000 - \$30,000,000
- > \$30,000,000
- Historical Burn Areas
- Distance From Actual Wildfires**
- < 1 Mile
- < 2 Miles
- < 3 Miles
- < 4 Miles
- < 5 Miles



Map of Stanislaus County Assets in Eastern portion of the county in relation to Historical Wildfire Areas with proximity zones radiating out to five miles.






Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

**Map Legend:**






-  Lakes
-  Rivers
-  Roads

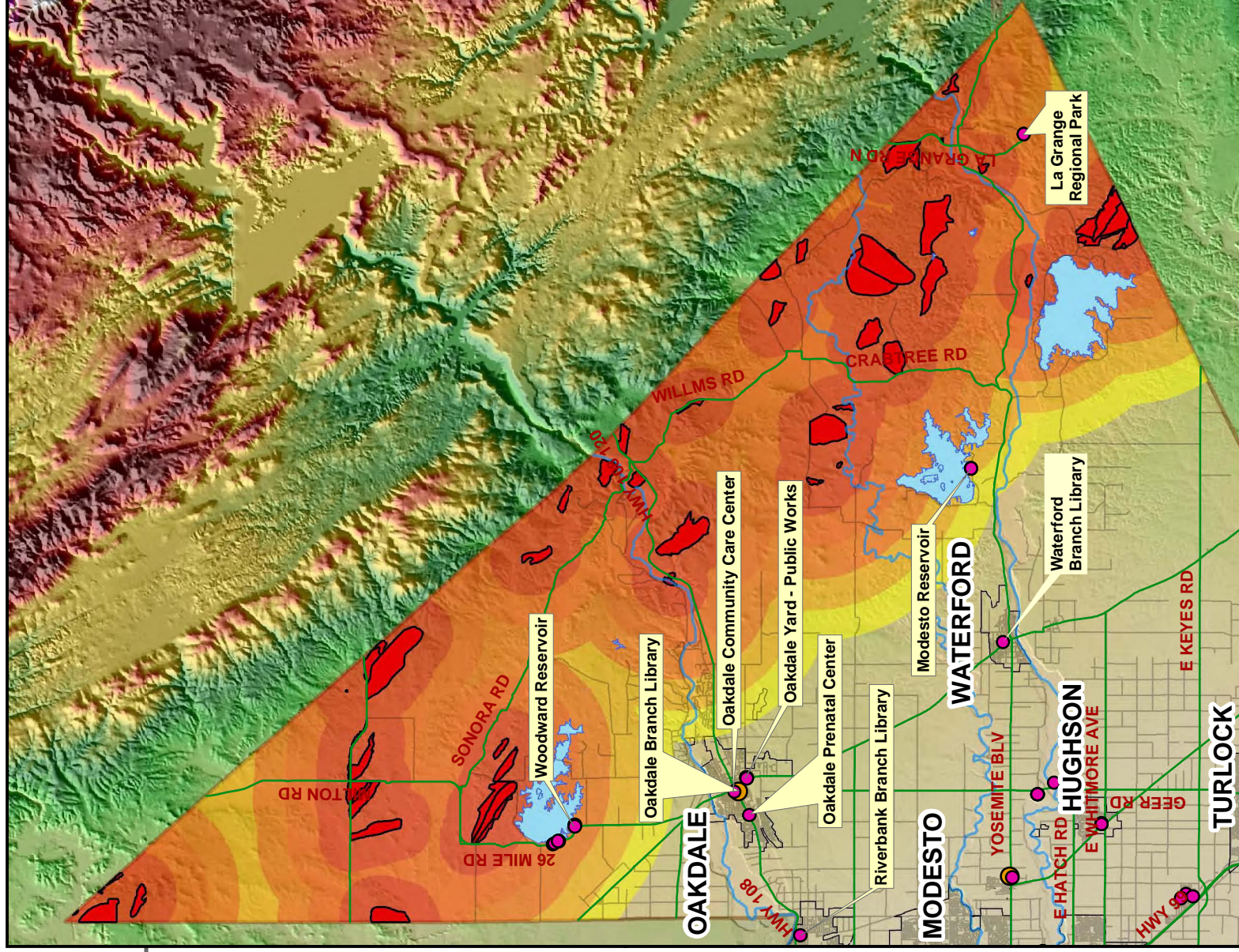
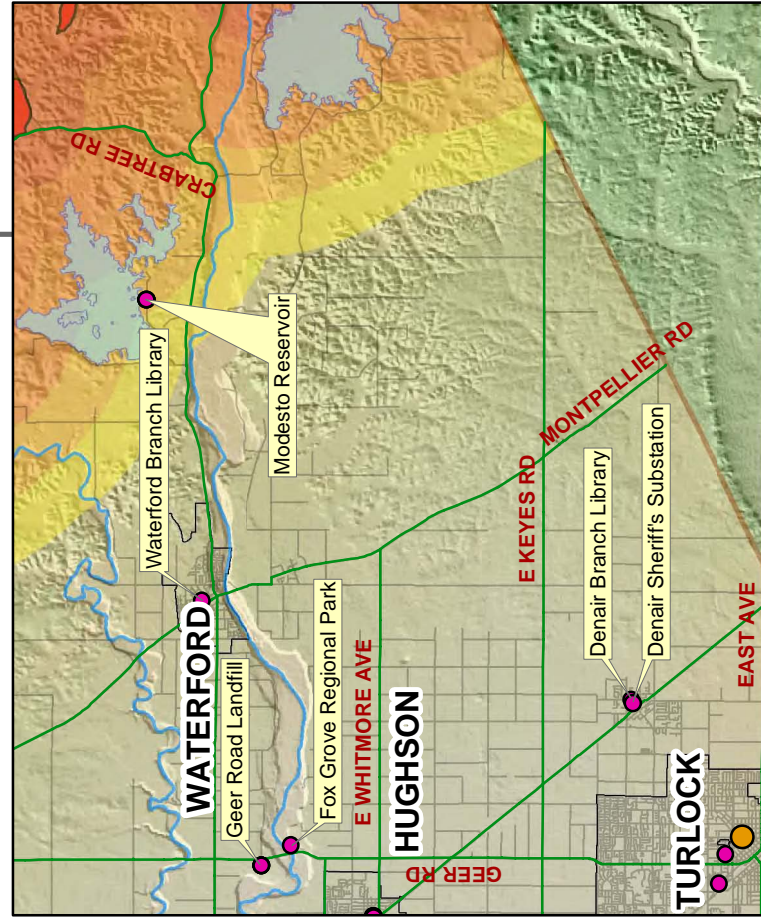
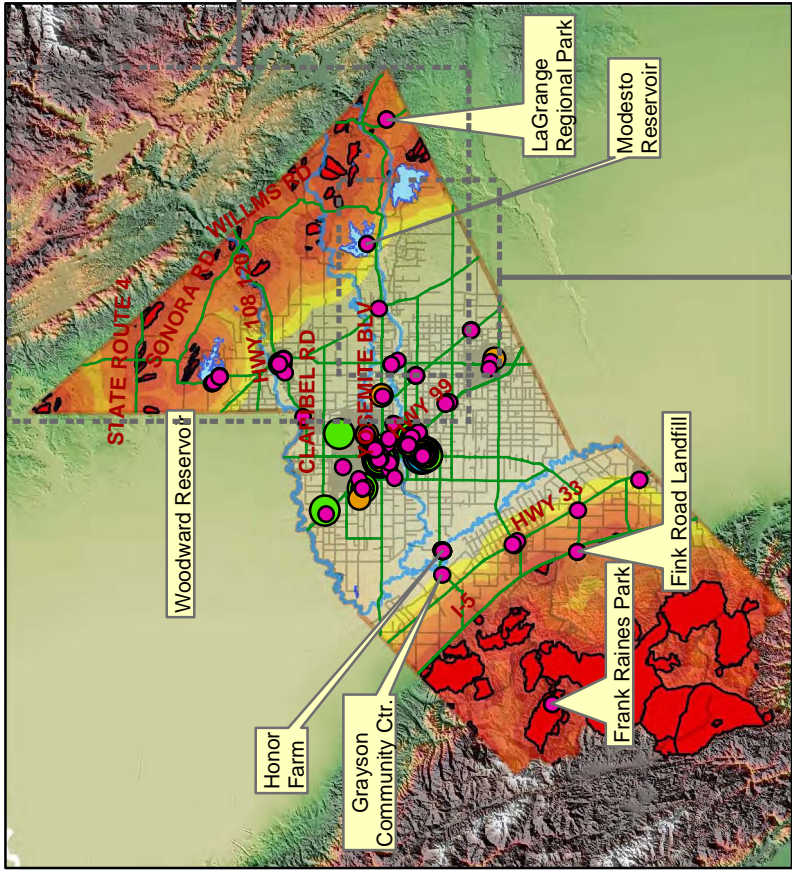
**County Facilities**

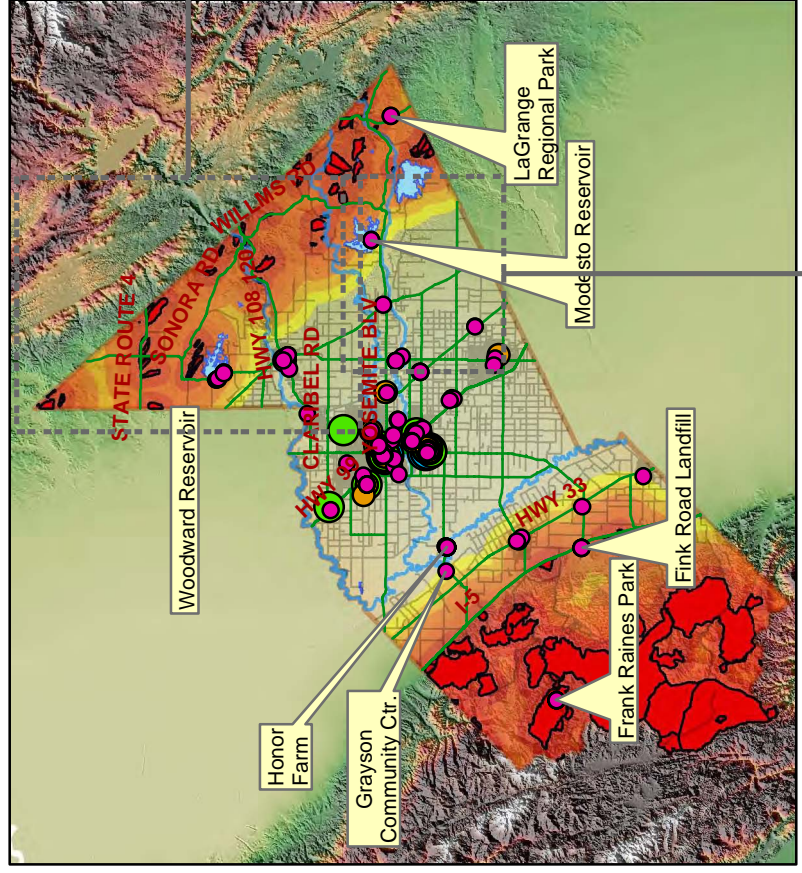
**Total Facility Value**

-  < \$2,000,000
-  \$2,000,000 - \$10,000,000
-  \$10,000,000 - \$30,000,000
-  > \$30,000,000
-  Historical Burn Areas

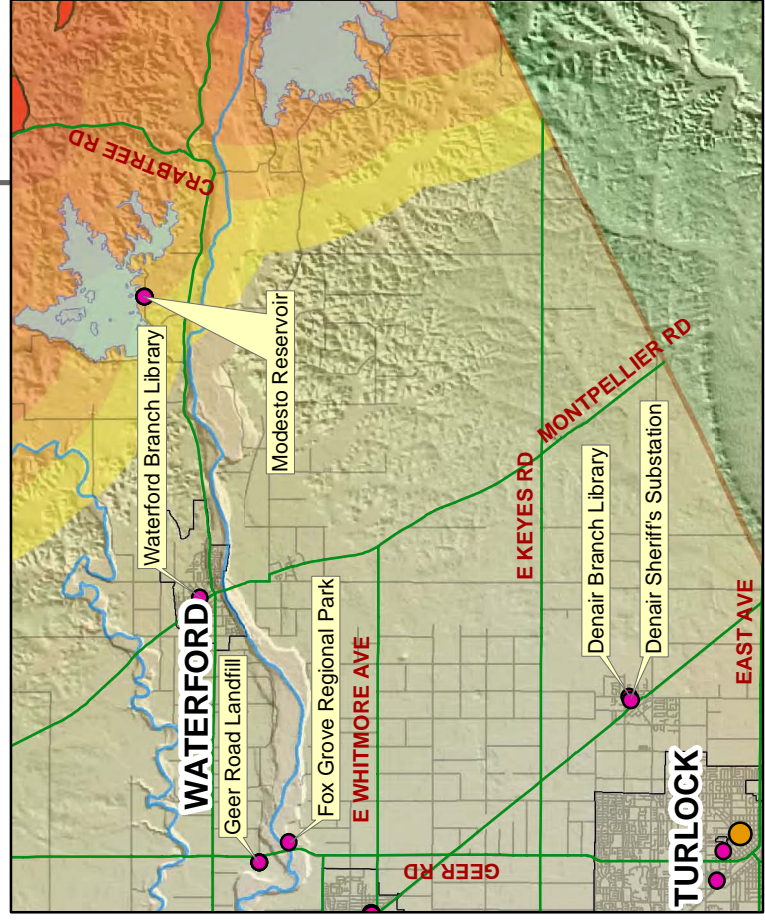
**Distance From Actual Wildfires**

-  < 1 Mile
-  < 2 Miles
-  < 3 Miles
-  < 4 Miles
-  < 5 Miles

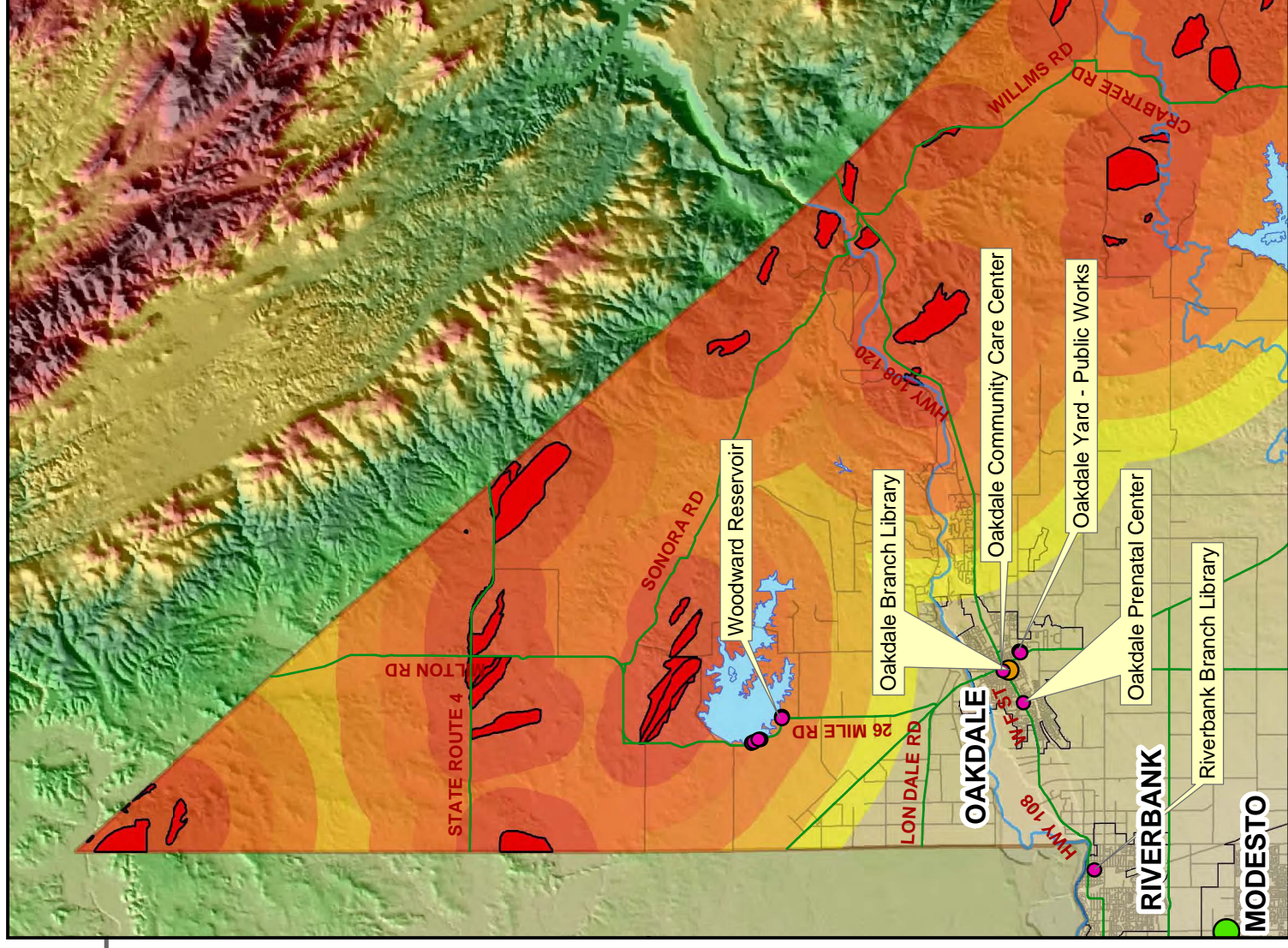




Miles  
0 20 40



Miles  
0 5 10






Miles  
0 5 10 15

Map of Stanislaus County Assets in Eastern portion of the county in relation to Historical Wildfire Areas with proximity zones radiating out to five miles.






Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

**Map Legend:**






-  Lakes
-  Rivers
-  Roads

**County Facilities**

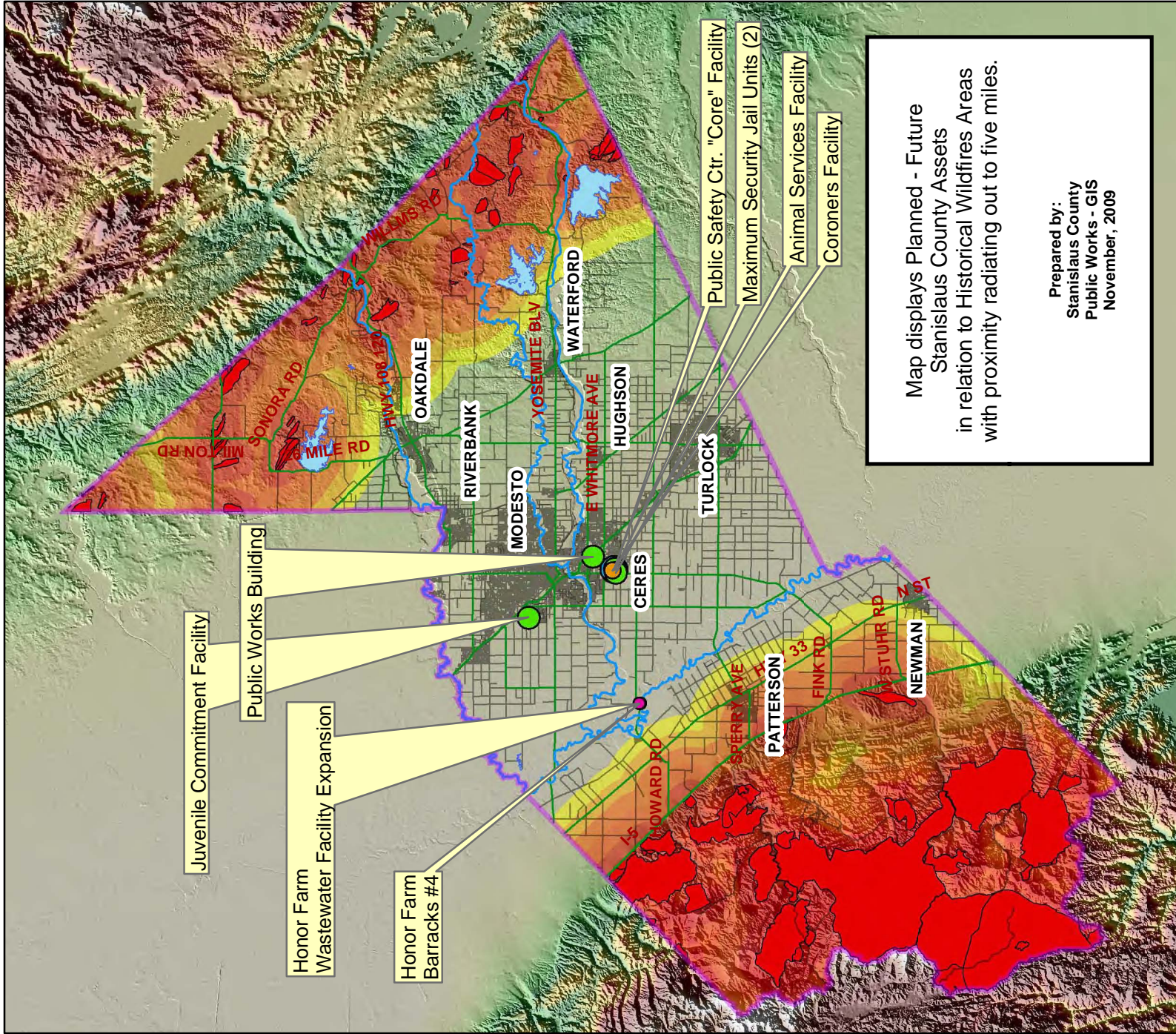
**Total Facility Value**

-  < \$2,000,000
-  \$2,000,000 - \$10,000,000
-  \$10,000,000 - \$30,000,000
-  > \$30,000,000
-  Historical Burn Areas

**Distance From Actual Wildfires**

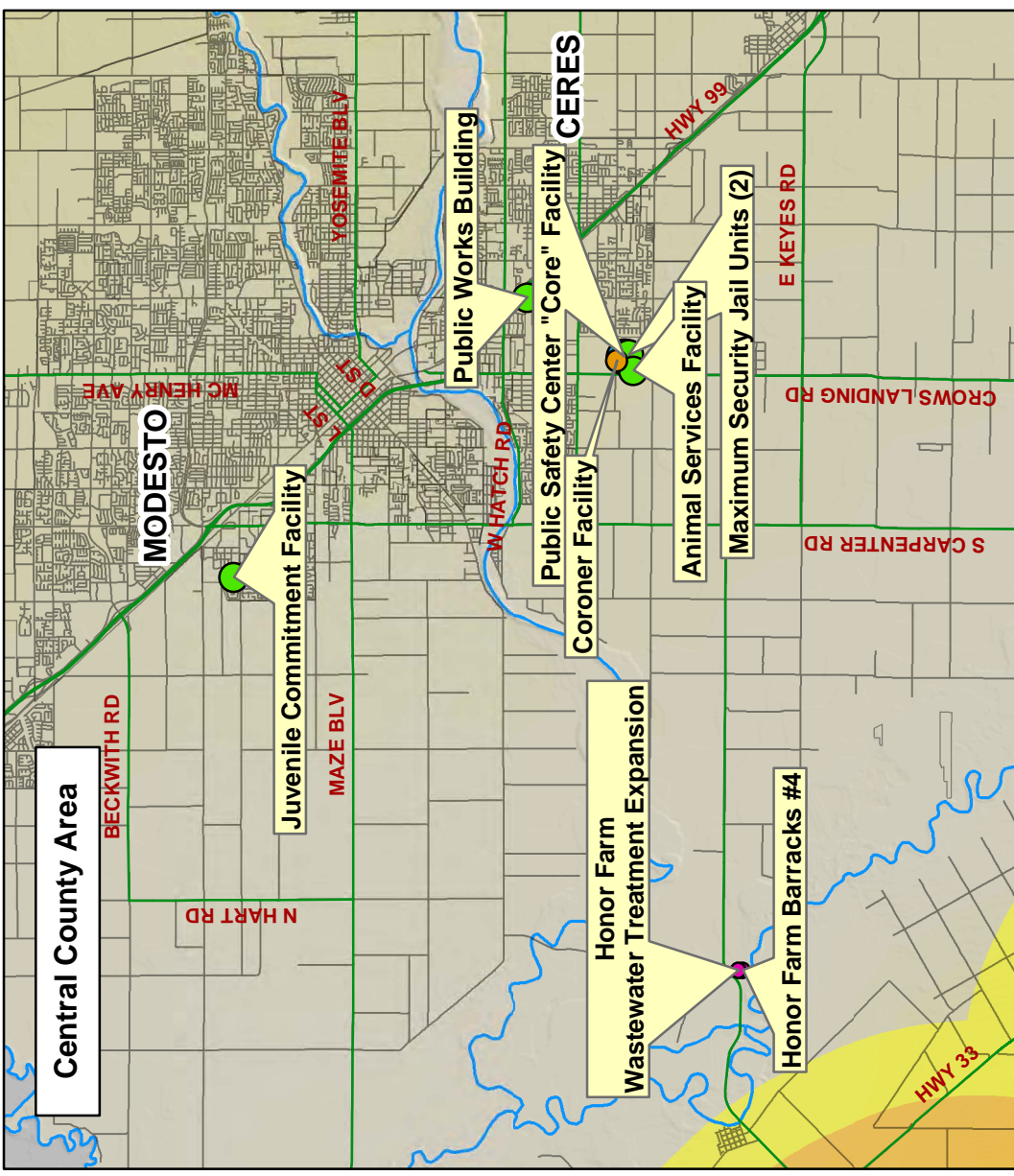
-  < 1 Mile
-  < 2 Miles
-  < 3 Miles
-  < 4 Miles
-  < 5 Miles

# 2010 Future Stanislaus County Facilities -- Wildfire Hazard



Map displays Planned - Future Stanislaus County Assets in relation to Historical Wildfires Areas with proximity radiating out to five miles.

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

**HAZARD: WILDFIRE**

Wildfire		POPULATION		HOUSEHOLDS		
Jurisdiction	Total #	% of County	Total #	% of County	Total #	% of County
<b>FIRE ZONE: &lt; 1 Mile</b>						
County	887	3.83%	345	4.79%		
Patterson	4	0.02%	2	0.03%		
<b>FIRE ZONE: &gt; 1 Mile &lt; 2 Miles</b>						
County	1113	4.80%	417	5.79%		
Patterson	1016	4.39%	281	3.90%		
<b>FIRE ZONE: &gt; 2 Miles &lt; 3 Miles</b>						
County	1697	7.33%	500	6.94%		
Patterson	6891	29.75%	2052	28.49%		
<b>FIRE ZONE: &gt; 3 Miles &lt; 4 Miles</b>						
County	2807	12.12%	991	13.76%		
Patterson	3868	16.70%	981	13.62%		
<b>FIRE ZONE: &gt; 4 Miles &lt; 5 Miles</b>						
County	4011	17.31%	1345	18.67%		
Newman	772	3.33%	242	3.36%		
Oakdale	13	0.06%	4	0.06%		
Patterson	22	0.09%	10	0.14%		
<b>FIRE ZONE: Previously Burnt</b>						
County	64	0.28%	33	0.46%		
<b>GRAND TOTAL</b>			23165		7203	

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: WILDFIRE

Jurisdiction County:Wildfire = < 1 Mile

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$9,100,234	42	\$1,207,422	\$0	\$16,880,483	\$700,730	\$0	\$27,888,869
INDUSTRIAL	\$2,601	2	\$0	\$0	\$0	\$0	\$0	\$2,601
NON-ASSESSABLE	\$237,809	133	\$0	\$41,991	\$0	\$0	\$0	\$279,800
RESIDENTIAL	\$3,089,416	42	\$0	\$0	\$6,546,967	\$0	\$0	\$9,636,383
RURAL, FARM, AGRICULTURE	\$129,023,633	1036	\$250,615	\$4,765,605	\$82,012,010	\$1,110,600	\$0	\$217,162,463
VACANT COMMERCIAL	\$1,180,596	10	\$0	\$0	\$0	\$0	\$0	\$1,180,596
VACANT RESIDENTIAL	\$8,890,076	103	\$0	\$0	\$410,457	\$0	\$0	\$9,300,533
<b>Total = &lt; 1 Mile</b>	<b>\$151,524,365</b>	<b>1368</b>	<b>\$1,458,037</b>	<b>\$4,807,596</b>	<b>\$105,849,917</b>	<b>\$1,811,330</b>	<b>\$0</b>	<b>\$265,451,245</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Patterson**

HAZARD: WILDFIRE

Jurisdiction County:Wildfire = < 1 Mile

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
RESIDENTIAL	\$320,000	8	\$0	\$0	\$1,499,000	\$0	\$0	\$1,819,000
VACANT RESIDENTIAL	\$360,000	36	\$0	\$0	\$0	\$0	\$0	\$360,000
<b>Total = &lt; 1 Mile</b>	<b>\$680,000</b>	<b>44</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,499,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,179,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: WILDFIRE

Jurisdiction County:Wildfire = > 3 Miles < 4

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$3,216,934	42	\$78,830	\$0	\$6,266,142	\$48,392	\$0	\$9,610,298
INDUSTRIAL	\$1,437,447	24	\$562,450	\$0	\$6,408,907	\$429,040	\$0	\$8,837,844
NON-ASSESSABLE	\$252,863	66	\$330	\$0	\$215,152	\$28,171	\$0	\$496,516
RESIDENTIAL	\$44,860,502	440	\$0	\$1,119	\$82,820,950	\$373,713	\$0	\$128,056,284
RESIDENTIAL-INCOME	\$581,832	9	\$0	\$0	\$469,776	\$0	\$0	\$1,051,608
RURAL, FARM, AGRICULTURE	\$135,349,022	796	\$2,468,784	\$8,926,532	\$98,082,997	\$7,308,339	\$18,718	\$252,154,392
VACANT COMMERCIAL	\$633,054	17	\$0	\$0	\$6,120	\$0	\$0	\$639,174
VACANT RESIDENTIAL	\$13,659,933	107	\$0	\$0	\$45,558	\$0	\$0	\$13,705,491
<b>Total = &gt; 3 Miles &lt; 4 Miles</b>	<b>\$199,991,587</b>	<b>1501</b>	<b>\$3,110,394</b>	<b>\$8,927,651</b>	<b>\$194,315,602</b>	<b>\$8,187,655</b>	<b>\$18,718</b>	<b>\$414,551,607</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Patterson**

HAZARD: WILDFIRE

Jurisdiction County:Wildfire = > 3 Miles < 4

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$279,024	2	\$0	\$0	\$1,778,490	\$0	\$0	\$2,057,514
INDUSTRIAL	\$265,548	3	\$0	\$0	\$438,176	\$0	\$0	\$703,724



NON-ASSESSABLE	\$0	16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$31,961,607	844	\$0	\$0	\$66,178,707	\$0	\$0	\$0	\$98,140,314	\$0
RESIDENTIAL-INCOME	\$4,332,200	19	\$0	\$0	\$2,768,500	\$0	\$0	\$0	\$7,100,700	\$0
RURAL, FARM, AGRICULTURE	\$3,682,522	28	\$0	\$139,082	\$1,276,491	\$53,433	\$0	\$0	\$5,151,528	\$0
VACANT COMMERCIAL	\$180,516	1	\$0	\$0	\$0	\$0	\$0	\$0	\$180,516	\$0
VACANT RESIDENTIAL	\$2,678,469	59	\$0	\$0	\$85,000	\$0	\$0	\$0	\$2,763,469	\$0
Total = > 3 Miles < 4 Miles	\$43,379,886	972	\$0	\$139,082	\$72,525,364	\$53,433	\$0	\$0	\$116,097,765	\$0

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: WILDFIRE

Jurisdiction County:Wildfire = > 4 Miles < 5

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$1,787,407	14	\$28,140	\$0	\$5,622,049	\$1,245,770	\$0	\$8,683,366
INDUSTRIAL	\$1,874,182	5	\$1,100	\$0	\$1,785,730	\$466,890	\$0	\$4,127,902
NON-ASSESSABLE	\$344,632	47	\$0	\$0	\$191,081	\$0	\$0	\$535,713
RESIDENTIAL	\$48,625,163	662	\$0	\$8,129	\$98,771,081	\$10,406	\$0	\$147,414,779
RESIDENTIAL-INCOME	\$2,614,496	15	\$0	\$62,790	\$910,304	\$2,600	\$0	\$3,590,190
RURAL, FARM, AGRICULTURE	\$159,384,034	1039	\$3,129,467	\$7,813,955	\$135,380,588	\$6,424,364	\$0	\$312,132,408
VACANT COMMERCIAL	\$2,198,842	6	\$0	\$0	\$31,836	\$0	\$0	\$2,230,678
VACANT RESIDENTIAL	\$9,495,912	48	\$0	\$0	\$22,222	\$0	\$0	\$9,518,134
<b>Total = &gt; 4 Miles &lt; 5 Miles</b>	<b>\$226,324,668</b>	<b>1836</b>	<b>\$3,158,707</b>	<b>\$7,884,874</b>	<b>\$242,714,891</b>	<b>\$8,150,030</b>	<b>\$0</b>	<b>\$488,233,170</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Newnan**

HAZARD: WILDFIRE

Jurisdiction County:Wildfire = > 4 Miles < 5

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$105,393	1	\$0	\$0	\$405,080	\$0	\$0	\$510,473
NON-ASSESSABLE	\$0	10	\$0	\$0	\$0	\$0	\$0	\$0

RESIDENTIAL	\$8,999,374	263	\$0	\$0	\$18,082,806	\$0	\$0	\$0	\$0	\$27,082,180
RESIDENTIAL-INCOME	\$537,347	6	\$0	\$0	\$2,718,415	\$0	\$0	\$0	\$0	\$3,255,762
RURAL, FARM, AGRICULTURE	\$11,436	2	\$0	\$0	\$56,289	\$0	\$0	\$0	\$0	\$67,725
VACANT RESIDENTIAL	\$716,754	38	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$716,754
<b>Total = &gt; 4 Miles &lt; 5 Miles</b>	<b>\$10,370,304</b>	<b>320</b>	<b>\$0</b>	<b>\$0</b>	<b>\$21,262,590</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$31,632,894</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Oakdale**

HAZARD: WILDFIRE  
 Jurisdiction County:Wildfire = > 4 Miles < 5

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
NON-ASSESSABLE	\$0	6	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total = &gt; 4 Miles &lt; 5 Miles</b>	<b>\$0</b>	<b>6</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Patterson**

HAZARD: WILDFIRE  
 Jurisdiction County:Wildfire = > 4 Miles < 5

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
NON-ASSESSABLE	\$331,223	1	\$0	\$0	\$0	\$0	\$0	\$331,223
RURAL, FARM, AGRICULTURE	\$343,798	2	\$0	\$35,100	\$356,887	\$0	\$0	\$735,785
<b>Total = &gt; 4 Miles &lt; 5 Miles</b>	<b>\$675,021</b>	<b>3</b>	<b>\$0</b>	<b>\$35,100</b>	<b>\$356,887</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,067,008</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: WILDFIRE

Jurisdiction County:Wildfire = >1 Mile < 2 Mil

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$8,538,925	8	\$563,233	\$0	\$10,408,716	\$747,329	\$0	\$20,258,203
INDUSTRIAL	\$67,234	1	\$0	\$0	\$0	\$0	\$0	\$67,234
NON-ASSESSABLE	\$2,177,870	66	\$677,960	\$0	\$35,613,744	\$14,939,040	\$0	\$53,408,614
RESIDENTIAL	\$22,453,850	452	\$0	\$0	\$57,682,990	\$0	\$0	\$80,136,840
RESIDENTIAL-INCOME	\$193,069	1	\$0	\$0	\$117,011	\$0	\$0	\$310,080
RURAL, FARM, AGRICULTURE	\$118,948,164	760	\$4,978,932	\$7,238,430	\$76,952,919	\$6,972,516	\$0	\$215,090,961
VACANT COMMERCIAL	\$778,884	5	\$0	\$0	\$0	\$0	\$0	\$778,884
VACANT RESIDENTIAL	\$14,030,161	221	\$0	\$0	\$0	\$0	\$0	\$14,030,161
<b>Total = &gt;1 Mile &lt; 2 Miles</b>	<b>\$167,188,157</b>	<b>1514</b>	<b>\$6,220,125</b>	<b>\$7,238,430</b>	<b>\$180,775,380</b>	<b>\$22,658,885</b>	<b>\$0</b>	<b>\$384,080,977</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Patterson**

HAZARD: WILDFIRE

Jurisdiction County:Wildfire = >1 Mile < 2 Mil

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$12,924,634	21	\$1,084,050	\$0	\$38,706,535	\$746,460	\$0	\$53,461,679
INDUSTRIAL	\$8,672,004	10	\$8,660,210	\$0	\$50,484,086	\$7,302,770	\$0	\$75,119,070

NON-ASSESSABLE	\$0	31	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$95,020,733	2283	\$0	\$0	\$331,207,611	\$270,950	\$0	\$0	\$426,499,294	\$0
RESIDENTIAL-INCOME	\$763,639	2	\$0	\$0	\$2,210,868	\$0	\$0	\$0	\$2,974,507	\$0
RURAL, FARM, AGRICULTURE	\$3,185,837	8	\$0	\$16,636	\$467,717	\$0	\$0	\$0	\$3,670,190	\$0
VACANT COMMERCIAL	\$28,382,167	25	\$0	\$0	\$0	\$0	\$0	\$0	\$28,382,167	\$0
VACANT RESIDENTIAL	\$2,082,344	165	\$0	\$0	\$334,185	\$0	\$0	\$0	\$2,416,529	\$0
Total = >1 Mile < 2 Miles	\$151,031,358	2545	\$9,744,260	\$16,636	\$423,411,002	\$8,320,180	\$0	\$0	\$592,523,436	\$0

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: WILDFIRE

Jurisdiction County:Wildfire = >2 Miles < 3 M

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$112,614	5	\$0	\$0	\$168,383	\$0	\$0	\$280,997
INDUSTRIAL	\$416,160	1	\$0	\$0	\$475,050	\$0	\$0	\$891,210
NON-ASSESSABLE	\$298,829	60	\$0	\$0	\$0	\$0	\$0	\$298,829
RESIDENTIAL	\$7,889,506	80	\$0	\$14,192	\$15,823,392	\$20,060	\$0	\$23,747,150
RESIDENTIAL-INCOME	\$1,022,609	7	\$830	\$30,309	\$687,333	\$66,360	\$0	\$1,807,441
RURAL, FARM, AGRICULTURE	\$111,101,738	624	\$345,140	\$9,642,068	\$76,099,666	\$3,450,045	\$0	\$200,638,657
VACANT COMMERCIAL	\$2,998,752	8	\$0	\$0	\$5,198,197	\$0	\$0	\$8,196,949
VACANT RESIDENTIAL	\$17,240,019	33	\$0	\$0	\$1,538	\$0	\$0	\$17,241,557
<b>Total = &gt;2 Miles &lt; 3 Miles</b>	<b>\$141,080,227</b>	<b>818</b>	<b>\$345,970</b>	<b>\$9,686,569</b>	<b>\$98,453,559</b>	<b>\$3,536,465</b>	<b>\$0</b>	<b>\$253,102,790</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Patterson**

HAZARD: WILDFIRE

Jurisdiction County:Wildfire = >2 Miles < 3 M

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$12,739,775	139	\$464,492	\$0	\$32,820,521	\$832,534	\$0	\$46,857,322
INDUSTRIAL	\$19,326,861	49	\$25,832,860	\$0	\$86,763,456	\$4,942,840	\$0	\$136,866,017

NON-ASSESSABLE	\$0	45	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$87,149,210	2361	\$0	\$3,909	\$240,225,828	\$16,214	\$0	\$0	\$327,395,161	
RESIDENTIAL-INCOME	\$4,051,986	93	\$0	\$3,145	\$8,159,661	\$29,826	\$0	\$0	\$12,244,618	
VACANT COMMERCIAL	\$5,577,001	41	\$0	\$0	\$569,566	\$63,410	\$0	\$0	\$6,209,977	
VACANT RESIDENTIAL	\$1,691,155	16	\$0	\$0	\$477,118	\$0	\$0	\$0	\$2,168,273	
<b>Total = &gt;2 Miles &lt; 3 Miles</b>	<b>\$130,535,988</b>	<b>2744</b>	<b>\$26,297,352</b>	<b>\$7,054</b>	<b>\$369,016,150</b>	<b>\$5,884,824</b>	<b>\$0</b>	<b>\$0</b>	<b>\$531,741,368</b>	

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- County**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire = Previously Bur

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$117,512	2	\$17,380	\$0	\$0	\$0	\$0	\$134,892
NON-ASSESSABLE	\$0	39	\$0	\$0	\$0	\$0	\$0	\$0
RURAL, FARM, AGRICULTURE	\$22,037,595	279	\$0	\$0	\$3,848,232	\$65,920	\$0	\$25,951,747
<b>Total = Previously Burnt</b>	<b>\$22,155,107</b>	<b>320</b>	<b>\$17,380</b>	<b>\$0</b>	<b>\$3,848,232</b>	<b>\$65,920</b>	<b>\$0</b>	<b>\$26,086,639</b>
<b>Grand Total</b>	<b>\$1,244,936,668</b>	<b>13991</b>	<b>\$50,352,225</b>	<b>\$38,742,992</b>	<b>\$1,714,028,574</b>	<b>\$58,668,722</b>	<b>\$18,718</b>	<b>\$3,106,747,899</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 1 Mile < 2 Miles

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
LAGRANGE REGIONAL PARK	008-029-015		\$218,020	\$0	\$0	\$218,020
LAGRANGE REGIONAL PARK	008-029-015		\$82,848	\$31,983	\$0	\$114,831
WOODWARD RESERVOIR	002-007-032		\$824,351	\$0	\$0	\$824,351
WOODWARD RESERVOIR	002-007-032		\$134,426	\$48,969	\$0	\$183,395
TOTAL COUNTY Wildfire = > 1 Mile < 2 Miles						\$1,340,597

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 2 Miles < 3 Miles

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
PATTERSON LIBRARY	131-014-021	BOOKS \$744,333	\$1,079,971	\$910,872	\$0	\$1,990,843
P.W. FINK RD. LANDFILL	027-017-040		\$12,482	\$5,888	\$0	\$18,370
P.W. FINK RD. LANDFILL	027-017-040		\$19,089	\$89,552	\$0	\$108,641
P.W. FINK RD. LANDFILL	027-017-040		\$19,172	\$38,381	\$0	\$57,553
P.W. FINK RD. LANDFILL	027-017-040		\$125,155	\$255,864	\$0	\$381,019
P.W. FINK RD. LANDFILL	027-017-040		\$57,449	\$63,964	\$0	\$121,413
PUBLIC WORKS	131-004-001		\$233,544	\$58,440	\$0	\$291,984
W.I.C.	131-009-001	LEASED	\$0	\$25,586	\$0	\$25,586
WOODWARD RESERVOIR	002-007-032		\$48,579	\$18,735	\$0	\$67,314
WOODWARD RESERVOIR	002-007-032		\$31,546	\$15,615	\$0	\$47,161
WOODWARD RESERVOIR	002-009-024		\$27,021	\$7,400	\$0	\$34,421



WOODWARD RESERVOIR	002-007-032		\$30,533	\$9,945	\$0	\$40,478
WOODWARD RESERVOIR	002-009-024		\$126,378	\$73,185	\$0	\$199,563
WOODWARD RESERVOIR	002-009-024		\$46,055	\$25,943	\$0	\$71,998
TOTAL COUNTY Wildfire = > 2 Miles < 3 Miles			\$1,856,974	\$1,599,370	\$0	\$3,456,344

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 3 Miles < 4 Miles

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
MODESTO RESERVOIR	008-003-021		\$1,011,995	\$129,156	\$0	\$1,141,151
MODESTO RESERVOIR	008-003-021		\$117,557	\$43,571	\$0	\$161,128
MODESTO RESERVOIR	008-003-021		\$133,044	\$80,011	\$0	\$213,055
PARKS-BONTTA POOL	027-014-006		\$345,420	\$0	\$0	\$345,420
TOTAL COUNTY Wildfire = > 3 Miles < 4 Miles			\$1,608,016	\$252,738	\$0	\$1,860,754

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**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 4 Miles < 5 Miles

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
Grayson Community Center	016-034-006		\$1,713,838	\$0	\$0	\$1,713,838
TOTAL COUNTY Wildfire = > 4 Miles < 5 Miles			\$1,713,838	\$0	\$0	\$1,713,838

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = Previously Burnt

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
FRANK RAINES PARK	025-020-003		\$77,151	\$0	\$0	\$77,151
FRANK RAINES PARK	025-020-003		\$363,198	\$0	\$0	\$363,198
FRANK RAINES PARK	025-020-003		\$172,773	\$76,241	\$0	\$249,014
FRANK RAINES PARK	025-020-003		\$36,245	\$12,609	\$0	\$48,854
FRANK RAINES PARK	025-020-003		\$811,754	\$109,902	\$0	\$921,656
TOTAL COUNTY Wildfire = Previously Burnt			\$1,461,121	\$198,752	\$0	\$1,659,873
<b>GRAND TOTAL EXISTING FACILITIES</b>			<b>\$7,899,594</b>	<b>\$2,131,812</b>	<b>\$0</b>	<b>\$10,031,406</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
FUTURE COUNTY FACILITIES**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone =

Description	APN	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
		\$0	\$0	\$0	\$0
<b>GRAND TOTAL FUTURE FACILITIES</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

TOTAL COUNTY WILDFIRE ZONE :

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = <1 Mile

Crossing	Bridge Number	Road Name	Type	Cost
ROCK RIVER	38C0008	COOPERSTOWN	Slab	\$1,184,992
DRY CREEK	38C0009	CRABTREE	Girder	\$748,883
ORESTIMBA CREEK	38C0011	ORESTIMBA	Slab	\$1,224,969
LITTLE JOHN CREEK	38C0017	26 MILE	Slab	\$2,250,364
LITTLE JOHN CREEK (MT. BROW)	38C0021	SONORA	Slab	\$1,575,656
LITTLE JOHN CREEK	38C0024	SONORA	Slab	\$1,715,611
INGRAM CREEK	38C0059	MCCRACKEN	Slab	\$529,329
DELTA MENDOTA CANAL	38C0101	HAMILTON	Slab	\$683,406
GASBURG CREEK	38C0111	LA GRANGE	Slab	\$451,788
CALIFORNIA AQUEDUCT	38C0117	HOWARD	Slab	\$1,349,415
DELTA MENDOTA CANAL	38C0118	HOWARD	Slab	\$679,200
DAWSON LAKE (MCDONALD CREEK)	38C0144	NEW LA GRANGE ROAD	Slab	\$772,870
TUOLUMNE RIVER	38C0145	LA GRANGE (OLD)	Girder	\$7,062,221
MID MAIN CANAL	38C0146	NEW LA GRANGE ROAD	Slab	\$817,721
HOODS CREEK	38C0162	DUNTON	Slab	\$752,702
SOUTH SAN JOAQUIN MAIN CANAL	38C0169	SHELL	Girder	\$110,779
GALLUP CREEK	38C0170	COOPERSTOWN	Girder	\$200,244
TID MAIN CANAL	38C0171	LAKE	Slab	\$494,704
DEL PUERTO CREEK	38C0174	DEL PUERTO CANYON	Slab	\$204,926
DEL PUERTO CR. (WASHINGTON CANAL)	38C0175	DEL PUERTO CANYON	Slab	\$112,069

CALIFORNIA AQUEDUCT	38C0207	ORESTIMBA	Slab	\$1,066,901
CALIFORNIA AQUEDUCT	38C0211	OAK FLAT	Slab	\$1,095,289
DELTA MENDOTA CANAL	38C0221	GAFFERY	Slab	\$848,188
HOODS CREEK	38C0232	MILTON	Slab	\$609,330
DRY CREEK TRIBUTARY	38C0256	COOPERSTOWN	Slab	\$177,446
RYDBERG CREEK	38C0257	COOPERSTOWN	Slab	\$297,318
JOHNSON CREEK	38C0258	COOPERSTOWN	Slab	\$161,699
DRY CREEK	38C0259	COOPERSTOWN	Girder	\$186,363
PEASLEE CREEK	38C0269	LAKE	Slab	\$313,626
TUOLUMNE RIVER	38C0317	LAKE	Slab	\$3,552,000
TOTAL COUNTY WILDFIRE ZONE :<1 Mile				\$31,230,009

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 1 Mile < 2 Miles

Crossing	Bridge Number	Road Name	Type	Cost
STANISLAUS RIVER	38C0001	ORANGE BLOSSOM	Girder	\$6,359,977
LITTLE JOHN CREEK (PUMP)	38C0013	SONORA	Slab	\$1,045,013
WOODWARD RESERVOIR (SSJID RESERVOIR )	38C0020	28 MILE	Slab	\$791,126
TID MAIN CANAL	38C0039	LAKE	Slab	\$1,004,821
CALIFORNIA AQUEDUCT	38C0053	SPERRY	Slab	\$1,251,253
CALIFORNIA AQUEDUCT	38C0094	FINK	Slab	\$1,279,832
DELTA MENDOTA CANAL	38C0095	FINK	Slab	\$632,389
WESTLEY WASTEWAY	38C0187	STARK	Slab	\$329,630
ROCK CREEK DITCH	38C0199	MILTON	Slab	\$216,300

DELTA MENDOTA CANAL	38C0205	ORESTIMBA	Slab	\$696,429
DELTA MENDOTA CANAL	38C0206	STUHR	Slab	\$675,640
CALIFORNIA AQUEDUCT	38C0210	WARD	Slab	\$1,386,692
DELTA MENDOTA CANAL	38C0212	MARSHALL	Slab	\$677,718
DELTA MENDOTA CANAL	38C0213	WARD	Slab	\$683,955
DELTA MENDOTA CANAL	38C0220	WELTY	Slab	\$702,665
SHIRLEY CREEK	38C0233	DUNTON	Slab	\$181,365
SOUTH SAN JOAQUIN MAIN CANAL	38C0234	26 MILE	Slab	\$243,350
DELTA MENDOTA CANAL	38C0239	NEEDHAM	Slab	\$860,231
CALIFORNIA AQUEDUCT	38C0240	MCCRACKEN	Slab	\$1,279,832
DELTA MENDOTA CANAL	38C0241	MCCRACKEN	Slab	\$829,167
WILDCAT CREEK	38C0253	WILLMS	Slab	\$321,798
DRY CREEK TRIBUTARY	38C0255	COOPERSTOWN	Slab	\$200,244
DRY CREEK TRIBUTARY	38C0270	WARNERVILLE	Slab	\$161,699
DRY CREEK TRIBUTARY	38C0278	WILLMS	Slab	\$200,123
SOUTH SAN JOAQUIN MAIN CANAL	38C0294	SONORA	Slab	\$146,000
DELTA MENDOTA CANAL	38C0296	DIEHL	Slab	\$675,640
DRY CREEK TRIBUTARY	38C0307	WARNERVILLE	Slab	\$156,897
TOTAL COUNTY WILDFIRE ZONE -> 1 Mile < 2 Miles				\$22,989,786

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 2 Miles < 3 Mile

Crossing	Bridge Number	Road Name	Type	Cost
ORESTIMBA CREEK	38C0012	ANDERSON	Slab	\$0

CASHMAN CREEK	38C0015	CLARIBEL	Slab	\$989,480
LITTLE JOHN CREEK	38C0045	FRANKENHEIMER	Slab	\$1,140,093
DRY CREEK	38C0073	TIM BELL	Girder	\$927,397
WEST STANISLAUS LATERAL NO.5 S	38C0188	W. STANISLAUS	Slab	\$132,141
SALADO CREEK	38C0189	WARD	Slab	\$173,604
DELTA MENDOTA CANAL	38C0209	DAVIS	Slab	\$721,375
INGRAM CREEK	38C0243	HAMILTON	Slab	\$190,498
MID MAIN CANAL	38C0267	CRABTREE	Slab	\$0
MARTELL CREEK	38C0272	SONORA	Slab	\$395,443
MARTELL CREEK	38C0273	SONORA	Slab	\$297,783
TOTAL COUNTY WILDFIRE ZONE :> 2 Miles < 3 Miles				\$4,967,814

## STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN COUNTY BRIDGES

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 3 Miles < 4 Mile

Crossing	Bridge Number	Road Name	Type	Cost
TUOLUMNE RIVER	38C0005	ROBERTS FERRY	Girder	\$4,956,000
BRANCH DRY CREEK NO 2	38C0014	CLARIBEL	Slab	\$808,497
CCID MAIN CANAL (SAN JOAQUIN & KINGS RIVE	38C0031	STUHR	Girder	\$660,940
SAN JOAQUIN & KINGS RIVER CANAL (CCID MAI	38C0096	CROWS LANDING	Girder	\$726,440
NEWMAN WASTEWAY	38C0182	EASTIN	Slab	\$266,074
SAN JOAQUIN & KINGS RIVER CANAL	38C0183	ANDERSON	Girder	\$430,453
PATTERSON IRRIGATION CANAL	38C0185	SYCAMORE	Slab	\$116,872
ROCK CREEK	38C0198	MILTON	Slab	\$225,142
SAN JOAQUIN & KINGS RIVER CANAL	38C0208	FIFTH	Girder	\$430,453

DEL PUERTO CREEK	38C0215	ROGERS	Slab	\$496,783
WESTLEY WASTEWAY	38C0218	FRANK COX	Slab	\$383,940
ROCK CREEK TRIBUTARY	38C0231	MILTON	Slab	\$1,031,417
WEST STANISLAUS LATERAL NO.4 S	38C0242	W. STANISLAUS	Slab	\$122,344
SOUTH SAN JOAQUIN MAIN CANAL	38C0261	LAMBUTH	Slab	\$248,153
TID MAIN CANAL	38C0268	LAKE	Slab	\$471,932
SOUTH SAN JOAQUIN MAIN CANAL	38C0319	FRANKENHEIMER	Slab	\$347,903
TOTAL COUNTY WILDFIRE ZONE :> 3 Miles < 4 Miles				\$11,723,343

## STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN COUNTY BRIDGES

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 4 Miles < 5 Mile

Crossing	Bridge Number	Road Name	Type	Cost
SAN JOAQUIN RIVER	38C0016	GRAYSON	Girder	\$2,610,382
ORESTIMBA CREEK	38C0042	MORRIS	Slab	\$0
SSJID CANAL (SOUTH SAN JOAQUIN MAIN CANA	38C0079	VALLEY HOME	Slab	\$258,447
LONE TREE CREEK	38C0080	VALLEY HOME	Slab	\$252,239
SAN JOAQUIN & KINGS RIVER CANAL	38C0180	SHIELLS	Girder	\$482,502
PATTERSON IRRIGATION CANAL	38C0184	ELM	Slab	\$156,753
CALIFORNIA AQUEDUCT	38C0200	SULLIVAN	Slab	\$1,066,901
CALIFORNIA AQUEDUCT	38C0201	PETE MILLER	Slab	\$1,059,804
DELTA MENDOTA CANAL	38C0202	PETE MILLER	Slab	\$887,686
SAN JOAQUIN & KINGS RIVER CANAL	38C0203	DRAPER	Girder	\$671,076
SAN JOAQUIN & KINGS RIVER CANAL	38C0204	ORESTIMBA	Girder	\$632,134
WESTLEY WASTEWAY	38C0219	COX	Slab	\$272,316



NEWMAN WASTEWAY	38C0238	DRAPER	Slab	\$867,280
LONE TREE CREEK	38C0262	PIONEER	Slab	\$154,555
MID MAIN CANAL	38C0289	RESERVOIR	Slab	\$568,721
MID MAIN CANAL	38C0290	HAZELDEAN	Slab	\$287,804
TOTAL COUNTY WILDFIRE ZONE :> 4 Miles < 5 Miles				\$10,228,600

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = Previously Burnt

Crossing	Bridge Number	Road Name	Type	Cost
DEL PUERTO CREEK	38C0019	DEL PUERTO CANYON	Slab	\$112,069
DEL PUERTO CREEK	38C0041	DEL PUERTO CANYON	Slab	\$107,357
DEL PUERTO CREEK	38C0315	FRANK RAIN ORV PK	Slab	\$61,889
TOTAL COUNTY WILDFIRE ZONE :Previously Burnt				\$281,315

**GRAND TOTAL COUNTY BRIDGES**

**\$81,420,867**

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zones = > 2 Miles < 3 M

Sub Division	Location	Cost
MOUNTAIN OAK - SUNSET OAKS NO. 10	N/ORANGE BLOSSOME (N/E CORNR)	\$403,263
TOTAL COUNTY Wildfire Zone = > 2 Miles < 3 Miles		\$403,263

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zones = > 3 Miles < 4 M

Sub Division	Location	Cost
SIERRA SUNSET	RANCH WOOD CT	\$403,263
TOTAL COUNTY Wildfire Zone = > 3 Miles < 4 Miles		\$403,263

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**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zones = > 4 Miles < 5 M

Sub Division	Location	Cost
RIO CASA DRIVE - RIO CASA ESTATES	S/DIXON ROAD	\$403,263
RIO SOMBRA DRIVE - HUNTER RANCH ESTATES	W/MORRIS HUNTER	\$403,263
ST. ANDREWS - OAKDALE CC ESTATES	2500 ATLAS	\$403,263
TOTAL COUNTY Wildfire Zone = > 4 Miles < 5 Miles		\$1,209,789

**GRAND TOTAL DRAINAGE DISTRICTS**

**\$2,016,315**

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = < 1 Mile

District	Number	Cost
Schwartz-Baize Lighting District	1	\$7,000
TOTAL COUNTY Wildfire Zone = < 1 Mile	1	\$7,000

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 1 Mile < 2 Miles

District	Number	Cost
Sunset Oaks Lighting District	2	\$14,000
TOTAL COUNTY Wildfire Zone = > 1 Mile < 2 Miles	2	\$14,000

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**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 2 Miles < 3 Miles

District	Number	Cost
Crowslanding Lighting District	1	\$7,000
Sunset Oaks Lighting District	24	\$168,000
TOTAL COUNTY Wildfire Zone = > 2 Miles < 3 Miles	25	\$175,000

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 3 Miles < 4 Miles

District	Number	Cost
Almond Wood Estates Lighting District	31	\$217,000
Crowslanding Lighting District	22	\$154,000
Gibbs Ranch Lighting District	5	\$35,000
Sunset Oaks Lighting District	53	\$371,000
<b>TOTAL COUNTY Wildfire Zone = &gt; 3 Miles &lt; 4 Miles</b>	<b>111</b>	<b>\$777,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone = > 4 Miles < 5 Miles

District	Number	Cost
Almond Wood Estates Lighting District	31	\$217,000
Country Club Estates Lighting District	3	\$21,000
Deo Gloria Estates Lighting District	18	\$126,000
Gibbs Ranch Lighting District	2	\$14,000
North Oaks Lighting District	6	\$42,000
<b>TOTAL COUNTY Wildfire Zone = &gt; 4 Miles &lt; 5 Miles</b>	<b>60</b>	<b>\$420,000</b>
<b>GRAND TOTAL LIGHTING DISTRICTS</b>	<b>199</b>	<b>\$1,393,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY TRAFFIC SIGNALS**

HAZARD: WILDFIRE

Jurisdiction County: Wildfire Zone =

Location	Cost
TOTAL COUNTY WILDFIRE ZONE =	\$0
<b>GRAND TOTAL TRAFFIC SIGNALS</b>	<b>\$0</b>

# RISK ASSESSMENT—Plan Update



Baseline Data

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
POPULATION AND HOUSING UNITS BY JURISDICTION**

Jurisdiction	POPULATION		HOUSEHOLDS	
	Total #	% of County	Total #	% of County
Ceres	34416	7.70%	10691	7.09%
County	104748	23.43%	33722	22.36%
Hughson	4116	0.92%	1302	0.86%
Modesto	189201	42.33%	67279	44.61%
Newman	7222	1.62%	2226	1.48%
Oakdale	16101	3.60%	6074	4.03%
Patterson	11801	2.64%	3326	2.21%
Riverbank	15927	3.56%	4760	3.16%
Turlock	56481	12.64%	19328	12.82%
Waterford	6984	1.56%	2099	1.39%
<b>GRAND TOTAL</b>	<b>446997</b>		<b>150807</b>	

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION--**  
**Ceres**

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$88,270,305	312	\$3,502,041	\$0	\$239,208,685	\$4,433,944	\$0	\$335,414,975
INDUSTRIAL	\$40,654,447	189	\$3,999,340	\$0	\$176,433,620	\$8,287,316	\$0	\$229,374,723
NON-ASSESSABLE	\$710,232	190	\$9,170	\$0	\$831,104	\$124,190	\$0	\$1,674,696
RESIDENTIAL	\$455,046,228	10303	\$0	\$3,018	\$1,104,451,962	\$108,526	\$0	\$1,559,609,734
RESIDENTIAL-INCOME	\$29,143,787	317	\$4,540	\$148,942	\$103,612,376	\$1,070,710	\$0	\$133,980,355
RURAL, FARM, AGRICULTURE	\$208,938	2	\$0	\$2,266	\$54,037	\$0	\$0	\$265,241
VACANT COMMERCIAL	\$61,433,210	196	\$0	\$0	\$850,482	\$0	\$0	\$62,283,692
VACANT RESIDENTIAL	\$15,506,818	355	\$0	\$0	\$5,001,778	\$0	\$0	\$20,508,596
<b>Total for Ceres</b>	<b>\$690,973,965</b>	<b>11864</b>	<b>\$7,515,091</b>	<b>\$154,226</b>	<b>\$1,630,444,044</b>	<b>\$14,024,686</b>	<b>\$0</b>	<b>\$2,343,112,012</b>



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- County**

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$225,242,891	915	\$3,643,451	\$153,151	\$487,378,538	\$12,221,702	\$0	\$728,639,733
INDUSTRIAL	\$267,173,960	882	\$357,620,584	\$306,799	\$944,202,043	\$287,706,567	\$0	\$1,857,009,953
NON-ASSESSABLE	\$16,196,571	1036	\$678,290	\$89,063	\$43,191,110	\$14,967,211	\$0	\$75,122,245
RESIDENTIAL	\$719,574,265	17167	\$0	\$51,004	\$1,698,251,659	\$673,421	\$0	\$2,418,550,349
RESIDENTIAL-INCOME	\$86,942,914	860	\$830	\$1,618,912	\$85,611,774	\$871,628	\$0	\$175,046,058
RURAL, FARM, AGRICULTURE	\$2,214,274,196	15821	\$73,176,802	\$198,773,529	\$2,044,225,246	\$139,054,507	\$104,447	\$4,669,608,727
VACANT COMMERCIAL	\$117,592,110	374	\$13,400	\$21,930	\$17,184,146	\$164,600	\$0	\$134,976,186
VACANT RESIDENTIAL	\$117,222,013	1160	\$0	\$609,651	\$3,100,189	\$12,782	\$0	\$120,944,635
<b>Total for County</b>	<b>\$3,764,218,920</b>	<b>38215</b>	<b>\$435,133,357</b>	<b>\$201,624,039</b>	<b>\$5,323,144,705</b>	<b>\$455,672,418</b>	<b>\$104,447</b>	<b>\$10,179,897,886</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Hughson**

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$8,193,953	82	\$1,758,900	\$0	\$73,811,357	\$1,997,557	\$0	\$85,761,767
INDUSTRIAL	\$3,539,444	19	\$1,808,950	\$0	\$15,119,671	\$233,250	\$0	\$20,701,315
NON-ASSESSABLE	\$0	58	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$73,559,192	1676	\$0	\$0	\$211,408,376	\$23,940	\$0	\$284,991,508
RESIDENTIAL-INCOME	\$3,055,559	44	\$0	\$0	\$5,518,383	\$0	\$0	\$8,573,942
RURAL, FARM, AGRICULTURE	\$803,394	13	\$0	\$69,795	\$559,446	\$0	\$0	\$1,432,635
VACANT COMMERCIAL	\$2,688,921	24	\$0	\$62,668	\$9,616	\$0	\$0	\$2,761,205
VACANT RESIDENTIAL	\$6,270,672	235	\$0	\$1,822	\$1,100,794	\$0	\$0	\$7,373,288
<b>Total for Hughson</b>	<b>\$98,111,135</b>	<b>2151</b>	<b>\$3,567,850</b>	<b>\$134,285</b>	<b>\$307,527,643</b>	<b>\$2,254,747</b>	<b>\$0</b>	<b>\$411,595,660</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Modesto**

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$799,894,042	2228	\$57,146,148	\$74,636	\$2,014,919,745	\$161,357,507	\$0	\$3,033,392,078
INDUSTRIAL	\$103,510,728	330	\$125,479,506	\$0	\$307,119,065	\$31,361,860	\$0	\$567,471,159
NON-ASSESSABLE	\$3,038,693	906	\$10,230	\$0	\$1,978,854	\$133,360	\$0	\$5,161,137
RESIDENTIAL	\$2,172,862,692	53644	\$11,365	\$0	\$5,917,460,925	\$937,770	\$0	\$8,091,272,752
RESIDENTIAL-INCOME	\$459,200,339	3127	\$22,970	\$0	\$2,102,471,483	\$6,497,127	\$0	\$2,568,191,919
RURAL, FARM, AGRICULTURE	\$4,832,447	23	\$6,180	\$16,236	\$2,046,537	\$133,711	\$0	\$7,035,111
VACANT COMMERCIAL	\$94,742,358	244	\$22,900	\$0	\$28,044,558	\$263,080	\$0	\$123,072,896
VACANT RESIDENTIAL	\$56,743,075	981	\$67,210	\$134,994	\$12,702,091	\$47,030	\$0	\$69,694,400
<b>Total for Modesto</b>	<b>\$3,694,824,374</b>	<b>61483</b>	<b>\$182,766,509</b>	<b>\$225,866</b>	<b>10,386,743,258</b>	<b>\$200,731,445</b>	<b>\$0</b>	<b>\$14,465,291,452</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Newman**

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$8,239,239	105	\$494,639	\$0	\$27,881,724	\$797,678	\$0	\$37,413,280
INDUSTRIAL	\$4,010,850	36	\$13,653,239	\$0	\$17,597,370	\$1,845,562	\$0	\$37,107,021
NON-ASSESSABLE	\$0	68	\$0	\$0	\$0	\$0	\$0	\$0
RESIDENTIAL	\$116,499,906	2890	\$0	\$2,373	\$256,551,582	\$0	\$0	\$373,053,861
RESIDENTIAL-INCOME	\$4,105,310	54	\$0	\$0	\$17,175,694	\$63,570	\$0	\$21,344,574
RURAL, FARM, AGRICULTURE	\$267,133	8	\$480	\$2,084	\$346,755	\$0	\$0	\$616,452
VACANT COMMERCIAL	\$3,154,249	34	\$23,350	\$0	\$303,430	\$5,990	\$0	\$3,487,019
VACANT RESIDENTIAL	\$6,658,994	334	\$0	\$0	\$3,559	\$0	\$0	\$6,662,553
<b>Total for Newman</b>	<b>\$142,935,681</b>	<b>3529</b>	<b>\$14,171,708</b>	<b>\$4,457</b>	<b>\$319,860,114</b>	<b>\$2,712,800</b>	<b>\$0</b>	<b>\$479,684,760</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
TOTAL PROPERTY VALUE BY JURISDICTION-- Oakdale**

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$73,124,427	351	\$2,996,970	\$0	\$162,928,688	\$1,535,718	\$0	\$240,585,803
INDUSTRIAL	\$34,719,579	200	\$71,630,539	\$0	\$100,931,847	\$21,279,922	\$0	\$228,561,887
NON-ASSESSABLE	\$319,477	209	\$0	\$0	\$51,030	\$68,060	\$0	\$438,567
RESIDENTIAL	\$281,040,756	5764	\$0	\$0	\$722,736,346	\$148,203	\$0	\$1,003,925,305
RESIDENTIAL-INCOME	\$25,970,996	336	\$0	\$50,000	\$61,039,760	\$274,402	\$0	\$87,335,158
RURAL, FARM, AGRICULTURE	\$2,638,400	17	\$104,110	\$0	\$3,560,653	\$27,250	\$0	\$6,330,413
VACANT COMMERCIAL	\$19,462,895	97	\$0	\$54,921	\$464,551	\$0	\$0	\$19,982,367
VACANT RESIDENTIAL	\$20,139,727	392	\$0	\$11,413	\$3,011,320	\$0	\$0	\$23,162,460
<b>Total for Oakdale</b>	<b>\$457,416,257</b>	<b>7366</b>	<b>\$74,731,619</b>	<b>\$116,334</b>	<b>\$1,054,724,195</b>	<b>\$23,333,555</b>	<b>\$0</b>	<b>\$1,610,321,960</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Patterson**

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$25,943,433	162	\$1,548,542	\$0	\$73,305,546	\$1,578,994	\$0	\$102,376,515
INDUSTRIAL	\$28,264,413	62	\$34,493,070	\$0	\$137,685,718	\$12,245,610	\$0	\$212,688,811
NON-ASSESSABLE	\$331,223	94	\$0	\$0	\$0	\$0	\$0	\$331,223
RESIDENTIAL	\$214,451,550	5496	\$0	\$3,909	\$639,111,146	\$287,164	\$0	\$853,853,769
RESIDENTIAL-INCOME	\$9,147,825	114	\$0	\$3,145	\$13,139,029	\$29,826	\$0	\$22,319,825
RURAL, FARM, AGRICULTURE	\$7,212,157	38	\$0	\$190,818	\$2,101,095	\$53,433	\$0	\$9,557,503
VACANT COMMERCIAL	\$34,139,684	67	\$0	\$0	\$569,566	\$63,410	\$0	\$34,772,660
VACANT RESIDENTIAL	\$6,811,968	276	\$0	\$0	\$896,303	\$0	\$0	\$7,708,271
<b>Total for Patterson</b>	<b>\$326,302,253</b>	<b>6309</b>	<b>\$36,041,612</b>	<b>\$197,872</b>	<b>\$866,808,403</b>	<b>\$14,258,437</b>	<b>\$0</b>	<b>\$1,243,608,577</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Riverbank**

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$51,124,994	247	\$2,131,946	\$0	\$134,731,073	\$2,823,507	\$0	\$190,811,520
INDUSTRIAL	\$11,353,324	40	\$12,509,410	\$0	\$27,662,064	\$4,872,510	\$0	\$56,397,308
NON-ASSESSABLE	\$42,420	96	\$0	\$0	\$166,764	\$0	\$0	\$209,184
RESIDENTIAL	\$267,786,433	6056	\$1,530	\$0	\$761,645,877	\$58,454	\$0	\$1,029,492,294
RESIDENTIAL-INCOME	\$9,263,746	122	\$0	\$0	\$16,358,408	\$29,500	\$0	\$25,651,654
RURAL, FARM, AGRICULTURE	\$3,143,315	38	\$0	\$0	\$2,620,593	\$58,531	\$0	\$5,822,439
VACANT COMMERCIAL	\$8,617,191	41	\$0	\$0	\$2,674,968	\$0	\$0	\$11,292,159
VACANT RESIDENTIAL	\$10,680,489	305	\$0	\$0	\$1,025,664	\$0	\$0	\$11,706,153
<b>Total for Riverbank</b>	<b>\$362,011,912</b>	<b>6945</b>	<b>\$14,642,886</b>	<b>\$0</b>	<b>\$946,885,411</b>	<b>\$7,842,502</b>	<b>\$0</b>	<b>\$1,331,382,711</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Turlock**

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$254,237,259	925	\$21,689,758	\$0	\$724,585,707	\$35,445,672	\$0	\$1,035,958,396
INDUSTRIAL	\$71,943,144	334	\$125,622,279	\$0	\$230,758,296	\$30,673,908	\$0	\$458,997,627
NON-ASSESSABLE	\$472,372	287	\$0	\$0	\$477,066	\$0	\$0	\$949,438
RESIDENTIAL	\$850,322,228	16444	\$19,296	\$0	\$2,030,445,025	\$490,065	\$0	\$2,881,276,614
RESIDENTIAL-INCOME	\$77,595,267	903	\$28,560	\$0	\$295,354,939	\$2,552,880	\$0	\$375,531,646
RURAL, FARM, AGRICULTURE	\$16,203,502	103	\$131,323	\$536,849	\$9,370,166	\$210,521	\$0	\$26,452,361
VACANT COMMERCIAL	\$106,066,646	292	\$0	\$33,000	\$3,804,563	\$1,027,040	\$0	\$110,931,249
VACANT RESIDENTIAL	\$32,273,108	571	\$0	\$0	\$7,172,836	\$0	\$0	\$39,445,944
<b>Total for Turlock</b>	<b>\$1,409,113,526</b>	<b>19859</b>	<b>\$147,491,216</b>	<b>\$569,849</b>	<b>\$3,301,968,598</b>	<b>\$70,400,086</b>	<b>\$0</b>	<b>\$4,929,543,275</b>



**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**  
**TOTAL PROPERTY VALUE BY JURISDICTION-- Waterford**

Land Use	Land Value	# of Parcels	Fixed Improvement Value	Grow Improvement Value	Structural Improvement Value	Personal Property Value	Mobile Home Value	TOTAL VALUE
COMMERCIAL	\$10,805,067	115	\$368,544	\$0	\$24,446,174	\$62,655	\$0	\$35,682,440
INDUSTRIAL	\$3,019,587	20	\$0	\$0	\$3,783,634	\$266,730	\$0	\$7,069,951
NON-ASSESSABLE	\$19,653	50	\$0	\$0	\$680,728	\$0	\$0	\$700,381
RESIDENTIAL	\$82,992,665	2095	\$0	\$0	\$186,377,110	\$8,900	\$0	\$269,378,675
RESIDENTIAL-INCOME	\$8,181,817	105	\$0	\$0	\$22,620,027	\$149,814	\$0	\$30,951,658
RURAL, FARM, AGRICULTURE	\$4,313,246	24	\$0	\$624,244	\$2,106,433	\$6,535	\$0	\$7,050,458
VACANT COMMERCIAL	\$3,570,339	27	\$0	\$0	\$18,798	\$0	\$0	\$3,589,137
VACANT RESIDENTIAL	\$4,366,713	65	\$0	\$0	\$1,635,293	\$0	\$0	\$6,002,006
<b>Total for Waterford</b>	<b>\$117,269,087</b>	<b>2501</b>	<b>\$368,544</b>	<b>\$624,244</b>	<b>\$241,668,197</b>	<b>\$494,634</b>	<b>\$0</b>	<b>\$360,424,706</b>

<b>Grand Total</b>	<b>\$11,063,177,110</b>	<b>160222</b>	<b>\$916,430,392</b>	<b>\$203,651,172</b>	<b>\$24,379,774,568</b>	<b>\$791,725,310</b>	<b>\$104,447</b>	<b>\$37,354,862,999</b>
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**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
EXISTING COUNTY FACILITIES**

Description	APN	Own/Lease	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
PATTERSON LIBRARY	131-014-021	BOOKS \$744,333	\$1,079,971	\$910,872	\$0	\$1,990,843
12TH ST PARKING GARAGE	105-024-010		\$11,395,050	\$0	\$0	\$11,395,050
12TH STREET OFFICE BUILDING	105-024-014		\$19,237,942	\$1,048,254	\$0	\$20,286,196
ADMIN. ANNEX #4	105-038-023	REAL INCL. IN LOC. 63	\$0	\$2,558,642	\$0	\$2,558,642
ADMIN. ANNEX #4	105-038-023		\$5,897,704	\$1,908,112	\$2,940,000	\$10,745,816
ADMIN. ANNEX #4	105-038-023	REAL INCL. IN LOC. 63	\$0	\$3,837,965	\$0	\$3,837,965
ADMIN. ANNEX #4	105-038-023	REAL INCL. IN LOC. 63	\$0	\$2,558,642	\$0	\$2,558,642
ADULT RESIDENTIAL TREATMENT	040-008-016		\$2,755,189	\$579,671	\$0	\$3,334,860
ADULT RESIDENTIAL TREATMENT	040-008-016		\$647,767	\$0	\$0	\$647,767
AGRICULTURAL COMPLEX	086-015-005	STORAGE	\$533,867	\$117,085	\$0	\$650,952
AGRICULTURAL COMPLEX	086-015-005	1997 A COP - BI AT LO	\$8,953,763	\$2,107,259	\$0	\$11,061,022
AGRICULTURAL COMPLEX	086-015-005	1997 A COP - BI AT LO	\$3,880,351	\$0	\$0	\$3,880,351
AGRICULTURAL COMPLEX	086-015-005	1997 A COP - BI AT LO	\$2,824,879	\$0	\$0	\$2,824,879
AGRICULTURAL COMPLEX	086-015-005	1997 A COP - BI AT LO	\$203,780	\$0	\$0	\$203,780
ANIMAL SERVICES	039-010-002		\$30,599	\$43,040	\$0	\$73,639
ANIMAL SERVICES	039-010-002	ADOPTION CENTER	\$123,035	\$127,932	\$0	\$250,967
ANIMAL SERVICES	039-010-002		\$1,122,739	\$160,975	\$0	\$1,283,714
BHRS	111-048-001		\$3,696,884	\$652,183	\$0	\$4,349,067
BONITA PARK	045-021-036		\$0	\$36,228	\$0	\$36,228
BURBANK-PARADISE	037-002-017		\$648,920	\$125,680	\$0	\$774,600
BUSES	081-003-014	REPLACEMENT COST	\$0	\$0	\$0	\$0

CAPITAL PROJECTS TRAILER	105-025-001			\$122,713	\$70,254	\$0	\$192,967
CENTRAL SERVICES	111-048-001			\$758,489	\$678,617	\$0	\$1,437,106
CERES COUNSELING CTR.	127-016-016			\$0	\$147,360	\$0	\$147,360
CERES LIBRARY	127-016-037	BOOKS \$915,225		\$613,893	\$1,030,865	\$0	\$1,644,758
CERES MUNICIPAL COURT	127-016-014			\$401,620	\$0	\$0	\$401,620
Children and Families Commission	105-007-010			\$0	\$157,238	\$0	\$157,238
COMMUNITY SERV. FACILITIES	018-042-025			\$0	\$6,397	\$0	\$6,397
COMMUNITY SERVICES FACILITY	086-015-016			\$51,120,820	\$7,897,717	\$9,932,663	\$68,951,200
COUNTY ANNEX	105-025-001			\$7,820,474	\$632,642	\$4,031,022	\$12,484,138
COUNTY CENTER #3	032-016-006			\$2,970,408	\$1,058,384	\$153,120	\$4,181,912
COUNTY CENTER #3	032-016-006			\$470,143	\$56,237	\$0	\$526,380
COUNTY CENTER #3	032-016-006			\$851,640	\$712,548	\$0	\$1,564,188
COUNTY CENTER #3	032-016-006			\$675,810	\$356,273	\$0	\$1,032,083
COUNTY GARAGE	086-015-014			\$1,630,271	\$585,423	\$0	\$2,215,694
COURT BUILDING	105-025-001			\$19,067,965	\$262,064	\$0	\$19,330,029
DENAIR LIBRARY	024-024-018	BOOKS \$333,112		\$241,638	\$401,801	\$0	\$643,439
DRUG ENFORCEMENT BLDG.	029-002-038	LEASED		\$0	\$255,864	\$0	\$255,864
EMERGENCY SERVICES	052-063-019			\$3,557,711	\$10,482,540	\$0	\$14,040,251
Empire Community Pool	009-007-009			\$2,200,000	\$0	\$0	\$2,200,000
EMPIRE LIBRARY	133-017-006	BOOKS \$282,235		\$331,652	\$570,255	\$0	\$901,907
FOX GROVE REG. PARK	018-005-003			\$60,296	\$0	\$0	\$60,296
FRANK RAINES PARK	025-020-003			\$363,198	\$0	\$0	\$363,198
FRANK RAINES PARK	025-020-003			\$77,151	\$0	\$0	\$77,151
FRANK RAINES PARK	025-020-003			\$172,773	\$76,241	\$0	\$249,014
FRANK RAINES PARK	025-020-003			\$36,245	\$12,609	\$0	\$48,854
FRANK RAINES PARK	025-020-003			\$811,754	\$109,902	\$0	\$921,656
GALLO CENTER FOR THE ARTS	105-039-014	COC FROM APRIL 200		\$42,462,422	\$0	\$2,251,865	\$44,714,287

Grayson Community Center	016-034-006			\$1,713,838	\$0	\$1,713,838
H.S.A.	111-048-001			\$9,735	\$0	\$15,590
H.S.A.	111-048-001			\$159,147	\$0	\$253,042
H.S.A.	111-048-001			\$4,842	\$0	\$8,746
H.S.A.	111-048-001			\$6,348	\$0	\$10,155
H.S.A.	111-048-001			\$57,433	\$0	\$90,726
H.S.A.	111-048-001			\$79,003	\$0	\$124,867
H.S.A.	111-048-001	REAL/CONTENTS INCL		\$0	\$0	\$486,141
H.S.A.	111-048-001			\$117,507	\$0	\$117,507
HEALTH SERVICES	111-048-001			\$1,271,595	\$0	\$1,806,707
HEALTH SERVICES	111-048-001	CONTENTS INCL. IN L		\$1,600,773	\$0	\$2,069,902
HEALTH SERVICES	111-048-001			\$748,798	\$0	\$1,032,278
HEALTH SERVICES	111-048-001	CONTENTS INCL. IN L		\$1,831,238	\$0	\$2,264,050
HEALTH SERVICES	111-048-001			\$2,960,774	\$0	\$3,566,531
HEALTH SERVICES	111-048-001			\$2,696,267	\$0	\$3,242,282
HEALTH SERVICES	111-048-001			\$3,659,440	\$406,285	\$5,677,985
HEALTH SERVICES	111-048-001			\$1,665,263	\$0	\$1,992,105
HEALTH SERVICES	111-048-001			\$15,000,934	\$0	\$23,984,067
HONOR FARM	016-026-010			\$43,378	\$0	\$64,479
HONOR FARM	017-060-002			\$10,338	\$0	\$58,020
HONOR FARM	016-026-010	REAL/CONTENTS INCL		\$41,572	\$0	\$61,088
HONOR FARM	017-060-002			\$61,259	\$0	\$92,325
HONOR FARM	016-026-010	REAL/CONTENTS INCL		\$82,470	\$0	\$147,521
HONOR FARM	016-026-010			\$87,101	\$0	\$109,354
HONOR FARM	016-026-010			\$45,502	\$0	\$54,064
HONOR FARM	016-026-010			\$27,732	\$0	\$39,415
HONOR FARM	016-026-010			\$0	\$0	\$12,793

HONOR FARM	016-026-010	REAL/CONTENTS INCL	\$13,891	\$21,075	\$0	\$34,966
HONOR FARM	016-026-010	REAL/CONTENTS INC.	\$8,644	\$8,587	\$0	\$17,231
HONOR FARM	017-060-002		\$109,009	\$0	\$0	\$109,009
HONOR FARM	016-026-010		\$50,266	\$22,731	\$0	\$72,997
HONOR FARM	017-060-002	REAL/CONTENTS INCL	\$818,301	\$268,656	\$0	\$1,086,957
HONOR FARM	016-026-010		\$450,315	\$231,554	\$0	\$681,869
HONOR FARM	017-060-002		\$29,069	\$0	\$0	\$29,069
HONOR FARM	017-060-002		\$456,829	\$194,629	\$0	\$651,458
HONOR FARM	017-060-002		\$918,192	\$292,845	\$0	\$1,211,037
HONOR FARM	016-026-010		\$145,187	\$40,180	\$0	\$185,367
HONOR FARM	016-026-010		\$52,821	\$17,522	\$0	\$70,343
HONOR FARM	016-026-010	REAL/CONTENTS INCL	\$671,811	\$211,413	\$0	\$883,224
HOSPITAL / STORAGE BUILDING	040-008-016		\$15,433,606	\$579,671	\$0	\$16,013,277
HUGHSON LIBRARY	018-042-065	BOOKS \$289,235	\$276,157	\$357,093	\$0	\$633,250
HUGHSON LIBRARY	018-042-065	LEASED	\$0	\$38,381	\$0	\$38,381
JUVENILE JUSTICE CENTER	081-012-006		\$6,213,224	\$637,493	\$0	\$6,850,717
JUVENILE JUSTICE CENTER	081-012-006		\$3,421,358	\$201,556	\$0	\$3,622,914
JUVENILE JUSTICE CENTER	081-012-006		\$14,536	\$7,878	\$0	\$22,414
JUVENILE JUSTICE CENTER	081-012-006		\$165,695	\$15,130	\$0	\$180,825
JUVENILE JUSTICE CENTER	081-012-006		\$89,200	\$64,916	\$0	\$154,116
JUVENILE JUSTICE CENTER	081-012-006		\$126,518	\$64,916	\$0	\$191,434
JUVENILE JUSTICE CENTER	081-012-006		\$125,751	\$124,866	\$0	\$250,617
JUVENILE JUSTICE CENTER	081-012-006		\$17,088,609	\$316,399	\$0	\$17,405,008
JUVENILE JUSTICE CENTER	081-012-006		\$925,793	\$115,354	\$0	\$1,041,147
KEYES COMMUNITY CENTER	045-021-021		\$666,087	\$194,385	\$0	\$860,472
KEYES LIBRARY	045-032-001	LEASED - BOOKS \$342	\$0	\$341,897	\$0	\$341,897
LAGRANGE REGIONAL PARK	008-029-015		\$82,848	\$31,983	\$0	\$114,831

LAGRANGE REGIONAL PARK	008-029-015			\$218,020	\$0	\$218,020
LAW LIBRARY	105-021-006	LEASED		\$0	\$639,661	\$639,661
MAIN LIBRARY	105-006-012	BOOK \$10,519,207		\$12,481,545	\$12,122,643	\$24,604,188
MANCINI HALL	102-012-001			\$417,405	\$127,114	\$544,519
MCHENRY MED. OFFICE	055-007-009			\$0	\$871,059	\$871,059
MECHANICAL EQUIPMENT	105-025-001			\$151,695	\$34,112	\$185,807
MEDICAL BUILDING	106-002-010	1997 B COP BI AT LOC		\$3,668,592	\$992,049	\$4,660,641
MENS JAIL	105-025-001			\$10,192,455	\$676,284	\$10,868,739
MENTAL HEALTH	106-008-010	LEASED		\$0	\$127,932	\$127,932
MENTAL HEALTH CENTER	111-048-001			\$1,515,762	\$1,449,130	\$2,964,892
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L		\$445,707	\$107,691	\$553,398
MENTAL HEALTH CENTER	111-048-001			\$49,999	\$17,283	\$67,282
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L		\$429,853	\$103,332	\$533,185
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L		\$518,559	\$123,660	\$642,219
MENTAL HEALTH CENTER	111-048-001	CONTENTS INCL. IN L		\$512,244	\$125,871	\$638,115
MINIMUM SECURITY FACILITY	086-015-014	RENTS FOR COP AT L		\$8,718,429	\$1,019,907	\$9,738,336
MODESTO RESERVOIR	008-003-021			\$117,557	\$43,571	\$161,128
MODESTO RESERVOIR	008-003-021			\$133,044	\$80,011	\$213,055
MODESTO RESERVOIR	008-003-021			\$1,011,995	\$129,156	\$1,141,151
NEWMAN LIBRARY	128-005-044	BOOKS \$467,843		\$472,381	\$554,434	\$1,026,815
OAKDALE COMM. CARE CTR.	130-003-036	LEASED		\$0	\$26,210	\$26,210
OAKDALE LIBRARY	130-009-045	BOOKS \$1,226,383		\$990,116	\$1,391,439	\$2,381,555
OAKDALE PRENATAL &	063-018-017	LEASED		\$0	\$126,549	\$126,549
OFFICE OF EDUCATION	032-016-006			\$2,464,065	\$0	\$2,464,065
P.W. FINK RD. LANDFILL	027-017-040			\$19,172	\$38,381	\$57,553
P.W. FINK RD. LANDFILL	027-017-040			\$19,089	\$89,552	\$108,641
P.W. FINK RD. LANDFILL	027-017-040			\$57,449	\$63,964	\$121,413

P.W. FINK RD. LANDFILL	027-017-040		\$12,482	\$5,888	\$0	\$18,370
P.W. FINK RD. LANDFILL	027-017-040		\$125,155	\$255,864	\$0	\$381,019
P.W. GEER RD. LANDFILL	009-029-009		\$29,069	\$19,189	\$0	\$48,258
P.W. GEER RD. LANDFILL	009-029-009		\$145,348	\$0	\$0	\$145,348
P.W. GEER RD. LANDFILL	009-029-009		\$218,020	\$0	\$0	\$218,020
P.W. GEER RD. LANDFILL	009-029-009		\$363,367	\$0	\$0	\$363,367
P.W. GEER RD. LANDFILL	009-029-009		\$290,692	\$0	\$0	\$290,692
PARK SHOP GROUNDS	111-048-001		\$43,305	\$9,371	\$0	\$52,676
PARKS-BONITTA POOL	027-014-006		\$345,420	\$0	\$0	\$345,420
PERINATAL UNIT	040-008-016	UNIT	\$1,759,568	\$579,671	\$0	\$2,339,239
PSC GENERATORS/ELEC. YARD	086-015-015		\$0	\$1,279,322	\$0	\$1,279,322
PSC PROGRAMS TRAILER	086-015-014		\$124,084	\$70,131	\$0	\$194,215
PUBLIC HEALTH	111-048-001	CONTENTS INCL. IN L	\$2,104,618	\$808,272	\$0	\$2,912,890
PUBLIC SAFETY CENTER	086-015-014		\$71,049	\$33,931	\$0	\$104,980
PUBLIC SAFETY CENTER	086-015-015		\$491,389	\$135,725	\$0	\$627,114
PUBLIC SAFETY CENTER	086-015-014		\$44,951,607	\$7,449,890	\$10,500,000	\$62,901,497
PUBLIC WORKS	129-007-002		\$199,589	\$136,882	\$0	\$336,471
PUBLIC WORKS	129-007-002		\$86,103	\$52,727	\$0	\$138,830
PUBLIC WORKS	131-004-001		\$233,544	\$58,440	\$0	\$291,984
PUBLIC WORKS	129-007-002		\$53,834	\$28,826	\$0	\$82,660
PUBLIC WORKS DEPT.	040-006-002		\$274,530	\$168,926	\$0	\$443,456
PUBLIC WORKS DEPT.	040-006-002		\$30,546	\$20,294	\$0	\$50,840
PUBLIC WORKS DEPT.	040-006-002		\$4,174	\$2,921	\$0	\$7,095
PUBLIC WORKS DEPT.	040-006-002	WASTE OFFICE	\$500,505	\$202,236	\$0	\$702,741
PUBLIC WORKS DEPT.	040-006-002	REPAIR SHOP	\$905,607	\$419,869	\$0	\$1,325,476
PUBLIC WORKS DEPT.	040-006-002		\$22,013	\$6,397	\$0	\$28,410
PUBLIC WORKS DEPT.	040-006-002		\$25,357	\$14,132	\$0	\$39,489

PUBLIC WORKS DEPT.	040-006-002			\$876,838	\$2,818,359	\$0	\$3,695,197
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$151,735	\$190,273	\$0	\$342,008
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$52,010	\$31,613	\$0	\$83,623
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$443,177	\$131,988	\$0	\$575,165
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$256,413	\$325,249	\$0	\$581,662
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$229,029	\$130,098	\$0	\$359,127
PUBLIC WORKS DEPT.	040-006-002	CONTENTS INCL. IN L		\$173,564	\$157,290	\$0	\$330,854
PUBLIC WORKS DEPT.	040-006-002			\$3,054	\$2,827	\$0	\$5,881
RAY SIMON CENTER	086-015-005			\$124,375	\$69,818	\$0	\$194,193
RAY SIMON REG. JUSTICE	086-015-005	1997 A COP		\$1,722,889	\$252,520	\$1,925,000	\$3,900,409
RAY SIMON REG. JUSTICE	086-015-005	1997 A COP - BI AT LO		\$2,405,072	\$233,427	\$0	\$2,638,499
RECOVERY RESOURCE CTR.	040-008-016			\$71,530	\$19,516	\$0	\$91,046
RECOVERY RESOURCE CTR.	040-008-016			\$510,388	\$144,410	\$0	\$654,798
RIVERBANK LIBRARY	132-012-015	BOOKS \$655,590		\$614,229	\$745,087	\$0	\$1,359,316
RONDA OUSDAHL	105-023-010	LEASED		\$0	\$31,983	\$0	\$31,983
SALIDA REGIONAL LIBRARY	135-053-006	Books \$2,615,595		\$8,508,255	\$4,018,417	\$0	\$12,526,672
SHERIFF HANGER #5-MODESTO	036-023-002	LEASED		\$0	\$51,173	\$0	\$51,173
SHERIFF STORAGE TRAILER	086-015-014			\$39,631	\$17,225	\$0	\$56,856
SHERIFF SUBSTATION	024-027-040	LEASED		\$0	\$18,930	\$0	\$18,930
SHERIFF SUBSTATION	135-049-005	LEASED		\$0	\$25,226	\$0	\$25,226
SHERIFF TRAILER	086-015-014			\$123,791	\$68,242	\$0	\$192,033
SHERIFF'S EVIDENCE BUNKER	086-015-014			\$86,055	\$31,974	\$0	\$118,029
SHERIFF'S K-9/EQUESRIAN	086-015-014			\$14,536	\$24,440	\$0	\$38,976
SHERIFF'S OFFICE MODULE	086-015-005			\$112,876	\$15,724	\$0	\$128,600
SHERIFFS OPERATIONS	086-015-014			\$7,260,018	\$1,268,606	\$0	\$8,528,624
SHERIFF'S PUBLIC SAFETY CENTER	086-015-014			\$444,900	\$0	\$0	\$444,900
SHERIFF'S SUBSTATION	035-037-038			\$366,056	\$0	\$0	\$366,056



SHERIFF'S TRAILER	086-015-014		\$72,412	\$45,579	\$0	\$117,991
SIGN SHOP	040-006-002	CONTENTS INCL. IN L	\$216,825	\$94,454	\$0	\$311,279
SUPPORT SERVICES	086-015-015	1992 B COP & 1997 B	\$8,532,914	\$1,318,612	\$1,130,000	\$10,981,526
Tenth Street Place	105-037-034		\$50,000,000	\$0	\$0	\$50,000,000
TRAILER	086-015-014		\$36,034	\$20,774	\$0	\$56,808
TURLOCK COURTS BLDG.	042-037-005		\$816,227	\$0	\$0	\$816,227
TURLOCK LIBRARY	061-033-056	BOOKS \$2,388,875	\$1,465,748	\$2,659,110	\$0	\$4,124,858
VEHICLES	086-015-014	REPLACEMENT COST	\$0	\$0	\$0	\$0
W.I.C.	131-009-001	LEASED	\$0	\$25,586	\$0	\$25,586
WATERFORD LIBRARY	134-007-027	BOOKS \$546,276	\$239,768	\$630,614	\$0	\$870,382
WEST MODESTO COMMUNITY CENTER	030-020-031		\$0	\$1,133,724	\$0	\$1,133,724
WIC-HUGHSON	018-042-025	LEASED	\$0	\$25,586	\$0	\$25,586
WIC-TURLOCK	042-006-014	LEASED	\$0	\$145,623	\$0	\$145,623
WOODWARD RESERVOIR	002-009-024		\$27,021	\$7,400	\$0	\$34,421
WOODWARD RESERVOIR	002-009-024		\$126,378	\$73,185	\$0	\$199,563
WOODWARD RESERVOIR	002-007-032		\$30,533	\$9,945	\$0	\$40,478
WOODWARD RESERVOIR	002-009-024		\$46,055	\$25,943	\$0	\$71,998
WOODWARD RESERVOIR	002-007-032		\$48,579	\$18,735	\$0	\$67,314
WOODWARD RESERVOIR	002-007-032		\$824,351	\$0	\$0	\$824,351
WOODWARD RESERVOIR	002-007-032		\$134,426	\$48,969	\$0	\$183,395
WOODWARD RESERVOIR	002-007-032		\$31,546	\$15,615	\$0	\$47,161
WORKPLACE WELLNESS	105-015-005	LEASED	\$0	\$74,757	\$0	\$74,757
<b>GRAND TOTAL EXISTING FACILITIES</b>			<b>\$467,442,876</b>	<b>\$111,480,412</b>	<b>\$33,269,955</b>	<b>\$612,193,243</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
FUTURE COUNTY FACILITIES**

Description	APN	Property Value	Personal Property Value	Rent Value	TOTAL VALUE
Animal Services Facility	086-015-014	\$0	\$0	\$0	\$11,000,000
Coroner Facility	086-015-014	\$0	\$0	\$0	\$5,500,000
Honor Farm Barracks #4 ( to replace existing bldg #4)	017-060-002	\$0	\$0	\$0	\$2,000,000
Honor Farm Wastewater Facility ( expansion of WW treatment ponds )	017-060-002	\$0	\$0	\$0	\$365,000
Juvenile Commitment Facility	081-012-006	\$0	\$0	\$0	\$24,000,000
Maximum Security Jail Units (2)	086-015-014	\$0	\$0	\$0	\$30,000,000
Public Safety Center "Core" Facility ( Intake/Property?Admin/Support Facility )	086-015-014	\$0	\$0	\$0	\$125,200,000
Public Works Building	040-006-002	\$0	\$0	\$0	\$17,000,000
<b>GRAND TOTAL FUTURE FACILITIES</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$215,065,000</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY BRIDGES**

Crossing	Bridge Number	Road Name	Type	Cost
STANISLAUS RIVER	38C0001	ORANGE BLOSSOM	Girder	\$6,359,977
DRY SLOUGH	38C0002	MCHENRY	Slab	\$2,389,912
TUOLUMNE RIVER	38C0003	SANTE FE	Girder	\$4,944,820
TUOLUMNE RIVER	38C0004	HICKMAN	Girder	\$7,734,211
TUOLUMNE RIVER	38C0005	ROBERTS FERRY	Girder	\$4,956,000
ROCK RIVER	38C0008	COOPERSTOWN	Slab	\$1,184,992
DRY CREEK	38C0009	CRABTREE	Girder	\$748,883
SAN JOAQUIN RIVER	38C0010	CROWS LANDING	Girder	\$6,857,073
ORESTIMBA CREEK	38C0011	ORESTIMBA	Slab	\$1,224,969
ORESTIMBA CREEK	38C0012	ANDERSON	Slab	\$0
LITTLE JOHN CREEK (PUMP)	38C0013	SONORA	Slab	\$1,045,013
BRANCH DRY CREEK NO 2	38C0014	CLARIBELL	Slab	\$808,497
CASHMAN CREEK	38C0015	CLARIBEL	Slab	\$989,480
SAN JOAQUIN RIVER	38C0016	GRAYSON	Girder	\$2,610,382
LITTLE JOHN CREEK	38C0017	26 MILE	Slab	\$2,250,364
TUOLUMNE RIVER	38C0018	SHILOH	Girder	\$4,679,087
DEL PUERTO CREEK	38C0019	DEL PUERTO CANYON	Slab	\$112,069
WOODWARD RESERVOIR (SSJID RESERVOIR )	38C0020	28 MILE	Slab	\$791,126
LITTLE JOHN CREEK (MT. BROW)	38C0021	SONORA	Slab	\$1,575,656
TUOLUMNE RIVER	38C0023	SEVENTH STREET	Girder	\$18,585,000

LITTLE JOHN CREEK	38C0024	SONORA	Slab	\$1,715,611
DRY CREEK	38C0025	ALBERS	Girder	\$2,577,613
LAIRD SLOUGH	38C0027	GRAYSON	Slab	\$2,942,850
CCID MAIN CANAL (SAN JOAQUIN & KINGS RIVE	38C0031	STUHR	Girder	\$660,940
STANISLAUS RIVER	38C0032	MCHENRY	Girder	\$12,271,516
SAN JOAQUIN RIVER	38C0033	LAS PALMAS	Girder	\$7,450,151
DRY CREEK	38C0038	WELLSFORD	Girder	\$2,633,701
TID MAIN CANAL	38C0039	LAKE	Slab	\$1,004,821
DEL PUERTO CREEK	38C0041	DEL PUERTO CANYON	Slab	\$107,357
ORESTIMBA CREEK	38C0042	MORRIS	Slab	\$0
ORESTIMBA CREEK	38C0043	RIVER	Slab	\$612,699
TUOLUMNE RIVER	38C0044	MITCHELL	Girder	\$20,454,013
LITTLE JOHN CREEK	38C0045	FRANKENHEIMER	Slab	\$1,140,093
DRY CREEK	38C0047	CHURCH	Girder	\$3,908,029
TUOLUMNE RIVER	38C0048	GEER	Girder	\$7,769,190
MODESTO MAIN CANAL	38C0049	ALBERS	Slab	\$604,456
TUOLUMNE RIVER	38C0050	CARPENTER	Girder	\$7,485,473
MID LATERAL NO.1	38C0051	GEER	Slab	\$225,142
CERES MAIN CANAL	38C0052	ROHDE ROAD	Slab	\$260,650
CALIFORNIA AQUEDUCT	38C0053	SPERRY	Slab	\$1,251,253
DRY CREEK	38C0055	OAKDALE/WATERFORD HW	Girder	\$4,183,401
INGRAM CREEK	38C0059	MCCRACKEN	Slab	\$529,329
TUOLUMNE RIVER	38C0061	9TH ST.	Girder	\$60,180,000
MID LATERAL NO.6	38C0068	SALIDA BOULEVARD	Slab	\$320,822
MID LATERAL NO.6	38C0069	SALIDA BOULEVARD	Slab	\$228,366

HIGHLINE CANAL	38C0072	MONTPELIER	Slab	\$313,640
DRY CREEK	38C0073	TIM BELL	Girder	\$927,397
MID MAIN CANAL	38C0076	OAKDALE/WATERFORD	Slab	\$586,080
CLARIBEL LATERAL (OID CANAL)	38C0078	OAKDALE/WATERFORD	Slab	\$209,323
SSJID CANAL (SOUTH SAN JOAQUIN MAIN CANA	38C0079	VALLEY HOME	Slab	\$258,447
LONE TREE CREEK	38C0080	VALLEY HOME	Slab	\$252,239
TID LATERAL NO.3	38C0083	SANTA FE	Slab	\$179,669
CERES MAIN CANAL	38C0084	SANTA FE	Slab	\$536,211
MID MAIN CANAL	38C0087	CLAUS	Slab	\$448,610
TID MAIN CANAL	38C0090	WHITMORE	Slab	\$402,588
TID MAIN CANAL	38C0091	HICKMAN	Slab	\$612,198
CERES MAIN CANAL	38C0092	GEER	Slab	\$512,124
CALIFORNIA AQUEDUCT	38C0094	FINK	Slab	\$1,279,832
DELTA MENDOTA CANAL	38C0095	FINK	Slab	\$632,389
SAN JOAQUIN & KINGS RIVER CANAL (CCID MAI	38C0096	CROWS LANDING	Girder	\$726,440
TID CANAL LATERAL NO.4	38C0098	CROWSLANDING	Slab	\$173,958
DELTA MENDOTA CANAL	38C0101	HAMILTON	Slab	\$683,406
TID MAIN CANAL	38C0105	EAST	Slab	\$313,626
TID MAIN CANAL	38C0106	EAST	Slab	\$174,507
MID LATERAL NO.5	38C0107	STONE	Slab	\$133,858
MID LATERAL NO.6	38C0108	FINNEY	Slab	\$275,608
MID MAIN CANAL	38C0109	DALE	Slab	\$236,847
MID MAIN CANAL	38C0110	AMERICAN	Slab	\$150,493
GASBURG CREEK	38C0111	LA GRANGE	Slab	\$451,788
MID LATERAL NO.6	38C0113	CLARIBEL	Slab	\$499,507

MID MAIN CANAL	38C0114	CLARIBEL	Slab	\$810,146
MID LATERAL NO.5	38C0116	PARADISE	Slab	\$273,362
CALIFORNIA AQUEDUCT	38C0117	HOWARD	Slab	\$1,349,415
DELTA MENDOTA CANAL	38C0118	HOWARD	Slab	\$679,200
TID LATERAL NO.2	38C0123	CARPENTER	Slab	\$249,736
TID LATERAL NO.1	38C0124	CARPENTER	Slab	\$253,123
RIVER ROAD UNDERPASS	38C0129	RIVER ROAD	Slab	\$0
MID LATERAL NO.5	38C0137	CHICAGO	Slab	\$315,036
MID LATERAL NO.5	38C0138	CALIFORNIA	Slab	\$233,100
GOLDEN STATE OVERHEAD	38C0141	GOLDEN STATE	Slab	\$15,853,624
DAWSON LAKE (MCDONALD CREEK)	38C0144	NEW LA GRANGE ROAD	Slab	\$772,870
TUOLUMNE RIVER	38C0145	LA GRANGE (OLD)	Girder	\$7,062,221
MID MAIN CANAL	38C0146	NEW LA GRANGE ROAD	Slab	\$817,721
MID MAIN CANAL	38C0147	WELLSFORD	Slab	\$1,051,154
CERES MAIN CANAL	38C0150	GILBERT	Slab	\$238,547
CERES MAIN CANAL	38C0151	BALDWIN	Slab	\$242,107
SOUTH SAN JOAQUIN MAIN CANAL	38C0154	PLEASANT VALLEY	Slab	\$556,665
CERES MAIN CANAL	38C0155	SWANSON	Slab	\$248,033
TID MAIN CANAL	38C0156	LAKE	Slab	\$531,336
TID MAIN CANAL	38C0157	MONTPELIER	Slab	\$407,248
TID MAIN CANAL	38C0158	LAMPLEY	Slab	\$346,912
TID MAIN CANAL	38C0159	DENTON	Slab	\$405,933
TID MAIN CANAL	38C0161	SANTE FE	Slab	\$334,534
HOODS CREEK	38C0162	DUNTON	Slab	\$752,702
MID MAIN CANAL	38C0164	SKITONE	Slab	\$136,084

MID MAIN CANAL	38C0166	CARVER	Slab	\$246,026
NEWMAN WASTEWAY	38C0167	UPPER	Slab	\$881,450
SOUTH SAN JOAQUIN MAIN CANAL	38C0169	SHELL	Girder	\$110,779
GALLUP CREEK	38C0170	COOPERSTOWN	Girder	\$200,244
TID MAIN CANAL	38C0171	LAKE	Slab	\$494,704
DEL PUERTO CREEK	38C0174	DEL PUERTO CANYON	Slab	\$204,926
DEL PUERTO CR. (WASHINGTON CANAL)	38C0175	DEL PUERTO CANYON	Slab	\$112,069
MID MAIN CANAL	38C0176	RICE	Slab	\$345,383
MID LATERAL NO.3	38C0177	DEWITT	Slab	\$317,138
MID MAIN CANAL	38C0178	DUSTY	Slab	\$404,963
MID LATERAL NO.3	38C0179	SANTE FE	Slab	\$317,138
SAN JOAQUIN & KINGS RIVER CANAL	38C0180	SHIELLS	Girder	\$482,502
SAN JOAQUIN & KINGS RIVER CANAL	38C0181	MOOREHEAD	Girder	\$482,502
NEWMAN WASTEWAY	38C0182	EASTIN	Slab	\$266,074
SAN JOAQUIN & KINGS RIVER CANAL	38C0183	ANDERSON	Girder	\$430,453
PATTERSON IRRIGATION CANAL	38C0184	ELM	Slab	\$156,753
PATTERSON IRRIGATION CANAL	38C0185	SYCAMORE	Slab	\$116,872
TID LATERAL NO. 5.5	38C0186	MORGAN	Slab	\$154,794
WESTLEY WASTEWAY	38C0187	STARK	Slab	\$329,630
WEST STANISLAUS LATERAL NO.5 S	38C0188	W. STANISLAUS	Slab	\$132,141
SALADO CREEK	38C0189	WARD	Slab	\$173,604
TID LATERAL NO.5	38C0190	WALNUT	Slab	\$143,037
TID LATERAL NO.4	38C0191	FAITH HOME	Slab	\$130,468
CERES MAIN CANAL	38C0192	FULKERTH	Slab	\$153,898
CERES MAIN CANAL	38C0193	KEYES	Slab	\$181,413

TID LOWER LATERAL NO.2	38C0194	MITCHELL	Slab	\$135,489
MID LATERAL NO.8	38C0197	HAMMETT	Slab	\$168,252
ROCK CREEK	38C0198	MILTON	Slab	\$225,142
ROCK CREEK DITCH	38C0199	MILTON	Slab	\$216,300
CALIFORNIA AQUEDUCT	38C0200	SULLIVAN	Slab	\$1,066,901
CALIFORNIA AQUEDUCT	38C0201	PETE MILLER	Slab	\$1,059,804
DELTA MENDOTA CANAL	38C0202	PETE MILLER	Slab	\$887,686
SAN JOAQUIN & KINGS RIVER CANAL	38C0203	DRAPER	Girder	\$671,076
SAN JOAQUIN & KINGS RIVER CANAL	38C0204	ORESTIMBA	Girder	\$632,134
DELTA MENDOTA CANAL	38C0205	ORESTIMBA	Slab	\$696,429
DELTA MENDOTA CANAL	38C0206	STUHR	Slab	\$675,640
CALIFORNIA AQUEDUCT	38C0207	ORESTIMBA	Slab	\$1,066,901
SAN JOAQUIN & KINGS RIVER CANAL	38C0208	FIFTH	Girder	\$430,453
DELTA MENDOTA CANAL	38C0209	DAVIS	Slab	\$721,375
CALIFORNIA AQUEDUCT	38C0210	WARD	Slab	\$1,386,692
CALIFORNIA AQUEDUCT	38C0211	OAK FLAT	Slab	\$1,095,289
DELTA MENDOTA CANAL	38C0212	MARSHALL	Slab	\$677,718
DELTA MENDOTA CANAL	38C0213	WARD	Slab	\$683,955
DEL PUERTO CREEK	38C0215	ROGERS	Slab	\$496,783
DEL PUERTO CREEK	38C0217	VINEYARD	Slab	\$272,980
WESTLEY WASTEWAY	38C0218	FRANK COX	Slab	\$383,940
WESTLEY WASTEWAY	38C0219	COX	Slab	\$272,316
DELTA MENDOTA CANAL	38C0220	WELTY	Slab	\$702,665
DELTA MENDOTA CANAL	38C0221	GAFFERY	Slab	\$848,188
CERES MAIN CANAL	38C0223	CLINTON	Slab	\$327,408



TID MAIN CANAL	38C0225	KEYES	Slab	\$468,539
MID LATERAL NO.6	38C0226	COVERT	Slab	\$265,870
MID LATERAL NO.6	38C0228	COFFEE	Slab	\$377,737
MID MAIN CANAL	38C0230	MILNES	Slab	\$377,737
ROCK CREEK TRIBUTARY	38C0231	MILTON	Slab	\$1,031,417
HOODS CREEK	38C0232	MILTON	Slab	\$609,330
SHIRLEY CREEK	38C0233	DUNTON	Slab	\$181,365
SOUTH SAN JOAQUIN MAIN CANAL	38C0234	26 MILE	Slab	\$243,350
MID MAIN CANAL	38C0236	ST. FRANCIS	Slab	\$260,937
TID MAIN CANAL	38C0237	MONTE VISTA	Slab	\$396,467
NEWMAN WASTEWAY	38C0238	DRAPER	Slab	\$867,280
DELTA MENDOTA CANAL	38C0239	NEEDHAM	Slab	\$860,231
CALIFORNIA AQUEDUCT	38C0240	MCCRACKEN	Slab	\$1,279,832
DELTA MENDOTA CANAL	38C0241	MCCRACKEN	Slab	\$829,167
WEST STANISLAUS LATERAL NO.4 S	38C0242	W. STANISLAUS	Slab	\$122,344
INGRAM CREEK	38C0243	HAMILTON	Slab	\$190,498
CERES MAIN CANAL	38C0244	MONTE VISTA	Slab	\$177,972
HIGHLINE CANAL TID	38C0246	KEYES	Slab	\$236,516
HIGHLINE CANAL TID	38C0247	MONTE VISTA	Slab	\$240,004
MID MAIN CANAL	38C0249	TERMINAL	Slab	\$492,267
MID MAIN CANAL	38C0251	LANGWORTH	Slab	\$598,927
CERES MAIN CANAL	38C0252	ALDRICH	Slab	\$226,487
WILDCAT CREEK	38C0253	WILLMS	Slab	\$321,798
DRY CREEK TRIBUTARY	38C0255	COOPERSTOWN	Slab	\$200,244
DRY CREEK TRIBUTARY	38C0256	COOPERSTOWN	Slab	\$177,446

RYDBERG CREEK	38C0257	COOPERSTOWN	Slab	\$297,318
JOHNSON CREEK	38C0258	COOPERSTOWN	Slab	\$161,699
DRY CREEK	38C0259	COOPERSTOWN	Girder	\$186,363
SOUTH SAN JOAQUIN MAIN CANAL	38C0261	LAMBUTH	Slab	\$248,153
LONE TREE CREEK	38C0262	PIONEER	Slab	\$154,555
SOUTH SAN JOAQUIN MAIN CANAL	38C0263	PIONEER	Slab	\$248,153
SOUTH SAN JOAQUIN MAIN CANAL	38C0264	VICTORY	Slab	\$462,971
DRY CREEK TRIBUTARY	38C0265	CROW	Girder	\$319,308
MID MAIN CANAL	38C0266	HAZELDEAN	Slab	\$321,758
MID MAIN CANAL	38C0267	CRABTREE	Slab	\$0
TID MAIN CANAL	38C0268	LAKE	Slab	\$471,932
PEASLEE CREEK	38C0269	LAKE	Slab	\$313,626
DRY CREEK TRIBUTARY	38C0270	WARNERVILLE	Slab	\$161,699
MARTELL CREEK	38C0272	SONORA	Slab	\$395,443
MARTELL CREEK	38C0273	SONORA	Slab	\$297,783
MID LATERAL NO.5	38C0274	PAULINE	Slab	\$112,069
MID LATERAL NO.4	38C0275	PAULINE	Slab	\$308,751
DRY CREEK TRIBUTARY	38C0278	WILLMS	Slab	\$200,123
MID LATERAL NO.5	38C0279	HOUSER	Slab	\$247,746
TID HIGHLINE CANAL	38C0280	LAKE	Slab	\$203,758
MID MAIN CANAL	38C0285	REINWAY	Slab	\$322,344
MID LATERAL NO.2	38C0286	CHURCH	Slab	\$190,715
MID LATERAL NO.3	38C0287	CHURCH	Slab	\$243,344
MID MAIN CANAL	38C0288	RESERVOIR ROAD	Slab	\$439,988
MID MAIN CANAL	38C0289	RESERVOIR	Slab	\$568,721

MID MAIN CANAL	38C0290	HAZELDEAN	Slab	\$287,804
MID MAIN CANAL	38C0291	HOPPER	Slab	\$345,814
MID MAIN CANAL	38C0292	BLOSSOM	Slab	\$326,589
SOUTH SAN JOAQUIN MAIN CANAL	38C0294	SONORA	Slab	\$146,000
TID LATERAL NO.2	38C0295	MORGAN	Slab	\$226,766
DELTA MENDOTA CANAL	38C0296	DIEHL	Slab	\$675,640
TID LATERAL NO.5	38C0302	TEGNER	Slab	\$113,766
MID LATERAL NO.7	38C0304	BECKWITH	Slab	\$243,541
MID LATERAL NO.7	38C0305	DAKOTA	Slab	\$181,413
TID LATERAL NO.3	38C0306	FAITH HOME	Slab	\$177,355
DRY CREEK TRIBUTARY	38C0307	WARNERVILLE	Slab	\$156,897
MID LATERAL NO.6	38C0308	WILLIAMS	Slab	\$136,084
MID LATERAL NO.6	38C0309	JACKSON	Slab	\$142,177
MID LATERAL NO.6	38C0310	DUNN	Slab	\$113,742
MID LATERAL NO.4	38C0311	ROSEMORE	Slab	\$183,157
MID LATERAL NO.2	38C0312	WELLSFORD	Slab	\$181,413
CERES MAIN CANAL	38C0313	WARNER	Slab	\$121,675
TID LATERAL NO.2	38C0314	GRIFFIN	Slab	\$115,414
DEL PUERTO CREEK	38C0315	FRANK RAIN ORV PK	Slab	\$61,889
TUOLUMNE RIVER	38C0317	LAKE	Slab	\$3,552,000
SOUTH SAN JOAQUIN MAIN CANAL	38C0319	FRANKENHEIMER	Slab	\$347,903
CERES MAIN CANAL	38C0321	PRAIRIE FLOWER ROAD	Slab	\$327,748
MID LATERAL NO.6	38C0322	HAMMETT	Slab	\$195,941
SAN JOAQUIN RIVER	39C0001	HILLS FERRY	Girder	\$2,571,456
<b>GRAND TOTAL COUNTY BRIDGES</b>				<b>\$306,871,324</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY DRAINAGE DISTRICTS**

Sub Division	Location	Cost
17PM9 - INDUSTRIAL AREA - FARRAR AVE	FARRAR AVE	\$403,263
46-PM-63 AUTO CENTER COURT	AUTO CENTER CT	\$403,263
ALYSSA AVENUE - KIERNAN ESTATES	N/HORACE WAY	\$758,580
ARDENCOURT - WALNUT GREEN ESTATES	S/GREENVIEW	\$403,263
BANGS INDUSTRIAL PARK 35-PM-34	GALAXY WAY	\$403,263
BRANDI WAY - REICH MANOR NO. 3	W/GRATTON	\$403,263
CASABA WAY - RAYMOND TRACT CSA NO. 6	S/STELLA (KEYES)	\$403,263
CORONA WAY - GLENMOOR ESTATES	W/MILLS STREET	\$403,263
COUNTRY CLUB - COUNTRY CLUB LANE	E/DEL RIO	\$403,263
DANIEL COURT - SUNNYBROOK VILLAGE WEST	E/DANIEL	\$758,580
DEL RIO HEIGHTS	HARTLEY DR	\$403,263
DURLEY DRIVE - CLARENDON WOODS NO. 1	AT WESSEX LANE	\$758,580
ELMSBURY DRIVE - BRISTOL GLEN CSA NO. 4	AT KILLIGREW	\$758,580
ESTATES DRIVE - SHERMAN ESTATES	E/CHURCH STREET	\$403,263
EVELLE LANE - LA JUNEA ESTATES	E/JOHNSON (TURLOCK)	\$403,263
GREENLEAF COURT - GREENLEAF INDUSTRIAL PARK	E/SISK ROAD	\$758,580
HARTLEY DRIVE - WALNUTWOODS	S/END WALNUTWOOD DRIVE	\$403,263
HILLCREST DRIVE - RANCH DEL RIO	S/COUNTRY CLUB DRIVE	\$403,263
KATELLA DRIVE - GLENMOOR ESTATES	CHALMER WAY	\$403,263
LA JOLLA	BLACK BERRY WAY	\$403,263
MARY LOU DRIVE - HONEY BEE ESTATES CSA NO. 8	N/FRONA DRIVE	\$403,263

MOUNTAIN OAK - SUNSET OAKS NO. 10	N/ORANGE BLOSSOME (N/E CORNR)	\$403,263
NORTH EMPIRE MANOR UNIT #3 (17-PM-74 )	CAMERON WAY	\$403,263
ORLANDO DRIVE	WESTLEY DRIVE (CERES)	\$403,263
PARKLAWN AVENUE - IN OLYMPIC PARK	PEARSON AVENUE	\$403,263
PARKSIDE PLAZA NO.1	TOOMES RD-WHITESTONE WAY	\$758,580
PECOS AVENUE - PORTER ESTATES NO. 2	AERON STREET (CERES)	\$403,263
PIN RIDGE PLAZA	SOUZA AVE	\$403,263
PIRRONE ROAD - MORGAN GLEN ESTATES	N/KIERNAN AVENUE	\$758,580
Portion Laverty Industrial Park	WELLS AVE	\$403,263
RAVENNA WAY - ENTERPRISE HOMES	N/TYSON STREET	\$403,263
RIO CASA DRIVE - RIO CASA ESTATES	S/DIXON ROAD	\$403,263
RIO SOMBRA DRIVE - HUNTER RANCH ESTATES	W/MORRIS HUNTER	\$403,263
ROMIE WAY - MYSTY LAND ESTATES	N/WALTON	\$403,263
SHERRY COURT	E/SHERRY LANE	\$403,263
SIERRA SUNSET	RANCH WOOD CT	\$403,263
SOLAR AVENUE - HERNDON ESTATES	ORBIT LANE (CERES)	\$403,263
SOMERSET ESTATES NO.1	wincanton rd	\$758,580
ST. ANDREWS - OAKDALE CC ESTATES	2500 ATLAS	\$403,263
STARLITE DRIVE - STARLITE PLACE CSA NO. 5	W/FAITH HOME ROAD	\$403,263
STILLWATER DRIVE - SUNNYBROOK VILLAGE	E/OVERLAND PLACE	\$758,580
STODDARD ROAD - LANDMARK BUSINESS CENTER	S/KIERNAN	\$758,580
SUNSET TERRACE - KEYES NORTH	W/GREENDALE (KEYES)	\$403,263
WINGATE DRIVE - WALNUT GREEN NORTH	W/SPERRY	\$403,263
ZINFANDEL AVENUE - DeARBOLES ESTATES	N/ESCAMILLA AVENUE	\$758,580
ZINFANDEL AVENUE - EDGEWOOD ESTATES	N/PARKS AVENUE	\$758,580
<b>GRAND TOTAL DRAINAGE DISTRICTS</b>		<b>\$22,813,902</b>

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY LIGHTING DISTRICTS**

District	Number	Cost
Almond Wood Estates Lighting District	62	\$434,000
Beard Industrial Lighting District	18	\$126,000
Bret Harte Landscape & Lighting District	2	\$14,000
Country Club Estates Lighting District	3	\$21,000
Crowslanding Lighting District	23	\$161,000
Denair Lighting District	150	\$1,050,000
Deo Gloria Estates Lighting District	18	\$126,000
Empire Lighting District	51	\$357,000
Gibbs Ranch Lighting District	7	\$49,000
Gilbert Road Lighting District	2	\$14,000
Hillcrest Lighting District	77	\$539,000
Mancini Tract Lighting District	36	\$252,000
North McHenry No.2 Lighting District	8	\$56,000
North McHenry Lighting District	79	\$553,000
North Oaks Lighting District	23	\$161,000
Paradise South Landscape & Lighting District	1	\$7,000
Peach Blossom Estates Lighting District	5	\$35,000
Salida Lighting District	645	\$4,515,000
Schwartz-Baize Lighting District	1	\$7,000
Sunset Oaks Lighting District	79	\$553,000
Tempo Park Lighting District	61	\$427,000
<b>GRAND TOTAL LIGHTING DISTRICTS</b>	1351	\$9,457,000

**STANISLAUS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
COUNTY TRAFFIC SIGNALS**

Location	Cost
ALBERS RD AT MILNES RD	\$250,000
Broadway At Salida Blve	\$250,000
BUTTE CROWS LANDING	\$250,000
Carpenter Road At Paradise Road	\$250,000
CLARIBEL AT ALBERS	\$250,000
CLARIBEL AT OAKDALE	\$250,000
Crows Landing At Whitmore	\$250,000
FINCH RD AT MARIPOSA RD	\$250,000
GEER RD AT HATCH RD	\$250,000
GEER RD AT KEYES RD	\$250,000
GEER RD AT SERVICE RD	\$250,000
HACKETT AT CROWS LANDING	\$250,000
HATCH AT CROWS LANDING	\$250,000
Hatch RoadAt Morgan Road	\$250,000
Herndon Road At Joyce Ave	\$250,000
KANSAS AVE AT EMERALD AVE	\$250,000
Keyes Road At Golden Blvd	\$250,000
KIERNAN AVE AT N. HWY99	\$250,000
KIERNAN AVE AT S. HWY99	\$250,000
KIERNAN AVE AT SISK RD	\$250,000
LATIMER AT 9TH STREET	\$250,000
LESTER RD AT MAIN ST	\$250,000

MITCHELL AT RIVERSIDE	\$250,000
MITCHELL RD AT TENAYA DR	\$250,000
PARADISE RD AT BURBANK	\$250,000
PATTERSON RD AT ALBERS RD	\$250,000
PECOS RD AT 9TH STREET	\$250,000
PELANDALE AVE AT SISK RD	\$250,000
PELANDALE RD AT SALIDA BLVD	\$250,000
SCHOOL AVE AT CROWS LANDING RD	\$250,000
SERVICE AT CROWS LANDING	\$250,000
SERVICE RD AT CENTRAL AVE	\$250,000
Stewart Road At McHenry Ave	\$250,000
WINMOORE CROWS LANDING	\$250,000
Woodland Ave At Carpenter Road	\$250,000
<b>GRAND TOTAL TRAFFIC SIGNALS</b>	<b>\$8,750,000</b>



# Stanislaus County



Striving to be the Best



## Mitigation Strategy

# MITIGATION STRATEGY

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This section outlines the four-step process for preparing a mitigation strategy including:

- Developing mitigation goals,
- Identifying mitigation actions,
- Evaluating mitigation actions, and
- Implementing mitigation action plans.

The Planning Team developed the mitigation goals, reviewed potential mitigation actions, and developed the Mitigation Action Plan for the unincorporated portion of the County. The plan was also reviewed and shared with our multi-jurisdictional partners to receive feedback and help us prioritize goals and objectives.

## WHY DO WE NEED A MITIGATION STRATEGY?

- To help the County make decisions that will reduce its vulnerability to hazards;
- It costs too much money to only address the effects of a disaster after it occurs;
- State and Federal aid is usually insufficient to cover the extent of physical and economic damages resulting from disasters;
- Damage from hazards can be prevented if the County takes the time to anticipate where and how disasters will occur, and then take appropriate action to minimize damages;
- The County can lessen the impact of disasters and speed the response and recovery process;
- The County has a moral responsibility to its citizens to plan and recognize the potential for hazards; and
- Awareness can help our community become more sustainable and disaster resistant.

## DEVELOPING MITIGATION GOALS

Mitigation goals are defined as general guidelines that explain what the County wants to achieve in terms of hazard and loss prevention. Goals are typically long-range statements representing community-wide visions. The Planning Team reviewed the goals from the original 2005 MJHMP which focused on minimizing future loss of life, reducing property damage, and avoiding long-term vulnerabilities to the identified hazards. After the Risk Assessment was completed, the Planning Team developed additional goals. These included: promoting a sustainable economy and increasing public preparedness for disasters. The goals were developed to be compatible with the goals of the community as expressed in the Safety Element of the General Plan, the Emergency Operations Plan, and the Continuity of Operations Plan. The County's Mitigation Strategy is guided by the vision of a safe and resilient County. Our mission is to integrate existing laws and programs into a mitigation strategy that will serve the citizens by reducing and preventing injury and damage from natural hazards.

Stanislaus County routinely performs activities such as issuing building permits, approving development plans, and repairing roads. The County is conscious that these activities should reflect our vision and goals, whether it is using the most current building code, restricting development in hazard-prone areas, or making infrastructure decisions based on our latest Risk Assessment findings. This Mitigation Plan will help serve as a tool for making future decisions.

## **IDENTIFYING MITIGATION ACTIONS**

For the Plan Update, the County proceeded to evaluate potential mitigation actions after reviewing our mitigation goals. Mitigation actions are activities, measures, or projects that help achieve the goals of a mitigation plan. Particular effort was made to identify at least one new mitigation action per identified hazard and define whether the existing actions were completed, deleted, deferred, or ongoing. County and jurisdiction-specific mitigation actions to reduce hazard impacts to new and existing buildings and infrastructure were also reviewed. Mitigation efforts should occur both before and after emergencies or disasters. This includes eliminating or reducing the impact of hazards that exist within Stanislaus County.

Mitigation efforts include:

- Amending local ordinances and statutes, such as zoning ordinances, building codes, and other enforcement codes;
- Integrating mitigation efforts into the County General Plan;
- Improving the understanding of the vulnerability of building types;
- Ensuring that all development in high-risk areas is protected by mitigation measures that provide for safety;
- Assessing tax levees or abatements;
- Emphasizing public education and awareness;
- Assessing and altering land use planning; and/or
- Establishing partnerships between all levels of government and the business community to improve and implement methods to protect property and lives.

## **NATIONAL FLOOD INSURANCE PROGRAM (NFIP) COMPLIANCE**

Stanislaus County actively participates in FEMA's National Flood Insurance Program (NFIP) and has implemented floodplain policies, regulations, and ordinances to protect the threatened population and infrastructure to assure NFIP compliance. To enhance our participation, we will be actively pursuing accreditation in the Community Rating System of the NFIP. The Community Rating System encourages communities to exceed the minimum standards of the NFIP and by doing so the community is awarded premium discounts on flood insurance policies. Each jurisdiction's Mitigation Strategy has identified and analyzed potential flood mitigation actions that would fulfill NFIP initiatives. We have subsequently selected and prioritized County or community appropriate actions to ensure an effective flood mitigation program.

## **COMMUNITY ASSISTANCE AND MONITORING ACTIVITIES**

The Building Permits Division has a Flood Plain Administrator that attends and schedules workshops, provides informational assistance to the general public, and creates ordinance adoptions to comply with FEMA requirements. The Flood Plain Administrator also monitors FEMA publications and has close contact with the State Water Resources Board to maintain accurate information. The Public Works Department provides FEMA flood plain maps on the County Website for community review. The MJHMP Update website also provides the community with GIS flood maps in addition to a map showing the repetitive flood loss areas.

## EVALUATING AND PRIORITIZING MITIGATION ACTIVITIES

The Planning Team used the simplified STAPLEE evaluation criteria to consider the opportunities and constraints of implementing each particular mitigation action.

EVALUATION CATEGORY	DISCUSSION	CONSIDERATION
<b>Social</b>	Public support for the overall mitigation strategy and specific mitigation actions	Community acceptance
<b>Technical</b>	Is the mitigation action technically feasible?	Long term solutions
<b>Administrative</b>	Does the County have the personnel and administrative capabilities necessary to implement the action?	Staffing and funding allocations
<b>Political</b>	How does the County feel about issues related to the environment?	Political support
<b>Legal</b>	Does the community have the legal authority to implement the action?	Local, State or Federal authority
<b>Economic</b>	Can the action be funded with current or future internal or external sources? Are the costs reasonable?	Outside funding required
<b>Environmental</b>	What is the impact on the environment because of the desire for a sustainable and healthy community?	Consistent with Local, State or Federal laws

Ultimately, the Planning Team decided to consider actions that best fulfill the goals of the MJHMP and those that seemed appropriate and feasible. The following criteria were also considered when prioritizing our mitigation activities:

- Percent of population at risk;
- Frequency and likelihood of hazard;
- Repetitive loss areas;
- Community planning resources available;
- Types and percent of land areas at risk;
- Development;
- Project urgency;
- Cost benefit analysis and/or;
- Cost effectiveness of measure.

## IMPLEMENTING A MITIGATION ACTION PLAN

The implementation strategy table for each hazard identifies the action, responsible agency, and anticipated funding source and timeframe. Many of these actions are considered ongoing or continuous County initiatives.

## **FUNDING PRIORITIES**

- Protect lives and property at risk from imminent hazards created or made worse by disasters;
- Protect vulnerable critical facilities and infrastructure in high hazard areas of the County;
- Reduce repetitive losses; and
- Encourage all communities to adopt a Local Hazard Mitigation Plan.

Funding projects that will help to mitigate imminent hazards are cost effective and assist in efforts to help communities recover from disasters. It is not anticipated that all future projects will be identified in this Multi-Jurisdictional Hazard Mitigation Plan. The County's Mitigation Plan will however, help guide local government to prioritize, be flexible, and identify critical mitigation strategy needs that may arise from a disaster when there is no time to update the local plan.

It is also important for the County to help protect critical facilities and infrastructure. Stanislaus County already has a Capital Improvement Plan with a Capital Projects Program in place. They are actively working to protect facilities and infrastructure important to the County. They are aware of the need to incorporate the requirements of the Mitigation Plan into their current and future projects. Areas of repetitive loss are high priorities for mitigation funding as they can drain County coffers.

Due to the past history of disasters declared throughout the County, the Planning Team has strongly encouraged all jurisdictions to participate with the County as one of our Multi-Jurisdictional partners. Jurisdictions have been forewarned that without an adopted plan they cannot receive Federal financial assistance for hazard mitigation.

## **POSSIBLE ROADBLOCK TO IMPLEMENTING MITIGATION ACTIONS**

Stanislaus County as well as most of the State of California is faced with extreme economic hardship. Our fiscal condition is volatile at this time and several departments are facing staff reductions. All jurisdictions rely heavily on available and consistent funding to ensure existing programs remain viable. Fluctuations within these funding streams will dramatically affect each jurisdiction's mitigation strategies. Reductions will severely limit successful mitigation action plan implementation.

# MITIGATION STRATEGY/EARTHQUAKE

## HAZARD MITIGATION GOALS

- Minimize future loss of life and reduce property damage as a result of earthquakes
- Reduce economic impact of earthquakes
- Promote sustainable economy
- Increase public preparedness for disasters

## IDENTIFICATION AND ANALYSIS OF MITIGATION ACTIONS

OBJECTIVES		
HAZARD		PRIORITY
<b>Earthquake</b>	Discourage development in geological fault areas.	HIGH
<b>Earthquake</b>	Prohibit urban development in geological fault and hazard areas unless measures to mitigate the problems are included as part of the application.	HIGH
<b>Earthquake</b>	All new development shall be designed to increase safety and to reduce health hazards.	HIGH
<b>Earthquake</b>	The County shall continue to enforce State-mandated Health and Safety Codes, which include but are not limited to the California Code of Regulations Title 24 and International Property and Maintenance Code. Specifically for Seismically designed structures that meet or exceed the requirements stated in the California Building Code Volumes 1 and 2.	HIGH
<b>Earthquake</b>	Continue critical business operations.	HIGH
<b>Earthquake</b>	Train emergency responders.	HIGH
<b>Earthquake</b>	Enable the public to prepare for, respond to, and recover from disasters by improving hazard information and GIS maps.	MEDIUM
<b>Earthquake</b>	Support efforts to identify and rehabilitate structures that are not earthquake resistant.	MEDIUM

## IMPLEMENTATION OF MITIGATION ACTIONS

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
Applications for development in areas with geological faults shall include measures to mitigate the impacts based on the Seismic Design Category associated with Soil Classification, liquefaction and seismic activity. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Building Permits Division</li> <li>• Public Works</li> <li>• Environmental Resources</li> <li>• Planning Department</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• Continuous Implementation</li> </ul>
Residential development may not be approved at the maximum density if it is in a geological fault area or if it does not meet the requirements of Ordinance, Title 16, Stanislaus County Code. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Building Permits Division</li> <li>• Planning Department</li> <li>• Environmental Resources</li> <li>• Public Works</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• Continuous Implementation</li> </ul>
The County shall enforce provisions of the Alquist-Priolo Earthquake Fault Zoning Act. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Building Permits Division</li> <li>• Planning Department</li> <li>• Public Works</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• Continuous Implementation</li> </ul>
Development in areas of geological hazard shall include acceptable evacuation routes. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Emergency Services</li> <li>• Public Works</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• State Funds</li> <li>• Federal Funds</li> <li>• Continuous Implementation</li> </ul>
Follow policies included in the adopted Emergency Operation Plan (EOP). The EOP establishes the emergency management organization required to mitigate any significant emergency or disaster. The EOP identifies policies, responsibilities and procedures required to protect the health and safety of our communities as well as public and private property. The EOP also establishes the operations and procedures for Initial Response Operations (Field Response), to emergencies, the Extended Response Operations (County Emergency	<ul style="list-style-type: none"> <li>• Emergency Services</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• Continuous Implementation</li> </ul>

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
Operations Center) activities and Recovery Operations. New development shall not conflict with policies included in that document. <b>(HIGH)</b>		
All building permit applications shall be reviewed to ensure compliance with the California Code of Regulations Title 24 and Subdivision Ordinance in areas of unstable soils. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Building Permits Division</li> <li>• Planning Department</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• Continuous</li> </ul>
Develop, adopt, maintain, and update a Continuity of Operations Plan. Provide disaster management to assist and support County departments to maintain their critical functions. <b>(HIGH)</b>  <b>DEVELOP AND ADOPT COOP COMPLETED</b>	<ul style="list-style-type: none"> <li>• O.E.S.</li> <li>• All 27 County departments</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• General Fund</li> <li>• Ongoing Implementation</li> </ul>
Provide NIMS training to all County employees who may be called upon during an emergency. The National Incident Management System (NIMS) was developed so that responders from different jurisdictions and disciplines can work together to provide a unified approach to incident management. Benefits of NIMS training include improved mitigation, preparedness, and response & recovery from hazards. <b>(HIGH)</b>  <b>COMPLETED</b>	<ul style="list-style-type: none"> <li>• O.E.S.</li> <li>• All 27 County departments</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• General Fund</li> <li>• Ongoing Implementation</li> </ul>
New public roads in areas subject to significant seismic hazard shall be designed to minimize seismic risk. <b>(MEDIUM)</b>	<ul style="list-style-type: none"> <li>• Public Works</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• Continuous Implementation</li> </ul>
Additional width shall be required if right-of-way widths greater than those specified in the Circulation Element are necessary to provide added safety in geologically unstable areas. <b>(MEDIUM)</b>	<ul style="list-style-type: none"> <li>• Public Works</li> <li>• Planning Department</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• Continuous Implementation</li> </ul>



IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
<p>Expand GIS to collect and develop sophisticated hazard mapping. Use information to update plan. Ensure information will be available to the public and to relevant communities and agencies. <b>(MEDIUM)</b>  <a href="http://www.stanoes.com/mjhmp.shtm">http://www.stanoes.com/mjhmp.shtm</a></p> <p><b>COMPLETED</b></p>	<ul style="list-style-type: none"> <li>Public Works Department</li> <li>Chief Executive Office</li> </ul>	<ul style="list-style-type: none"> <li>Existing staff</li> <li>General Fund</li> <li>Ongoing Implementation</li> </ul>
<p>Take advantage of programs that would provide funds to identify and rehabilitate structures that do not currently meet building standard minimums for earthquake resistance. <b>(MEDIUM)</b></p>	<ul style="list-style-type: none"> <li>Building Permits Division</li> </ul>	<ul style="list-style-type: none"> <li>State Funding</li> <li>Federal Funding</li> <li>Continuous Implementation</li> </ul>

**MULTI-JURISDICTIONAL MITIGATION ACTIONS**

See Volumes Two and Three for additional reports from the County’s Multi-Jurisdictional Partners. Each jurisdiction is responsible for pursuing actions and implementing strategies that are relevant to their particular jurisdiction.

# MITIGATION STRATEGY/LANDSLIDES

## HAZARD MITIGATION GOALS

- Minimize future loss of life and reduce property damage as a result of landslides
- Reduce economic impact of landslides
- Promote sustainable economy

## IDENTIFICATION AND ANALYSIS OF MITIGATION ACTIONS

OBJECTIVES		
HAZARD		PRIORITY
<b>Landslide</b>	Development west of Highway 5 in areas susceptible to landslides shall be permitted only when a geological soils report has been completed with (a) documented evidence that no such potential exists on the site, or (b) identifying the extent of the problem and the mitigation measures necessary to correct the identified problem.	HIGH
<b>Landslide</b>	All new development, including near river bluffs shall be designed to increase safety and reduce health hazards.	HIGH
<b>Landslide</b>	Discourage development on lands that are subject to landslides.	HIGH
<b>Landslide</b>	Continue critical business operations.	HIGH
<b>Landslide</b>	Train emergency responders.	HIGH

## IMPLEMENTATION OF MITIGATION ACTIONS

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
Development west of Highway 5 located in Seismic Design Category D shall submit a geological soils report unless the Chief Building Official and Planning Director are satisfied that no need for the report is present. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Planning Department</li> <li>• Building Permits Division</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• Ongoing</li> </ul>

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
<p>The County shall utilize the California Environmental Quality Act (CEQA) process to ensure that development does not occur that would be especially susceptible to landslides. Most discretionary projects require review for compliance with CEQA. As part of this review, potential impacts must be identified and mitigated or a statement of overriding concerns adopted. <b>(HIGH)</b></p>	<ul style="list-style-type: none"> <li>• Planning Department</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• State Funds</li> <li>• Federal Funds</li> <li>• Continuous Implementation</li> </ul>
<p>The routes of new public roads in areas subject to landslides shall be designed to minimize landslide risks. <b>(HIGH)</b></p>	<ul style="list-style-type: none"> <li>• Public Works</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• State Funds</li> <li>• Federal Funds</li> <li>• Ongoing</li> </ul>
<p>Development proposals in an area identified as having unstable soils and subject to landslides such as areas in the foothills and river bluffs shall include an engineered design with emphasis on soil, degree of slope measures for mitigating possible hazards. <b>(HIGH)</b></p>	<ul style="list-style-type: none"> <li>• Planning Department</li> <li>• Building Permits Division</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• General Fund</li> <li>• State Funds</li> <li>• Federal Funds</li> <li>• Continuous Implementation</li> </ul>
<p>All building permit applications shall be reviewed to ensure compliance with the California Code of Regulations Title 24 and Subdivision Ordinance in areas of unstable soils. <b>(HIGH)</b></p>	<ul style="list-style-type: none"> <li>• Building Permits Division</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• Continuous Implementation</li> </ul>
<p>Follow policies included in the adopted Emergency Operation Plan (EOP). The EOP establishes the emergency management organization required to mitigate any significant emergency or disaster. The EOP identifies policies, responsibilities and procedures required to protect the health and safety of our communities as well as public and private property. The EOP also establishes the operations and procedures for Initial Response</p>	<ul style="list-style-type: none"> <li>• Emergency Services</li> <li>• Public Works</li> <li>• Planning Department</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• Continuous Implementation</li> </ul>

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
Operations (Field Response), to emergencies, the Extended Response Operations (County Emergency Operations Center) activities and Recovery Operations. New development shall not conflict with policies included in that document. <b>(HIGH)</b>		
Develop, adopt, maintain, and update a Continuity of Operations Plan. Provide disaster management to assist and support County departments to maintain their critical functions. <b>(HIGH)</b>  <b>DEVELOP AND ADOPT COOP COMPLETED</b>	<ul style="list-style-type: none"> <li>• O.E.S.</li> <li>• All 27 County departments</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• General Fund</li> <li>• Ongoing Implementation</li> </ul>
Provide NIMS training to all County employees who may be called upon during an emergency. The National Incident Management System (NIMS) was developed so that responders from different jurisdictions and disciplines can work together to provide a unified approach to incident management. Benefits of NIMS training include improved mitigation, preparedness, and response & recovery from hazards. <b>(HIGH)</b>  <b>COMPLETED</b>	<ul style="list-style-type: none"> <li>• O.E.S.</li> <li>• All 27 County departments</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• General Fund</li> <li>• Ongoing Implementation</li> </ul>

### MULTI-JURISDICTIONAL MITIGATION ACTIONS

See Volumes Two and Three for additional reports from the County’s Multi-Jurisdictional Partners. Each jurisdiction is responsible for pursuing actions and implementing strategies that are relevant to their particular jurisdiction.

# MITIGATION STRATEGY/DAM INUNDATION

## HAZARD MITIGATION GOALS

- Minimize future loss of life and reduce property damage as a result of dam inundation
- Reduce the economic impact of flooding due to dam inundation
- Promote sustainable economy
- Increase public preparedness for disasters

## IDENTIFICATION/ANALYSIS OF MITIGATION ACTIONS

OBJECTIVES		
HAZARD		PRIORITY
<b>Dam Inundation</b>	All new development shall be designed to increase safety and reduce health hazards.	HIGH
<b>Dam Inundation</b>	Development proposals adjacent to a reservoir shall include an engineered evaluation of the potential impacts.	HIGH
<b>Dam Inundation</b>	Continue critical business operations.	HIGH
<b>Dam Inundation</b>	Train emergency responders.	HIGH
<b>Dam Inundation</b>	Enable the public to prepare for, respond to, and recover from disasters by improving hazard information and GIS maps.	MEDIUM

## IMPLEMENTATION OF MITIGATION ACTIONS

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
Identify the projected flood path of travel as if total loss of dam occurs. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Public Works</li> <li>• Building Permits Division</li> </ul>	<ul style="list-style-type: none"> <li>• General Fund</li> <li>• Existing staff</li> <li>• Ongoing</li> </ul>

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
Identify the structures within the flood path of travel and noting property in data base. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>Public Works</li> <li>Building Permits Division</li> </ul>	<ul style="list-style-type: none"> <li>General Fund</li> <li>Existing Staff</li> <li>Ongoing</li> </ul>
Produce a County flood map showing the structures and population within the projected flood path. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>Public Works</li> <li>Building Permits Division</li> </ul>	<ul style="list-style-type: none"> <li>General Fund</li> <li>Existing Staff</li> <li>Ongoing</li> </ul>
The County Office of Emergency Services will continue to work with other jurisdictions to develop evacuation routes to be used in case of dam failure. Evacuation routes will serve all of the jurisdictions in the County. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>Emergency Services</li> <li>Public Works</li> <li>Cal Trans</li> <li>Adjacent Counties</li> <li>Cities in County</li> </ul>	<ul style="list-style-type: none"> <li>Existing staff</li> <li>State Funds</li> <li>Federal Funds</li> <li>Continuous Implementation</li> </ul>
Follow policies included in the adopted Emergency Operation Plan (EOP). The EOP establishes the emergency management organization required to mitigate any significant emergency or disaster; identifies policies, responsibilities and procedures required to protect the health and safety of our communities as well as public and private property. The EOP also establishes the operations and procedures for Initial Response Operations (Field Response), to emergencies, the Extended Response Operations (County Emergency Operations Center) activities and Recovery Operations. New development shall not conflict with policies included in that document. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>Emergency Services</li> <li>Planning Commission</li> <li>Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>Existing staff</li> <li>State Funds</li> <li>Federal Funds</li> <li>Continuous Implementation</li> </ul>
Develop, adopt, maintain, and update a Continuity of Operations Plan. Provide disaster management to assist and support County departments to maintain their critical functions. <b>(HIGH)</b>  <b>DEVELOP AND ADOPT COOP COMPLETED</b>	<ul style="list-style-type: none"> <li>O.E.S.</li> <li>All 27 County departments</li> </ul>	<ul style="list-style-type: none"> <li>Existing staff</li> <li>General Fund</li> <li>Ongoing Implementation</li> </ul>

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
<p>Provide NIMS training to all County employees who may be called upon during an emergency. The National Incident Management System (NIMS) was developed so that responders from different jurisdictions and disciplines can work together to provide a unified approach to incident management. Benefits of NIMS training include improved mitigation, preparedness, and response &amp; recovery from hazards. <b>(HIGH)</b></p> <p><b>COMPLETED</b></p>	<ul style="list-style-type: none"> <li>• O.E.S.</li> <li>• All 27 County departments</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• General Fund</li> <li>• Ongoing Implementation</li> </ul>
<p>Expand GIS to collect and develop sophisticated hazard mapping. Use information to update plan. Ensure information will be available to the public and to relevant communities and agencies. <b>(MEDIUM)</b></p> <p><a href="http://www.stanoes.com/mjhmp.shtm">http://www.stanoes.com/mjhmp.shtm</a></p> <p><b>COMPLETED</b></p>	<ul style="list-style-type: none"> <li>• Public Works Department</li> <li>• Chief Executive Office</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• General Fund</li> <li>• Ongoing Implementation</li> </ul>

**MULTI-JURISDICTIONAL MITIGATION ACTIONS**

See Volumes Two and Three for additional reports from the County’s Multi-Jurisdictional Partners. Each jurisdiction is responsible for pursuing actions and implementing strategies that are relevant to their particular jurisdiction.

# MITIGATION STRATEGY/FLOOD

## HAZARD MITIGATION GOALS

- Minimize future loss of life and reduce property damage as a result of floods
- Reduce the economic impact of floods
- Promote sustainable economy
- Increase public preparedness for disasters

## IDENTIFICATION/ANALYSIS OF MITIGATION ACTIONS

OBJECTIVES		
HAZARD		PRIORITY
<b>Flood</b>	Provide ordinances to ensure that flood insurance can be made available to qualified property owners through State and Federal programs.	HIGH
<b>Flood</b>	Support programs and activities that increase Community Rating System (CRS) premium discounts through National Flood Insurance Program (NFIP).	HIGH
<b>Flood</b>	Development should not be allowed in areas that are within the designated floodway.	HIGH
<b>Flood</b>	New development shall be designed to increase safety and reduce health hazards.	HIGH
<b>Flood</b>	Discourage development in areas susceptible to floods.	HIGH
<b>Flood</b>	Continue critical business operations.	HIGH
<b>Flood</b>	Train emergency responders.	HIGH
<b>Flood</b>	Enable the public to prepare for, respond to, and recover from disasters by improving hazard information and GIS maps.	MEDIUM
<b>Flood</b>	Support the formation of improvement districts, including flood control districts to eliminate safety hazards.	MEDIUM



## IMPLEMENTATION OF MITIGATION ACTIONS

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
Amend Ordinance CS 638 and require that structures in a flood plain will have the Lowest Floor Elevation constructed at a minimum level of one foot above Base Flood Elevation and to adopt FEMA section 11-01 and provide clarity on basement definition. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>Public Works</li> <li>Building Permits Division</li> <li>Planning Department</li> </ul>	<ul style="list-style-type: none"> <li>General Fund</li> <li>Application Fees</li> <li>Existing staff</li> <li>Ongoing</li> </ul>
Elevate existing homes out of the flood plain due to repetitive loss. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>Planning Department</li> </ul>	<ul style="list-style-type: none"> <li>Grant program through FEMA that provides funds to repetitive loss homes and would raise the homes above BFE by 12"</li> <li>Existing staff</li> <li>Ongoing</li> </ul>
Maintain documented FEMA Elevation Certificates for all new and substantially improved construction in Stanislaus County. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>Public Works</li> <li>Building Permits Division</li> <li>Planning Department</li> </ul>	<ul style="list-style-type: none"> <li>General Fund</li> <li>Application Fees</li> <li>Existing staff</li> <li>Ongoing</li> </ul>
Schedule Public Information Workshops based on Community Rating System for National Flood Insurance Program. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>Public Works</li> <li>Building Permits Division</li> <li>Planning Department</li> </ul>	<ul style="list-style-type: none"> <li>General Fund</li> <li>Application Fees</li> <li>Existing staff</li> <li>Ongoing</li> </ul>
Development within the 100-year flood boundary shall meet the requirements of Chapter 16.50 Flood Damage Protection Ordinance of the County Code and within the designated floodway shall obtain State Floodway Agency and Reclamation District Board approval. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>Building Permits Division</li> <li>Public Works</li> <li>Planning Department</li> <li>Planning Commission</li> <li>Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>Existing staff</li> <li>Application Fees</li> <li>Continuous Implementation</li> </ul>
The Public Works Department will provide information to landowners in areas subject to flooding to help them form a flood control district in Stanislaus County. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>Public Works</li> <li>Local Agency Formation Commission—LAFCO</li> </ul>	<ul style="list-style-type: none"> <li>Existing staff</li> <li>State Funds</li> <li>Federal Funds</li> <li>Continuous Implementation</li> </ul>

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
<p>The County shall utilize the California Environmental Quality Act (CEQA) process to ensure that development does not occur in areas that would be especially susceptible to flooding. As part of this review, potential impacts must be identified and mitigated. <b>(HIGH)</b></p>	<ul style="list-style-type: none"> <li>• Planning Department</li> <li>• Public Works</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• Continuous Implementation</li> </ul>
<p>The County Office of Emergency Services (O. E. S.) will continue to work with other jurisdictions to develop evacuation routes to be used in case of a flood disaster. Evacuation routes will be established to serve all of the jurisdictions in the County. <b>(HIGH)</b></p>	<ul style="list-style-type: none"> <li>• O.E.S.</li> <li>• Public Works</li> <li>• Cal Trans</li> <li>• Adjacent Counties</li> <li>• Adjacent Cities</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• State Funds</li> <li>• Federal Funds</li> <li>• Continuous Implementation</li> </ul>
<p>Follow policies included in the adopted Emergency Operation Plan (EOP). The EOP establishes the emergency management organization required to mitigate any significant emergency or disaster; identifies policies, responsibilities and procedures required to protect the health and safety of our communities as well as public and private property. The EOP also establishes the operations and procedures for Initial Response Operations (Field Response), to emergencies, the Extended Response Operations (County Emergency Operations Center) activities and Recovery Operations. New development shall not conflict with policies included in that document. <b>(HIGH)</b></p>	<ul style="list-style-type: none"> <li>• O.E.S.</li> <li>• Planning Department</li> <li>• Public Works</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• Continuous Implementation</li> </ul>
<p>Develop, adopt, maintain, and update a Continuity of Operations Plan. Provide disaster management to assist and support County departments to maintain their critical functions. <b>(HIGH)</b></p> <p><b>DEVELOP AND ADOPT COOP COMPLETED</b></p>	<ul style="list-style-type: none"> <li>• O.E.S.</li> <li>• All 27 County departments</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• General Fund</li> <li>• Ongoing Implementation</li> </ul>

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
<p>Provide NIMS training to all County employees who may be called upon during an emergency. The National Incident Management System (NIMS) was developed so that responders from different jurisdictions and disciplines can work together to provide a unified approach to incident management. Benefits of NIMS training include improved mitigation, preparedness, and response &amp; recovery from hazards. <b>(HIGH)</b></p> <p><b>COMPLETED</b></p>	<ul style="list-style-type: none"> <li>• O.E.S.</li> <li>• All 27 County departments</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• General Fund</li> <li>• Ongoing Implementation</li> </ul>
<p>Expand GIS to collect and develop sophisticated hazard mapping. Use information to update plan. Ensure information will be available to the public and to relevant communities and agencies. <b>(MEDIUM)</b></p> <p><a href="http://www.stanoes.com/mjhmp.shtm">http://www.stanoes.com/mjhmp.shtm</a></p> <p><b>COMPLETED</b></p>	<ul style="list-style-type: none"> <li>• Public Works Department</li> <li>• Chief Executive Office</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• General Fund</li> <li>• Ongoing Implementation</li> </ul>
<p>Development in the area known as the Sperry Avenue Corridor shall be required to participate in the solution of the Salado Creek flooding problem, except that which is consistent with the County General Plan at the time the Patterson Agreement is executed. <b>(MEDIUM)</b></p> <p><b>COMPLETED</b></p>	<ul style="list-style-type: none"> <li>• Planning Department</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> <li>• City of Patterson</li> <li>• Public Works</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• State of California</li> <li>• Continuous</li> </ul>

**MULTI-JURISDICTIONAL MITIGATION ACTIONS**

See Volumes Two and Three for additional reports from the County’s Multi-Jurisdictional Partners. Each jurisdiction is responsible for pursuing actions and implementing strategies that are relevant to their particular jurisdiction.

# MITIGATION STRATEGY/WILDFIRE

## HAZARD MITIGATION GOALS

- Minimize the effects of hazardous conditions that might cause loss of life and property
- Reduce the economic impact of wildfires
- Promote sustainable economy
- Increase public preparedness for disasters

## IDENTIFICATION/ANALYSIS OF MITIGATION ACTIONS

OBJECTIVES		
HAZARD		PRIORITY
<b>Wildfire</b>	All new development shall be designed to increase safety and reduce health hazards.	HIGH
<b>Wildfire</b>	Adequate fire protection shall be provided.	HIGH
<b>Wildfire</b>	Roads shall be maintained for the safety of travelers for wildfire.	HIGH
<b>Wildfire</b>	Future growth shall not exceed the capacity to provide services such as water and public safety.	HIGH
<b>Wildfire</b>	Discourage development in areas susceptible to wildfire.	HIGH
<b>Wildfire</b>	The County will continue to enforce State-mandated Health and Safety Codes, which include but are not limited to the California Code of Regulations Title 24 and International Property and Maintenance Code.	HIGH
<b>Wildfire</b>	Continue critical business operations.	HIGH
<b>Wildfire</b>	Train emergency responders.	HIGH
<b>Wildfire</b>	Enable the public to prepare for, respond to, and recover from disasters by improving hazard information and GIS maps.	MEDIUM
<b>Wildfire</b>	The County shall support the formation of improvement districts to eliminate safety hazards for wildfire.	MEDIUM

## IMPLEMENTATION OF MITIGATION ACTIONS

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
All building permits applications shall be reviewed to ensure compliance with the California Code of Regulations, Title 24 and California Public Resources Code. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Building Permits Division</li> <li>• Cal-Fire Staff</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• Cal-Fire</li> <li>• Ongoing</li> </ul>
The California Fire Code shall be enforced during inspections and maintenance of structures regulated under that code. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• County Fire Prevention Bureau</li> <li>• Building Permits Division</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• Continuous</li> </ul>
Implement the funding strategies identified in the Land Use Element of the General Plan. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Planning Department</li> <li>• CEO</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• State Funds</li> <li>• Federal Funds</li> <li>• Continuous Implementation</li> </ul>
All discretionary projects in the County shall be referred to the County Fire Prevention Bureau and to the appropriate Fire District for comment. The comments of these agencies will be used to condition or recommend modifications of the project as it relates to fire safety and rescue issues. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Fire Warden</li> <li>• County Fire Prevention Bureau</li> <li>• Planning Department</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• Continuous Implementation</li> </ul>
The County Fire Prevention Bureau shall work with the California Department of Forestry and Fire Protection and with local fire districts to minimize the danger from wildfire. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Fire Districts</li> <li>• Fire Warden</li> <li>• County Fire Prevention Bureau</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• Application Fees</li> <li>• State Funds</li> <li>• Federal Funds</li> <li>• Continuous Implementation</li> </ul>
The County will work with the Fire Warden/ County Fire Prevention Bureau, the State Department of Forestry and Fire Protection and local fire districts to ensure that adequate fire suppression measures are provided in areas without access to a public water system. <b>(HIGH)</b>	<ul style="list-style-type: none"> <li>• Fire Warden</li> <li>• County Fire Prevention Bureau</li> <li>• State of California/ Cal Fire</li> <li>• Planning Department</li> <li>• Public Works</li> <li>• Fire Districts</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• State Funds</li> <li>• Federal Fund</li> <li>• Ongoing Implementation</li> </ul>

**IMPLEMENTATION STRATEGY**

<b>Actions</b>	<b>Responsible Agency</b>	<b>Funding Source Timeframe and Deadline</b>
<p>All New development shall have adequate water to meet the established fire flow standards as required by State Fire Marshall and California Fire Code. <b>(HIGH)</b></p>	<ul style="list-style-type: none"> <li>• Fire Warden</li> <li>• County Fire Prevention Bureau</li> <li>• Planning Department</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> <li>• Cal-Fire</li> </ul>	<ul style="list-style-type: none"> <li>• Applicant/Private Funds</li> <li>• Continuous Implementation</li> </ul>
<p>All building permits and discretionary projects within the State Responsibility Areas, as identified by the California Department of Forestry and Fire Protection, shall meet the minimum development standards. New development shall conform to the standards in the County specifications and Improvement Standards for maintenance and improvement of roads. <b>(HIGH)</b></p>	<ul style="list-style-type: none"> <li>• Building Permit Division</li> <li>• Fire Warden</li> <li>• County Fire Prevention Bureau</li> <li>• Planning Department</li> <li>• Planning Commission</li> <li>• Board of Supervisors</li> <li>• Cal-Fire</li> </ul>	<ul style="list-style-type: none"> <li>• Applicant/Private Funds</li> <li>• Continuous Implementation</li> </ul>
<p>Develop, adopt, maintain, and update a Continuity of Operations Plan. Provide disaster management to assist and support County departments to maintain their critical functions. <b>(HIGH)</b></p> <p style="text-align: center;"><b>DEVELOP AND ADOPT COOP COMPLETED</b></p>	<ul style="list-style-type: none"> <li>• O.E.S.</li> <li>• All 27 County departments</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• General Fund</li> <li>• Ongoing Implementation</li> </ul>
<p>Provide NIMS training to all County employees who may be called upon during an emergency. The National Incident Management System (NIMS) was developed so that responders from different jurisdictions and disciplines can work together to provide a unified approach to incident management. Benefits of NIMS training include improved mitigation, preparedness, and response &amp; recovery from hazards. <b>(HIGH)</b></p> <p style="text-align: center;"><b>COMPLETED</b></p>	<ul style="list-style-type: none"> <li>• O.E.S.</li> <li>• All 27 County departments</li> </ul>	<ul style="list-style-type: none"> <li>• Existing staff</li> <li>• General Fund</li> <li>• Ongoing Implementation</li> </ul>

IMPLEMENTATION STRATEGY		
Actions	Responsible Agency	Funding Source Timeframe and Deadline
<p>Expand GIS to collect and develop sophisticated hazard mapping. Use information to update plan. Ensure information will be available to the public and to relevant communities and agencies. <b>(MEDIUM)</b>  <a href="http://www.stanoes.com/mjhmp.shtm">http://www.stanoes.com/mjhmp.shtm</a></p> <p><b>COMPLETED</b></p>	<ul style="list-style-type: none"> <li>Public Works Department</li> <li>Chief Executive Office</li> </ul>	<ul style="list-style-type: none"> <li>Existing staff</li> <li>General Fund</li> <li>Ongoing Implementation</li> </ul>
<p>Fire Districts should be encouraged to request that the Board of Supervisors impose development fees to help support their services. Such requests shall be accompanied by supporting documentation. <b>(MEDIUM)</b></p> <p><b>COMPLETED</b></p>	<ul style="list-style-type: none"> <li>Fire Districts</li> <li>Stanislaus County Fire Authority</li> </ul>	<ul style="list-style-type: none"> <li>District Funds</li> <li>Continuous Implementation</li> </ul>

**MULTI-JURISDICTIONAL MITIGATION ACTIONS**

See Volumes Two and Three for additional reports from the County’s Multi-Jurisdictional Partners. Each jurisdiction is responsible for pursuing actions and implementing strategies that are relevant to their particular jurisdiction.

# Stanislaus County



Striving to be the Best



## Plan Maintenance



# PLAN MAINTENANCE

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## INTRODUCTION

This section describes a formal plan maintenance process to ensure that the MJHMP remains an active and applicable document. It includes an explanation of how Stanislaus County and the Planning Team intend to organize their efforts to ensure that improvements and revisions to the MJHMP occur in a well-managed, efficient, and coordinated manner.

The following three process steps are addressed in detail below:

- Monitoring, evaluating, and updating the MJHMP;
- Implementation through existing planning mechanisms; and
- Continued public involvement.

## MONITORING, EVALUATING, AND UPDATING THE MJHMP

The MJHMP was prepared as a collaborative effort among Stanislaus County and the participating jurisdictions. To maintain momentum and build upon previous hazard mitigation planning efforts and successes, the County will use the Planning Team Members expertise to monitor, evaluate, and update the MJHMP. Assistant Director of Emergency Services, Gary Hinshaw, will serve as the primary point of contact and will coordinate all local efforts to monitor, evaluate, and revise the MJHMP. Each participating jurisdiction will be responsible for implementing the County and/or jurisdiction specific Mitigation Action Plans, as appropriate.

The Office of Emergency Services will send an email to the representative from each participating jurisdiction and conduct an annual review to monitor the progress in implementing the MJHMP. The *MJHMP Progress Report Form* has been developed for this purpose and will be sent beginning one year from the date of FEMA's approval of the Final Plan Update.

The *MJHMP Progress Report Form* will provide the basis for possible changes to the overall MJHMP and the County and/or jurisdiction will have an opportunity to refocus on any new or more threatening hazards. This will allow the County to make any necessary adjustments to, or changes in resource allocations, and engage additional support for the MJHMP implementation, if warranted. The findings will be reviewed by the Assistant Director of Emergency Services and used for the plan update in 2015.

MJHMP Progress Report Form will be used to evaluate the plan for the following:

- Have any new hazard/disaster events occurred during the reporting period?
- Did anyone from the public comment on the plan during this reporting period?
- Do the goals and objectives address current and expected conditions?
- Were any mitigation projects identified in the MJHMP implemented during this reporting period?
- What obstacles, problems, or delays did any current or ongoing mitigation projects encounter, if any?
- Are the current resources appropriate for implementing the plan?
- Have the outcomes occurred as expected?
- Have the agencies participated as proposed?
- Where shortcomings are identified, what can the County do to bring things back on track?
- Have there been changes in development trends that could create additional risks?

In addition to the annual review, the County will update the MJHMP every five (5) years to maintain FEMA mitigation funding eligibility. The Plan Update will include the following activities:

- Review FEMA MJHMP update requirements for the new planning cycle;
- Thoroughly analyze and update the risk of natural hazards countywide;
- Coordinate with participating jurisdictions to review and update the MJHMP;
- Complete a comprehensive detailed risk assessment updating costs and facilities;
- Complete a comprehensive detailed mitigation strategy review and revision;
- Update the Mitigation Action Plan for all participating jurisdictions identifying the status of the currently identified actions and adding newly considered, prioritized, and assigned actions;
- Present MJHMP to Cal EMA and FEMA for review and approval;
- Present MJHMP to each governing agency for adoption; and
- Return a copy of the finalized MJHMP with adoption resolutions from all participating jurisdictions to FEMA to finalize FEMA’s approval.

The process to update the plan will be similar to the process used to develop the original plan, as outlined in the table below:

ACTION	WHEN	RESPONSIBILITY
1. Review and Update Hazard Risks	Spring 2015	Assistant Director of Emergency Services
2. Update Multi-Jurisdictional Partner List	Spring 2015	Chief Executive Office (CEO)
3. Risk Assessment Inventory	Summer 2015	Chief Executive Office/Capital Projects
4. Review Goals	Summer 2015	All Partner Jurisdictions
5. Review/Update Mitigation Strategies	Fall 2015	All Partner Jurisdictions
6. Publish Updated MJHMP Plan	Winter 2015	CEO & Partner Jurisdictions

It should be noted that the data contained within the inventory of risks is continuously updated in a “live” database linked to the Geographical Information System to provide up-to-date mapping and planning capabilities.

#### CRITERIA FOR REVISIONS TO THE MJHMP

- New technology;
- If changing situations have modified goals/objectives/actions and/or hazards;
- New information to update vulnerability assessments;
- Shifts in development;
- Participating jurisdictions who wish to be added or removed from the plan;
- Areas affected by recent disasters; and/or
- Significant changes in Federal, State or County regulations, codes, ordinances or policies.

#### IMPLEMENTATION THROUGH EXISTING PLANNING MECHANISMS

The requirements for implementation through existing planning mechanisms, as stipulated in the DMA 2000 and its implementing regulations are described below.

Requirement §201.6(c)(4)(ii) states that the plan shall include a process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

The County’s MJHMP is a living document that will require adjustments to maintain its relevance. The Project Manager is actively involved in the preparation of the County’s annual update to our Capital Improvement Plan. This cross over of assignments will help to maintain focus and awareness on the

MJHMP. The Project Manager will collaborate with Capital Projects to monitor, evaluate, and update the plan to reflect ongoing efforts to improve hazard mitigation activities. The Project Manager meets annually with the Planning Director to update the CIP so it is the perfect venue to discuss and incorporate any appropriate changes or amendments in the General Plan into the maintenance review of the MJHMP.

The Geographical Information System used for the MJHMP update will provide continuous current live information such as the Assessor valuation and land use data as properties are re-assessed and permits are pulled. This allows the MJHMP to be a current planning tool for both the development process and emergency management operations. The County property and facilities inventory used in the Risk Assessment will be reviewed annually by the Chief Executive Office as part of the Capital Improvement Plan annual update. Any revisions deemed necessary will be added to the MJHMP.

In summary, the County's comprehensive land use plan, capital improvement plan, mandated standards and building codes currently address identified mitigation initiatives and code compliance requirements. The County strives to incorporate mitigation actions into existing programs and procedures as the opportunity arises. This will help to maintain the relevance of the MJHMP.

After MJHMP adoption, each participating jurisdiction will be responsible for ensuring that the MJHMP is incorporated into existing planning mechanisms. Increased awareness among the participating jurisdictions of the importance of having an adopted MJHMP can be utilized to enhance other planning activities.

Each jurisdiction will achieve this incorporation by undertaking the following activities:

- Conduct a review of the community-specific regulatory tools to assess the schedule for integration of the mitigation strategy;
- Work with pertinent community departments and agencies to increase MJHMP awareness and provide assistance in integrating the mitigation strategy into relevant planning mechanisms; and
- Implementation of these requirements may require updating or amending specific planning mechanisms.

## **ADOPTION AND IMPLEMENTATION OF THE ORIGINAL PLAN**

On August 10, 2004, the Board of Supervisors authorized the County to develop and submit for review, the first three parts of the Multi-Jurisdictional Hazard Mitigation Plan to the State. The first three parts were approved on October 19, 2004. Parts Four and Five were forwarded to the State and FEMA for review and were approved on January 12, 2006. The Mitigation Plan will be implemented through the mitigation actions and existing planning mechanisms contained herein.

## **CONTINUED PUBLIC INVOLVEMENT**

The requirements for continued public involvement, as stipulated in the DMA 2000 and its implementing regulations, are described below.

Requirement §201.6(c)(4)(iii) states that the plan maintenance process shall include a discussion on how the community will continue public participation in the plan maintenance process.

Stanislaus County and each of the participating jurisdictions remain dedicated to involving the public directly in the continual reshaping and updating of the MJHMP. The website designed for the plan update will remain live and the updated plan will be posted. This will provide an opportunity for the public to comment on the plan at anytime. In addition to the plan being downloadable from the OES website, the site also contains contact information with an e-mail address and phone number to which people can direct their comments or concerns. Each participating jurisdiction has also added a link on their

jurisdiction's web page to the County mitigation planning website as part of the plan development process.

The Assistant Director of Emergency Services also has the opportunity to raise County and community awareness of the MJHMP by his attendance and participation at other meetings such as: the Operational Area Council, Disaster Council, Fire Chief's Association, Annual Community Conference, and Department Head meetings to name a few. Operational Area Council meetings are attended by all nine cities as well as participating agencies such as the American Red Cross, United Way, Latino Emergency Communication Council, private industry, schools, California Emergency Management Agency, CERT, Mountain Valley EMSA, utilities, and other Stanislaus County departments. Any public comments received regarding the MJHMP will be collected by OES, included in the annual report, and considered during future plan updates.



**MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN  
PARTICIPATING JURISDICTION  
PROGRESS REPORT FORM**

**PURPOSE**

As part of the Plan Maintenance Process for the MJHMP, the Office of Emergency Services will send an email to the representative from each participating jurisdiction and conduct an annual review to monitor the progress in implementing the MJHMP. The *MJHMP Progress Report Form* has been developed for this purpose and will be sent beginning one year from the date of FEMA's approval of the Final Plan Update.

The MJHMP Progress Report Form will provide the basis for possible changes to the overall MJHMP and the County and/or jurisdiction will have an opportunity to refocus on any new or more threatening hazards. This will allow the County to make any necessary adjustments to, or changes in resource allocations, and engage additional support for the MJHMP implementation, if warranted. The findings will be reviewed by the Assistant Director of Emergency Services and used for the plan update in 2015.

MJHMP ANNUAL PROGRESS REPORT		
<b>Reporting Period From (date):</b>	<b>To (date):</b>	
<b>Name of Jurisdiction:</b>		
<b>Contact Name:</b>	<b>Email:</b>	<b>Phone#:</b>
SUMMARY OF PROGRESS—CHECKLIST REVIEW		
1. Have any new hazard/disaster events occurred during the reporting period? If so, list the events.		
2. Did anyone from the public comment on the plan during this reporting period? If so, list comments.		
3. Do the goals and objectives address current and expected conditions? If not, explain further below.		
4. Were any mitigation projects identified in the MJHMP implemented during this reporting period?		
5. What obstacles, problems, or delays did any current or ongoing mitigation projects encounter, if any? How were the problems solved?		
6. Are the current resources appropriate for implementing the plan?		

7. Have the outcomes occurred as expected?

8. Have the agencies participated as proposed?

9. Where shortcomings are identified, what can the County do to bring things back on track?

10. Have there been changes in development trends that could create additional risks? Please explain.

**PROGRESS REPORT VERIFICATION**

**Print Name of Contact Person:**

**Signature:**

**Date Signed:**

# Stanislaus County



Striving to be the Best

Crosswalk

# PowerPoint Presentation



## Stanislaus County Multi-Jurisdiction Hazard Mitigation Plan Update





# State & Local Mitigation Planning after Disaster Mitigation Act 2000

- All local governments in California are required to have an approved local hazard mitigation plan in order to qualify for Federal mitigation funding.
- New program requires an approved plan be in place before a disaster strikes.

# Multi-Jurisdictional Hazard Mitigation Plan

- FEMA defines a local government in broad terms to include cities, school districts, and special districts.
- Jointly prepared by multiple jurisdictions

# If the County Does Not Participate

Not eligible for:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation Grant Program (PDM)
- Flood Mitigation Assistance Grant (FMA)
- Severe Repetitive Loss (SRL)

# MJHMP Plan Update

- MJHMP originally adopted by the Board on December 13, 2005
- The plan in its entirety must be reviewed, updated, and re-submitted to Cal EMA and FEMA for approval every 5 years
- Updated plan must demonstrate progress from previous plan
- A plan update, is not an annex to the previously approved plan; it stands on its own as a complete and current plan

# MJHMP Plan Update

- 111 jurisdictions were invited to participate with the County in the plan update
- 58 formally responded their intent to participate with the County
- 36 jurisdictions completed all the requirements

# Participating Jurisdictions

- Stanislaus County
- City of Newman
- City of Oakdale
- City of Riverbank
- City of Turlock
- City of Waterford
- City of Ceres
- City of Hughson
- City of Modesto
- Modesto Irrigation District
- Turlock Irrigation District
- Salida Sanitary District
- Oak Flat Water District
- Stanislaus County Office of Education
- Yosemite Community College District
- Hickman Charter School District
- Roberts Ferry Union Elementary
- Empire Unified School District

# Participating Jurisdictions

- Crows Landing CSD
- Grayson CSD
- Patterson Cemetery District
- Hughson FPD
- Oakdale Fire Protection District
- Salida Fire Protection District
- Stanislaus Consolidated FPD
- Oak Valley Hospital District
- Del Puerto Water District
- Shiloh Elementary School District
- Paradise School District
- Knights Ferry Elementary School District
- Ceres Unified School District
- Valley Home Joint School District
- Gratton School District
- Waterford Unified School District
- Chatom Unified School District
- Turlock Unified School District

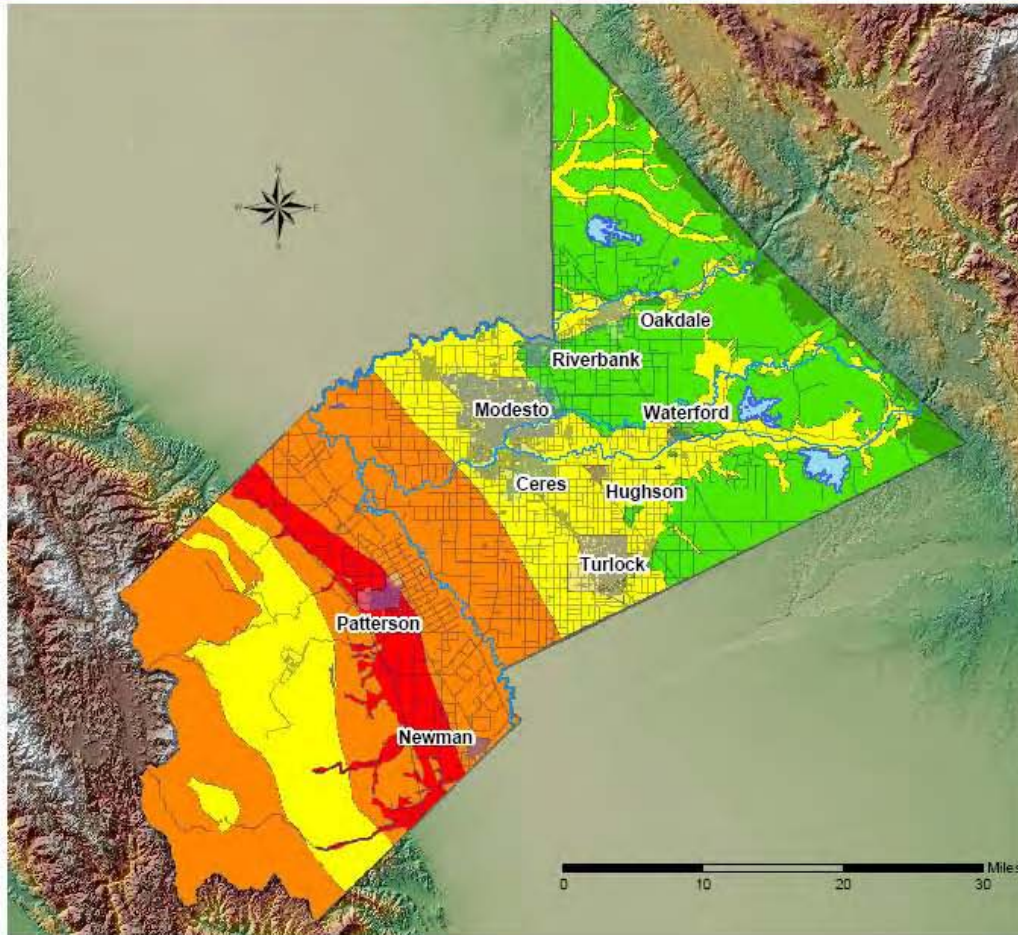
# Components of a MJHMP

- Planning Process
- Risk Assessment
- Mitigation Strategy
- Plan Maintenance Procedures
- Adoption of plan by local governing body



# Understanding Hazards: Earthquakes

## 2010 Stanislaus County -- Earthquake Hazard



### Map Legend:

- Rivers
- Lakes
- Roads

### Shaking

#### Peak Ground Acceleration

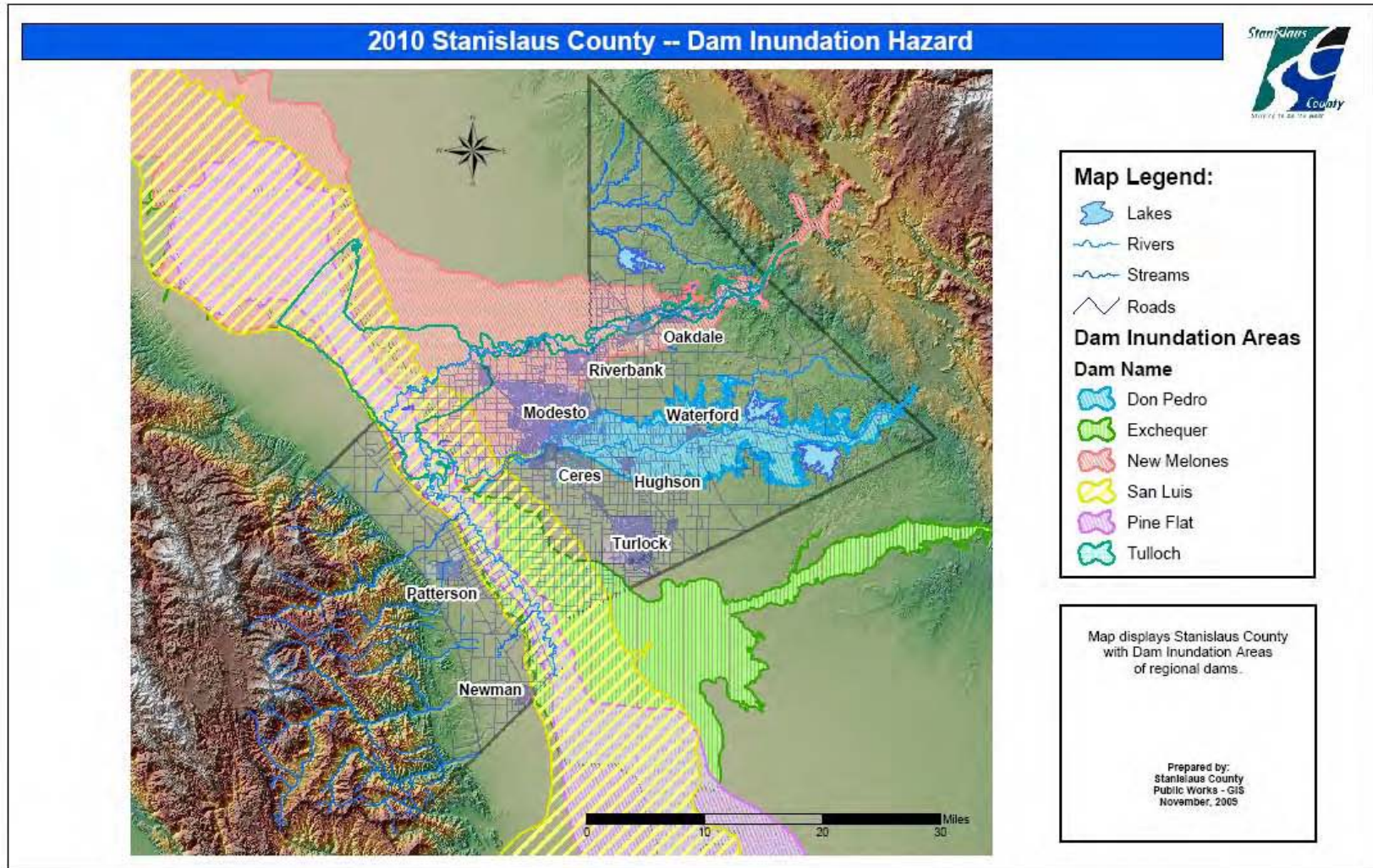
- 0.45 G's
- 0.35 G's
- 0.25 G's
- 0.15 G's
- 0.05 G's



Map displays Stanislaus County with Earthquake Shaking Zones at PGA.  
(Peak Ground Acceleration)

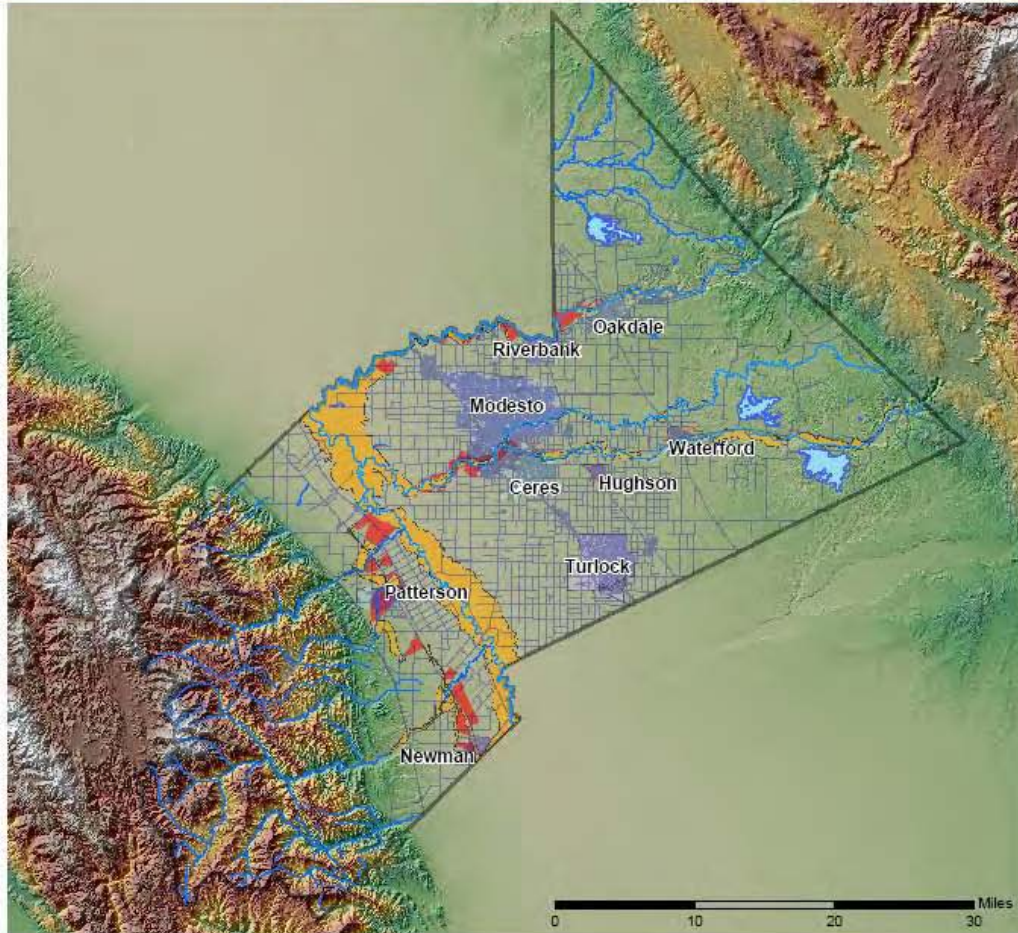
Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

# Understanding Hazards: Dam Inundation



# Understanding Hazards: Flood

## 2010 Stanislaus County -- Flood Hazard



### Map Legend:

- Rivers
- Streams
- Lakes
- Roads

### FEMA Flood Zones

Federal Emergency Mgt Agency

- 100 Year Flood Zone
- 500 Year Flood Zone

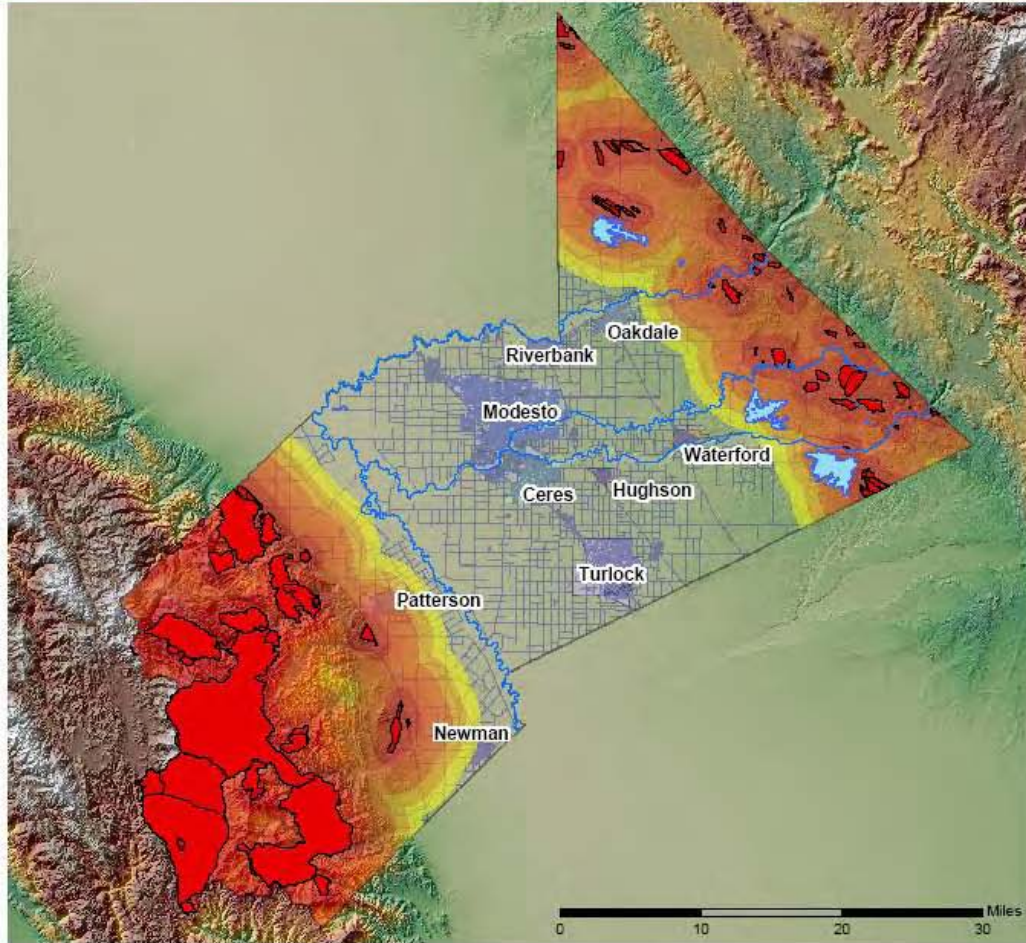


Map displays Stanislaus County with 100 and 500 year FEMA floodplain boundaries. ( 1% and 0.2% chance of flood )

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

# Understanding Hazards: Wildfires

## 2010 Stanislaus County -- Historical Wildfire Hazard



### Map Legend:

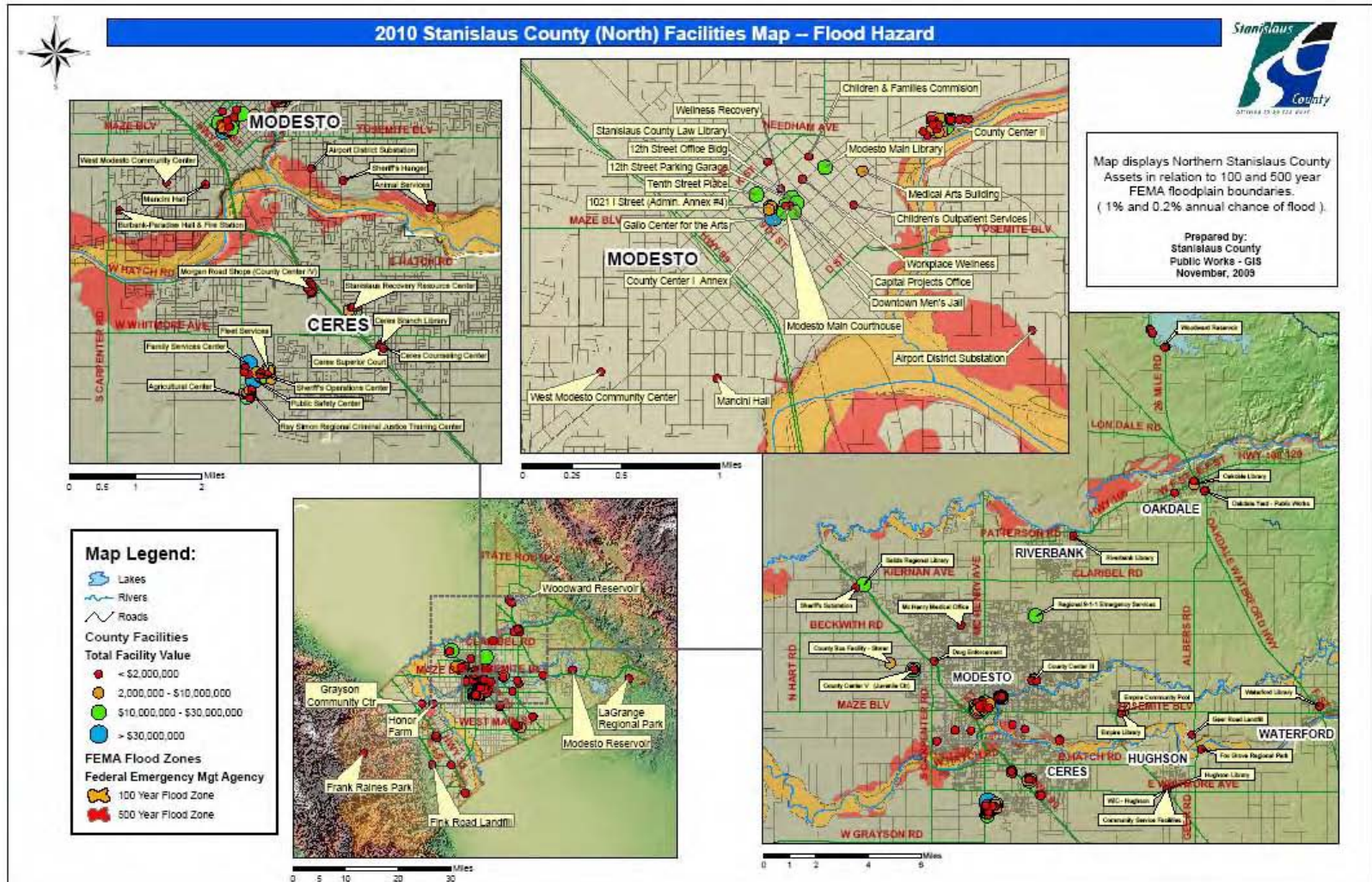
- Lakes
- Rivers
- Roads
- Historical Burn Areas
- Distance From Actual Wildfires**
- < 1 Mile
- < 2 Miles
- < 3 Miles
- < 4 Miles
- < 5 Miles



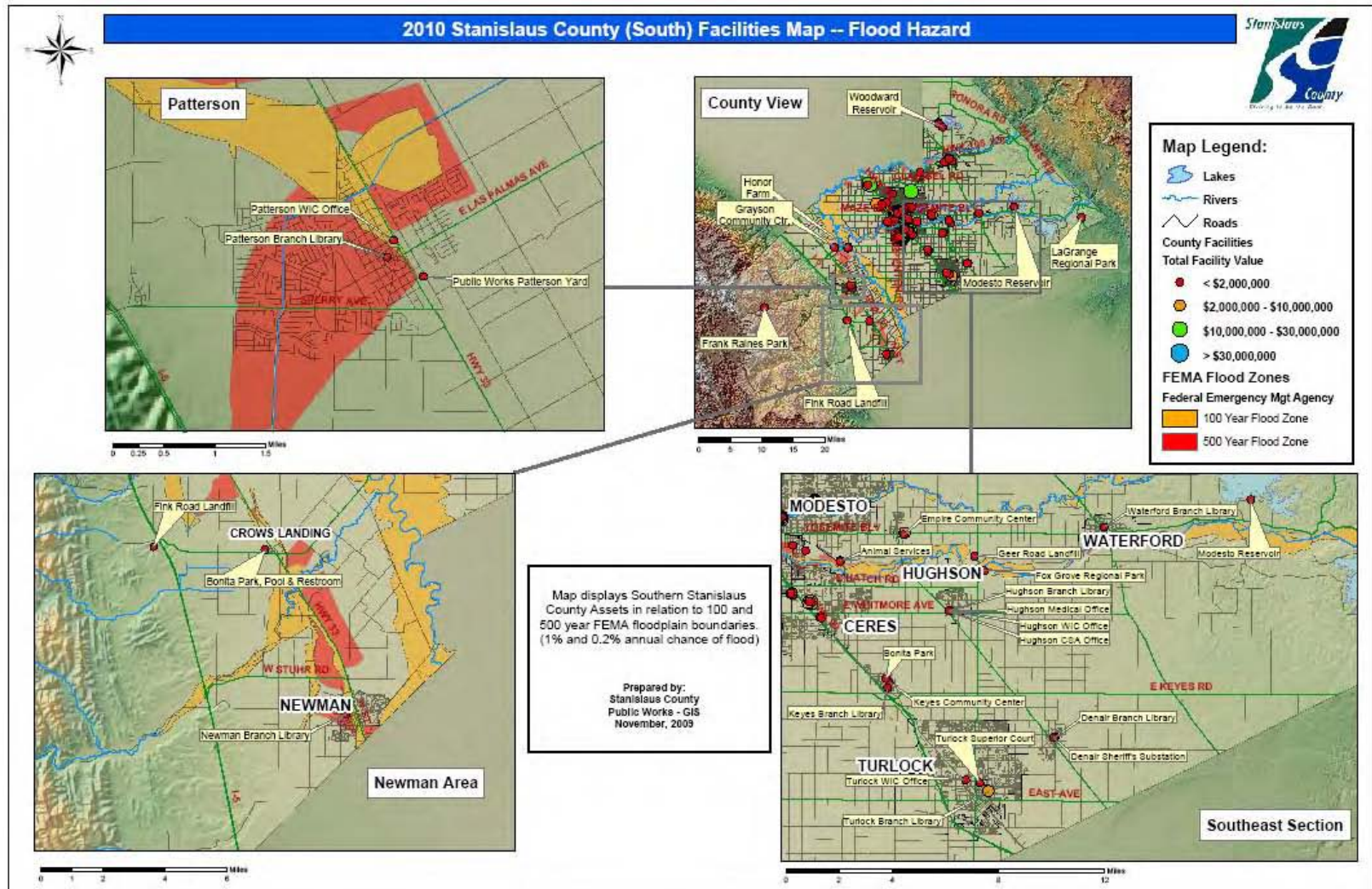
Map displays Stanislaus County  
Historical Wildfire Areas with  
proximity zones radiating out five miles.

Prepared by:  
Stanislaus County  
Public Works - GIS  
November, 2009

# Plotting the Risk at Each Public Facility



# Plotting the Risk at Each Public Facility



# Recommendation:

- Adopt the Stanislaus County Multi-Jurisdiction Hazard Mitigation Plan