

## FINAL REPORT

# FISCAL AND ECONOMIC IMPACT ANALYSES COLUSA SUBREACH

Prepared for:

The Nature Conservancy in Conjunction with  
The Sacramento River Conservation Area Forum

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## I. EXECUTIVE SUMMARY AND FINDINGS

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The Nature Conservancy (TNC), in conjunction with its partner the Sacramento River Conservation Area Forum (SRCAF), retained Economic & Planning Systems (EPS) to conduct fiscal and economic impacts analyses of the transfer of its land in the Colusa Subreach Planning (CSP) area to the State of California, including the State Department of Fish and Game (DFG) and the State Department of Park and Recreation (DPR) for wildlife habitat restoration and public recreation. The economic impact analysis evaluates the impact of the land transfer on the economies of Colusa and Glenn County resulting from the conversion of agricultural land. The fiscal impact analysis identifies impacts on the County of Colusa's budget revenues and costs due to the ownership transfer and land use conversion; where applicable, impacts on the revenues and costs of the Cities of Colusa and Williams are also included.

### COLUSA SUBREACH

The Colusa Subreach (Subreach) is a 21-mile section of the Sacramento River between the unincorporated community of Princeton on the north and the City of Colusa on the south. The north boundary of the Subreach is marked by the site of the former Princeton Ferry, at River Mile (RM) 164.5 and the south boundary is the Colusa Bridge at RM 143.5. The area is bounded on the east and west sides of the river by flood control levees. The area totals about 5,466 acres, with about 5,094 acres in Colusa County and 372 acres in Glenn County. **Figure 1** details the locations of the five planning tracts analyzed in this study. The location of the Subreach is shown in **Figure 2**.

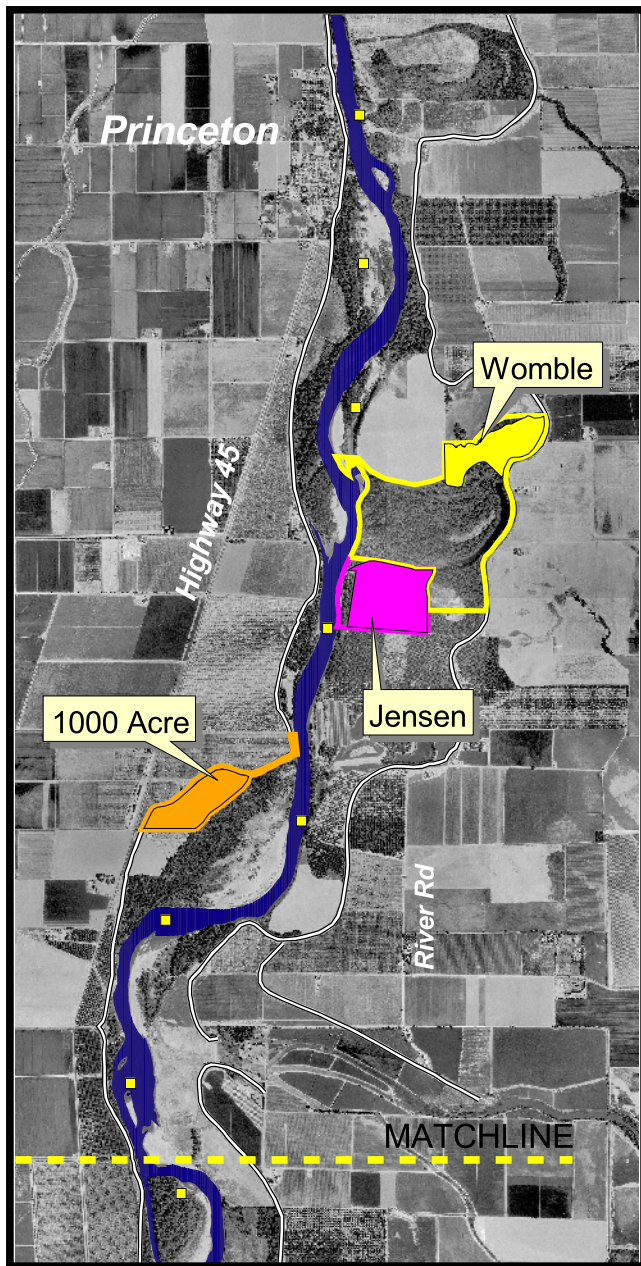
### SUBREACH EXISTING PUBLIC LAND USES

The "Colusa Subreach Background Report" (August 2005) provides an overview of land uses within the Colusa Subreach. Presently about 22 percent of the land or about 1,231 acres is in public-ownership, summarized by owner below.

Public Agency	No. of Sites	Acres
City of Colusa	1	<1
County of Colusa	2	11
Reclamation District 1004	1	4
Maxwell Irrigation District	1	<1
CA DFG	7	905
CA DPR	1	95
Sacramento & San Joaquin Drainage District	1	161
US Bureau of Indian Affairs	1	37
Total	15	1,231

*Source: Colusa Subreach Background Report, August 2005*





**Figure 1**

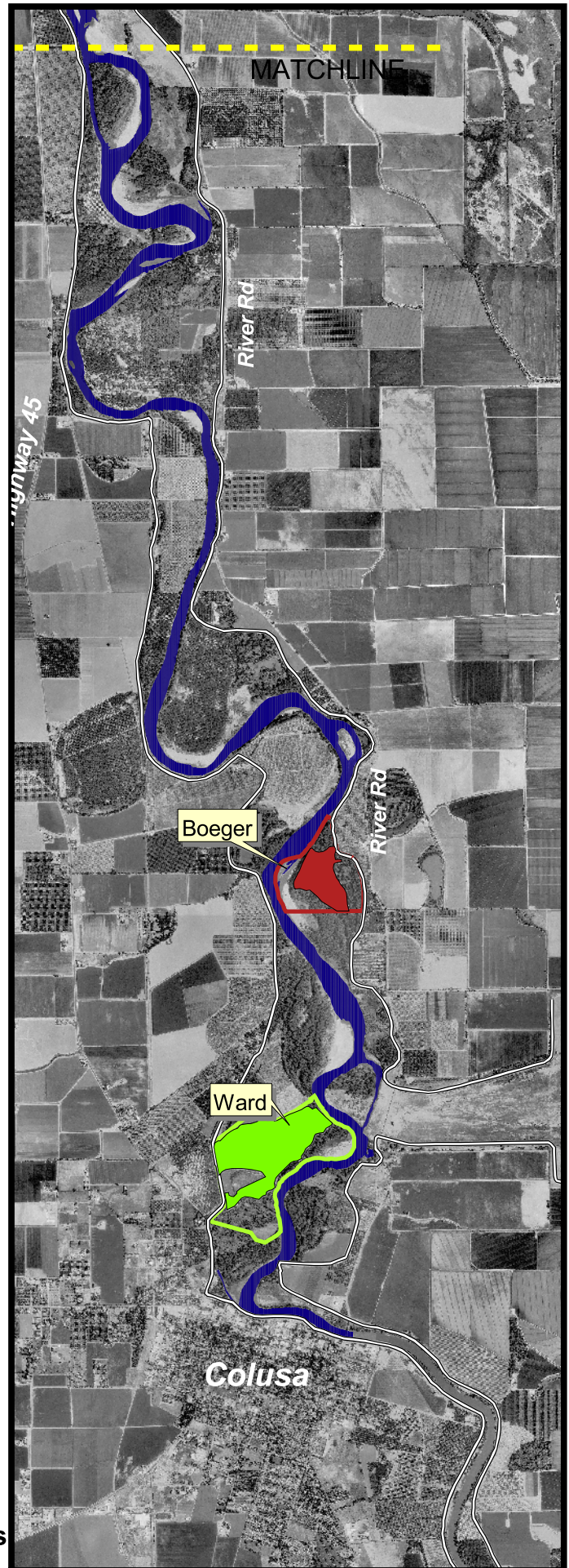
**COLUSA SUBREACH PLANNING  
TRANSFER AND CONVERSION TRACTS**

Note: Solid colors indicate the portions of the tracts where habitat restoration is planned.

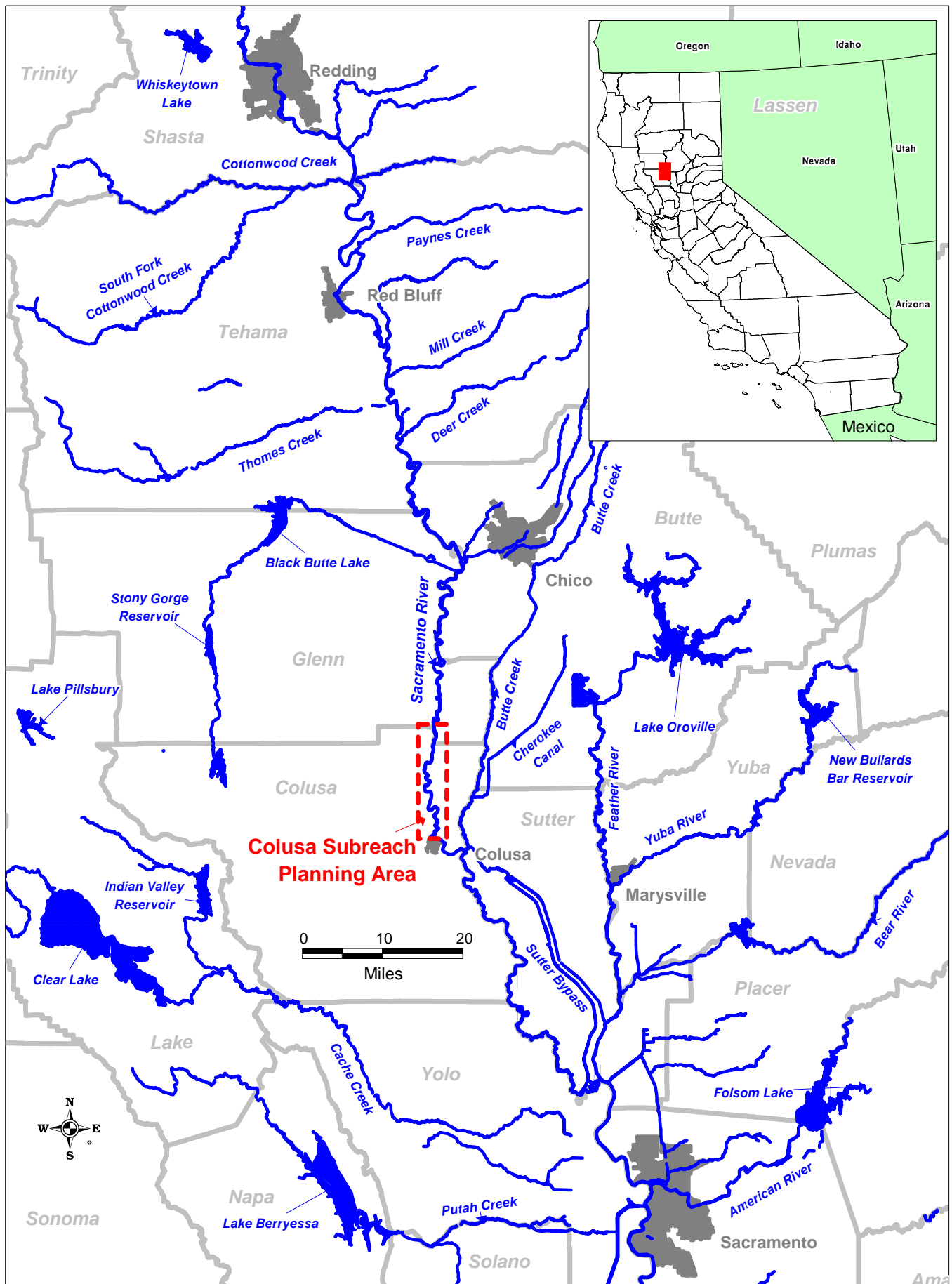
- Boeger Tract
- Womble Tract
- 1000ac Tract
- Jensen Tract
- Ward Tract



1 0 1 2 Miles



**Figure 2: Colusa Subreach Planning Area**





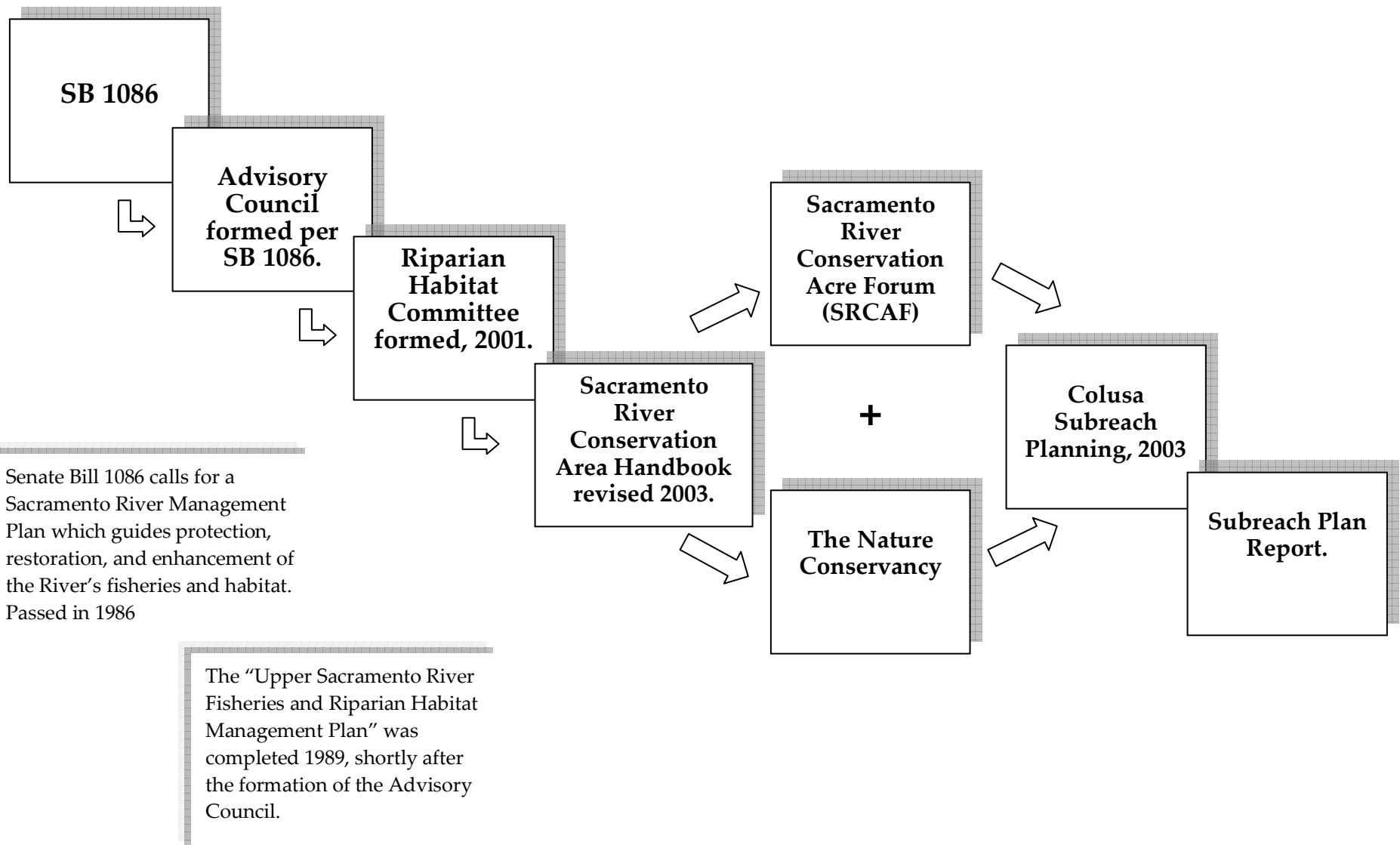
## BACKGROUND

**Figure 3** provides an illustration of the origins of the Colusa Subreach Planning effort. In 1986, the California State Legislature passed a bill (Senate Bill 1086, SB 1086) calling for the development of a management plan for the Sacramento River to steer the protection, restoration, and enhancement of its fisheries and riparian habitat. The Bill created an Advisory Council to guide the process, made up of State and Federal agency representatives, county supervisors, and a variety of interest groups. Three years after the passage of SB 1086, the Upper Sacramento River Fisheries and Riparian Habitat Management Plan was completed. Many elements of this 1989 Plan concerning fishery protection and enhancement have been implemented including bypass structures at diversions along the River's tributaries.

Planning work related to habitat conservation and enhancement was undertaken by the Riparian Habitat Committee of the Advisory Council. The Committee developed the Sacramento River Conservation Area Handbook, most recently amended in 2003. The Handbook provides basic principles for restoration work and guidelines for managing the effort. The policies and practices set forth in the Handbook were agreed upon through a Memorandum of Understanding signed by many interested groups at all levels of government including both Colusa and Glenn Counties

The SRCAF, a nonprofit organization, was formed following a recommendation in the Handbook that a locally based organization coordinate management of planning and implementing restoration projects. TNC teamed with the SRCAF to collaborate in the creation of a plan for restoration in the Colusa Subreach, one of several subreaches in the Sacramento River Conservation Area. Colusa Subreach Planning (CSP) is a four-year process (began in 2004), which uses technical research and public engagement to produce an ecosystem restoration plan for the Subreach that balances restoration goals with local concerns. Several technical studies including a physical assessment of land tracts considered for restoration, a report on small mammals and their population due to restoration, as well as an assessment of cultural resources on the tracts were initially planned to guide CSP. As a result of the priority landowner concerns that were identified by the Advisory Workgroup, analyses of fiscal and economic impacts of the work, as well as other planning and research studies, are included as part of CSP.

**Figure 3. Origins of Colusa Subreach Planning Effort**



## OVERVIEW OF METHODS

In conducting the economic and fiscal impact analyses, a number of assumptions are applied to data collected and the results were analyzed with a spreadsheet-based model as well as an input-output model.

### ASSUMPTIONS

- **Land would have remained in agricultural use.** In estimating losses in agricultural output due to the conversion of the tracts to habitat and parkland, the base case assumption is that the land would have remained in agricultural use.
- **Agricultural production values are based on County average crop values.** The estimates of the losses in agricultural output are based on each respective County's Agricultural County Commissioner's crop reports, published annually.
- **Land will remain in agricultural use until conversion to habitat or parkland.** This assumption, based on the current use of the land and statements by the landowner to this effect, means that losses in agricultural production will begin when restoration or improvement work begins.
- **The transfer of land expected to go to the Department of Fish and Game will take place in one to three years and planning and restoration work will occur within five years.** This rough schedule, based on discussions with Department staff, drives the timing of impacts such as the loss of property taxes to the County and the influx of investment to carry out the restoration.
- **The transfer of the Ward property to the Department of Park and Recreation will take place within one year and improvement work will be completed over the next three to five years.** This schedule, also based on discussions with Department staff, drives the timing of impacts such as the loss of property taxes to the County and the influx of investment to construct the park improvements.

### KEY DATA SOURCES

Key information sources for each of the analyses are listed below.

- Annual Crop and Livestock Reports for Colusa and Glenn Counties for 1994 through 2005 were used to estimate crops values and the change over time in production value.
- United States Decennial Census from 1990, 2000 and 2006 estimates were used for basic demographic information.

- Data from the current operators of the land on their actual crop values and purchases made in conjunction with their operation of the land were used to supplement information from the Annual Crop and Livestock Reports and to help estimate the location (i.e., either inside the combined-counties' economy or outside) of supply purchases.
- IMPLAN 2.0, an input-output model was used to estimate a portion of the total economic effects, specifically the multiplier effects for the analysis.
- Colusa County Office of the Auditor-Controller provided current and historical assessments of the properties examined in this study.
- State DFG staff provided information on current and historical appropriations to the payment-in-lieu of taxes (PILT) program, which is intended to provide relief to counties which have lost property tax revenues due to the acquisition of land by or for DFG.

## TOOLS OF ANALYSIS

Estimating the economic impacts of the conversion of portions of five tracts from agriculture use to habitat or parkland uses was generally completed in a two-step process.

### **Measuring Direct Impacts**

The direct impacts of this project are twofold: 1) The cessation of farming on the land means a loss of agricultural value and jobs; and 2) The conversion to habitat and parkland use will involve a short-term investment to make the change and long-term benefit to sectors which profit from visitors to these types of public uses.

The direct impacts to the agricultural sector ([1] above) are calculated based on local data, compiled from the Agricultural Commissioner Offices. These effects make up the bulk of the total effects. The direct effects are composed of jobs and associated income from farming the land and the total sales from goods produced on the land.

The direct impacts to the restoration and construction sectors and the tourism sector ([2] above) are based on estimates of investments to complete the restoration (short-term, direct impacts) and on the number of jobs expected to be needed due to the State recreation area expansion to include the Ward property.

### **Measuring Indirect and Induced Impacts**

Indirect impacts are effects on industries which supply the directly effected sector. Induced impacts are effects on industries where wage-earners from the industries directly and indirectly effected make purchases. These effects, called multiplier effects,

were measured by inputting the direct effects measured based on local sources in the IMPLAN model and interpreting the results. Along with the direct impacts, the indirect and induced impacts make up the total economic impact.

### **The Use of IMPLAN**

The input-output model IMPLAN was used to estimate multiplier effects for the economic impact analysis. IMPLAN was integrated into the analysis as a way to quantify impacts where other approaches could only provide a qualitative evaluation.

Given the limited data tracked at the local level, the IMPLAN model was used to estimate indirect and induced effects rather than only describing the effects qualitatively. This decision was based on both the wide use of the model in economic impact analyses throughout the U.S. and the model's actual quantification of County-level impacts relative to alternative data sources.

## **SUMMARY OF FINDINGS**

The conversion of agricultural land in the Colusa Subreach from private ownership to public habitat or parkland will have several types of impacts. This report evaluates the economic and fiscal impacts associated with the anticipated transfer of changes in ownership and/or land use on five tracts of land in Colusa and Glenn Counties. Specifically, it evaluates the economic and fiscal impacts associated with land use changes and ownership changes of four tracts of land in Colusa County where the land will be transferred from TNC to the State of California. It also evaluates the economic impacts due to the land use changes on one tract in Glenn County.<sup>1</sup> Economic impacts were estimated for the loss of agricultural output, the gains due to visitorship from the additional recreation capacity, and the associated "multiplier" effects of both of these changes.<sup>2</sup> Fiscal impacts, that is, the increase or decrease of revenues and costs to the local governments, were analyzed for Colusa County and, where applicable, for the two cities in the County, Williams and Colusa.

### **OVERALL FINDINGS**

- 1. The overall impacts of the transfer and conversion of the five tracts are relatively small in scale compared to the overall scale of the agricultural industry in both Counties and to the size of the Colusa County budget.**

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<sup>1</sup> The tract in Glenn County is already owned by the Department of Fish and Game; therefore there will be no fiscal impacts associated with a change in ownership.

<sup>2</sup> There are two types of multiplier effects. The first are associated with the changes in economic production, incomes, and jobs at businesses that supplied inputs to the agricultural or recreation activities. The second are associated with the lost economic production, income, and jobs at businesses that benefited from the expenditures of the farm or recreation workers and managers.

The annual economic losses of about \$380,000 each year associated with agricultural land conversion, the annual economic gains of about \$134,000 associated with increased recreational activities in both Counties and the annual loss of \$5,100 in property taxes to Colusa County are relatively small. This is not surprising given the total size of the converted portion of the five tracts—389 acres—relative to the acres in agricultural production in the two counties—about 900,000 acres.

**2. The results of this study should be considered in the broader context of the Counties' agricultural industries and public finances.**

Although the overall impacts of the tracts studied in this analysis are small, the impacts should be considered in light of the existing conditions in the Counties' agricultural industries and the Counties' public finances as well as the cumulative impacts of conservation efforts. For example, although Colusa and Glenn Counties have experienced real growth in their farm gate production value over the last decade, the agricultural industry faces numerous challenges, including the loss of agricultural land due to rural residential development, urbanization, and conservation. A broader evaluation of the cumulative effects of agricultural land conversion was beyond the scope of this study.

**3. With the recent lack of funding for the State DFG's Payment In Lieu of Taxes (PILT) program and the lack of any program for filling lost property taxes for DPR land, the fiscal impacts on the County from the ownership transfer to the State will continue to be negative.**

Recognizing the typically negative fiscal impacts associated with the transfer of ownership from a private party to the State, the PILT program was established in 1965 to compensate affected local governments. This program is, however, underfunded. Given the lack of other funding available to balance these impacts, such transfers of ownership, including those evaluated in this analysis, will continue to be fiscally negative from the perspectives of local governments.

## ECONOMIC IMPACTS

The economic impacts analysis was conducted for both Colusa and Glenn Counties. Economic impacts resulting from the change in land use (from agriculture to both State parkland and State Fish and Game land) were evaluated for 372 acres in Colusa County and 17 acres in Glenn County.

### Ongoing Annual Impacts

**4. The total economic effect in both Counties due to the conversion of agricultural land sums to a loss of \$379,400 in output annually.**

The total job loss in both Counties is estimated at about 3.3. The direct impact of the agricultural conversion is a loss of about \$306,000 in output, with the additional losses from multiplier effects.



**5. The total “multiplier” effect for the impacts found in the agricultural industry is about 1.24.**

This level of a multiplier effect is the expected level for the agricultural industry in economies the size of Colusa and Glenn counties, combined. The multiplier effect is a measure of the degree to which industries in an economy are interlinked, e.g., California's agricultural economy is relatively interlinked, meaning that much of the value added to agricultural products - processing and canning tomatoes for sauce sales or peanuts for peanut butter - takes place within the State. As a comparison, in California's case, which is the largest agricultural economy in the world with diverse operations and value-added processing, State-wide multiplier effects were estimated at 2.15 for the entire economy.<sup>3</sup> The sector with the highest multiplier effect, dairy which has extensive processing associated with its production, has a multiplier effect of about 2.40.

**6. The total effect on output represents a 0.04 percent annual decrease in the overall agriculture farming output of the two Counties.**

Based on 2003 data, total agricultural farming output was \$897 million for Colusa and Glenn Counties.

**7. Measured recreation impacts, which include additional spending from visitors to the expanded Colusa-Sacramento River State Recreation Area (CSRSRA) and additional employees of the CSRSRA, are estimated to add a total output of about \$134,200 and 2.5 additional jobs.**

Additional visitor spending is based on an estimate of new visitors associated with the increase in the number of campsites at the CSRSRA. Also, DPR officials expect to hire two new seasonal employees needed to maintain the increase in acreage to the CSRSRA.<sup>4</sup> These two impacts result in a direct increase of 2.1 jobs and about \$101,800 in total output with the additional impact coming from multiplier effects.

### **Short-Term Impacts**

**8. The impact of restoration and parkland improvement investments (short-term impacts, over the next five to ten years) are estimated at about \$684,000 in direct labor personal income gains and about \$368,000 in local supply purchases.**

These findings are based on an estimate that 50 percent of the restoration and park improvements dollars will remain in the respective County's local economy.<sup>5</sup>

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<sup>3</sup> Based on the 2000 report “Measure of California Agriculture”, published by the University of California, Agricultural Issues Center.

<sup>4</sup> Seasonal employees work year round, four days per week. DPR officials note that two new full-time employees are also needed in the CSRSRA due to the new acreage. These additional hires are not included in the analysis based on budgetary constraints experienced in the Department in recent years.

<sup>5</sup> The total anticipated investment is about \$5,500 per restored acre of DFG land and between \$500,000 and \$1 million to the Ward tract initially.

## FISCAL IMPACTS

The fiscal impact analysis was conducted for Colusa County. One of the properties examined in the Economic Impacts analysis is located in Glenn County, but that property is currently under DFG ownership; therefore, there will be no loss of property taxes, the primary determinant of fiscal impact associated with this parcel. The loss of property tax revenue in Colusa County will be partially mitigated by payments from the State.<sup>6</sup> Service costs will remain largely unchanged under the new ownership/land use scenario and sales tax losses and gains will largely cancel one another out.

### Property Tax Impacts

- 9. The estimated impact on revenue to Colusa County's General Fund from the loss of property taxes is about \$5,100, about 0.02 percent of the County's \$26.4 million approved 2005/2006 General Fund budget.**

The County's general fund is the highest recipient of property taxes allocated from the State to local agencies. Property taxes make up a high proportion of the County's discretionary spending and are therefore viewed as an important source of revenue.

- 10. Total property tax revenues for the four tracts of land under study sum to about \$21,500 in revenues to all jurisdictions.**

Colusa County receives about 23.7 percent of all property taxes for lands assessed in the unincorporated areas. The total assessed value of the tracts under study, which total about 510 acres, is about \$2.1 million.

- 11. Prior to TNC's purchase of the four tracts of land which triggered their reassessment, revenues generated from the lands totaled about \$10,800 in property taxes.**

Because TNC's purchase triggered a reassessment of the properties' values, the property tax revenues generated by the tracts increased by about 48 percent.<sup>7</sup>

### Other Fiscal Impacts

- 12. Annual impacts on local revenues due to changes in sales tax are estimated to net a loss of revenue to Colusa County of about \$435 per year.**

These impacts are based on the net impact of: 1) an estimated revenue loss due to a decline in farming-related purchases and 2) an increase in purchases by visitors to the CSRSRA.

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<sup>6</sup> Though payments from DFG for property tax payments have been suspended for the last five fiscal years, a funding provision in the program stipulates that back payments will be made.

<sup>7</sup> Under Proposition 13, property taxes are capped at 1 percent of assessed value, with an allowed increase of up to 2 percent per year until a property is sold, which triggers a new assessment.

- 13. County costs may increase marginally—although fire and law enforcement providers will theoretically have fewer acres under their purview, additional public lands may increase the assistance County services provide to State officials.** Sheriff providers do not anticipate an increase or decrease in service costs due to the ownership/land use change. The Sacramento River Fire Protection District anticipates an increase in its responses to calls for service based on the increased size of the CSRSRA.
- 14. Costs to local agencies for air and water quality monitoring are unlikely to change because of the ownership/land use change.** Currently, water quality monitoring is administered by the Sacramento Valley Water Quality Coalition while the California Air Resources Board provides air quality monitoring. Water quality monitoring is now required on agricultural land and, after the transfer, will be required for any land with wetlands with the landowners responsible for supplying funding for this monitoring. No changes in the costs for air quality monitoring are expected.

#### OTHER IMPACTS

- 15. Impacts due to an increase in rodent or pest populations are currently under study in a separate effort.** The extent of potential rodent and pest damage to nearby farming lands will depend on various factors including the amount of farmland adjacent to potential restoration areas, the types of crops planted, and the extent of restoration. The current land use make up of the Subreach (which totals about 5,466 acres) is about 55 percent riparian habitat, 22 percent orchards, 21 percent fallow or in row crops, and about 2 percent in other uses such as flood control. In order to fully examine the issue of rodent and pest populations, this issue is being examined in a separate process and will not be quantified here.
- 16. Habitat restoration's impact on the area's propensity for flooding, whether positive or negative, is also under study in a separate report.** The wildlife habitat restoration plans are subject to permit approval by the State Reclamation Board to ensure that they do not substantively affect the integrity of the flood control system. Two-dimensional hydraulic modeling of the effects of the restoration upon flood flows is being prepared as a part of the CSP. The modeling will indicate changes in flood evaluation and velocity of flow. The results of this modeling will be shared with local landowners as well as the Reclamation Board. Habitat restoration will not be permitted to proceed unless it is approved by the Reclamation Board as meeting its standards.

## REPORT ORGANIZATION

**Chapter I, Introduction and Summary of Findings**, provides a description of key findings and background on the project. **Chapter II, Project Area: Existing/Planned Conditions** describes the project location, current conditions of the tracts of land, and plans for restoration or improvement. The purpose of the report, key assumptions and methodology are contained in **Chapter III, Approach to Analysis**. **Chapter IV, Economic Impacts Analysis**, describes the results of the economic impacts analysis due to the proposed land use change and ownership change on the two County economies. **Chapter V, Fiscal Impacts Analysis**, provides the results of the project's impact on the revenues and costs of local Colusa County agencies. **Selected Bibliography and Personal Communications** are provided at the end of the study.

## II. PROJECT AREA: EXISTING/PLANNED CONDITIONS

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### COLUSA SUBREACH

The Colusa Subreach is a 21-mile section of the Sacramento River between the unincorporated community of Princeton on the north and the City of Colusa on the south. The north boundary of the Subreach is marked by the site of the former Princeton Ferry, at River Mile (RM) 164.5 and the south boundary is the Colusa Bridge at RM 143.5. The area is bounded on the east and west sides of the river by flood control levees. The area totals about 5,466 acres, with about 5,094 acres in Colusa County and 372 acres in Glenn County.

**Appendix A-1** provides a description of the types of native plant communities which are targeted for restoration. The species include willow shrub, Cottonwood Riparian Forest, Mixed Riparian Forest, Valley Oak Riparian Forest, and Valley Oak Woodland. Trees and shrubs in these communities support populations of yellow-billed cuckoos and other small and medium bodied land birds. In addition, the restoration of spawning gravels, sand and gravel bars, and shaded riverine aquatic habitat provides important settings for spawning, feeding and cover for salmon and nesting areas for water birds.

### SITE CONDITIONS

Four tracts of land are planned for transfer to the State of California; DFG already has title to a fifth tract. **Table 1** summarizes basic information about each tract's current use/ownership. **Table 2** provides information about future uses and ownership. Each tract is described below. (The tracts are listed in location order, from north to south.)

#### Womble Tract

Location and Access. Womble is located on the east side of the River at RM 162, about one mile south of Princeton. Two points of access—one via boat on the River, the other on foot by crossing the levee from River Road—allow entry to the site.

Size and Use. This tract is about 307 acres in size. DFG controls the site and leases about 58 acres to a local farmer. The lessee planted baby lima beans during the 2006 growing season and is considering safflower and sunflower crops for the site. The property is not currently irrigated. As State DFG land, the site is currently open to the public.

Planned Future Conditions. The proposed restoration area covers about 20 percent of the site, 58 acres out of the total 307. Womble will be integrated into DFG's lands as riparian habitat with public recreation uses permitted.

**Table 1**  
**Restoration Tract Information**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Tract	County	Location (RM/ County) [1]	Total Acres	Total Ag. Acres [2]	Existing Ag.	Typical Flooding
Womble	Glenn	162L/ Glenn	40	17	Sunflower/ Safflower/ Beans	Generally every year
Womble	Colusa	162L/ Colusa	267	41	Sunflower/ Safflower/ Beans	
Jensen	Colusa	161L/ Colusa	105	83	Walnut orchards	1 to 2 years
1000-acre Ranch	Colusa	160R /Colusa	60	50	Prune orchard	2 to 4 years
Boeger	Colusa	148L/ Colusa	129	55	Wheat/ Safflower	1 to 4 years
Ward	Colusa	145.5R/ Colusa	238	143	Wheat/ Lima beans	1 to 4 years
Colusa - Total Acres			799	372		
Glenn - Total Acres			<u>40</u>	<u>17</u>		
Total All			839	389		

[1] River mile followed by either "L" or "R" indicates which side of the River the tract is located on.

"R" means the right side and "L" means the left side, when facing downstream.

[2] Based on the acres used for agriculture on the tract at the time of TNC purchase. Purchases occurred between 2000 and 2003.

Sources: *Initial Colusa Subreach Background Report* (August 2005); Economic & Planning Systems



**Table 2**  
**Future Ownership and Use**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Tract	County	Total Acres	Total Restoration Area	Proposed Future Ownership	Proposed Future Use
Womble	Glenn	40	17	Department of Fish and Game [1]	Riparian habitat with public recreation [2]
Womble	Colusa	267	41	Department of Fish and Game [1]	Riparian habitat with public recreation [2]
Jensen	Colusa	105	83	Department of Fish and Game	Riparian habitat
1000-acre Ranch	Colusa	60	50	Department of Fish and Game	Riparian habitat
Boeger	Colusa	129	55	Department of Fish and Game	Riparian habitat
Ward	Colusa	238	143	Department of Park and Recreation	Extension of Colusa-Sacramento River State Recreation Area
DFG-Total Acres		601	246		
DPR-Total Acres		<u>238</u>	<u>143</u>		
Total All		839	389		

[1] Womble is currently DFG land.

[2] This is the current use on Womble.

Sources: *Initial Colusa Subreach Background Report* (August 2005); Economic & Planning Systems

### **Jensen Tract**

Location and Access. Jensen is on the east side of the River at RM 161. To the north and partially to the east of the property is the Womble tract, while the River is on the property's west. Access to the site is across a private easement which joins the site with River Road.

Size and Use. This tract is about 105 acres. 22 acres are now riparian vegetation and the remaining 83 are walnut orchards. The orchards are irrigated from an offsite well.

Planned Future Conditions. About 83 acres of the 105 are planned for restoration. Jensen is anticipated to be integrated into the adjoining DFG lands as riparian habitat, creating a contiguous habitat corridor alongside Womble, with public recreation allowed.

### **1000-acre Ranch Tract**

Location and Access. 1000-acre Ranch is on the west side of the River, at RM160 about a mile south of the Jensen tract. Access to the site from Highway 45 is across a private easement.

Size and Use. 1000-acre Ranch is about 60 acres in size, 50 of which are prune orchards while the remaining 10 acres are covered by the levee. The site is irrigated from an offsite well.

Planned Future Conditions. Fifty of the 60 total acres are planned for habitat restoration. 1000-acre Ranch is anticipated to be integrated into the adjoining DFG lands as riparian habitat, with public recreation allowed.

### **Boeger Tract**

Location and Access. Boeger is located at RM 148 on the east side of the River, about two and a half miles north of the City of Colusa. Access to the site is available from River Road across a private easement.

Size and Use. Boeger is about 129 acres in size, with 55 acres in row crops and the remaining 74 acres in riparian habitat. The property is not currently irrigated.

Planned Future Conditions. 55 of the 129 acres are planned for habitat restoration. Boeger is anticipated to be integrated into DFG wildlife area as riparian habitat, with public recreation allowed.

### **Ward Tract**

Location and Access. The Ward tract is located about one mile north of the City of Colusa on the west side of the River at RM145.5. It adjoins the CSRSRA to the south and the River to the east. Access to the Ward site is from the levee road to the west.

Size and Use. The Ward property is the largest tract under study, about 238 acres. About 143 acres of the 238 are in row crops while the remaining 95 is in riparian habitat. The property is not currently irrigated.

Planned Future Conditions. Ward will be integrated into the CSRSRA and transfer to DPR is anticipated in late 2006. Planned improvements include expansion of an existing seasonal wetland, the development of a primitive campground, additional restrooms, hiking trails, a meadow, and riparian woodland.<sup>8</sup> The State DPR will manage the area.

In August 2006, a concept Master Plan (Concept) for the integration of the Ward tract into the CSRSRA was developed. The additional acreage would more than quadruple the current size of the CSRSRA. The Recreation Area has a variety of camping and picnicking facilities. Wildlife in the area includes deer, raccoons, possums, foxes, skunks, and muskrats. Also, birds spotted in the area include ring-necked pheasants, California quail, mallard ducks, Canada geese, western meadowlarks, northern flickers, and ospreys. Anglers in this area seek the following varieties of fish: king salmon, steelhead rainbow trout, striped bass, catfish, shad, carp, and sturgeon.<sup>9</sup>

The Concept plan includes recreational improvements to integrate the Ward property into the existing CSRSRA. The Concept plan is shown in **Figure 4**. The Ward property will provide a primitive camp ground with eight additional sites for car and tent camping. Restrooms, parking and hiking trails as well as day-use picnicking will be available. Riparian woodland and an expansion to an existing wetland are planned. The entire area is subject to flooding and thus would be available on a seasonal basis only.

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<sup>8</sup> The CSRSRA is an approximately 65-acre State recreation area with 12 reserve able campsites, a group camp area, flush toilets and showers, a boat ramp (to be discussed more in the Recreation section), and a parking lot which can accommodate boat trailers.

<sup>9</sup> California State Parks, 2001 information brochure on the Colusa-Sacramento River State Recreation Area.

Figure 4: Ward Property Concept Plan



### III. APPROACH TO ANALYSIS

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This section details the purpose of the study, the key assumptions used throughout the remainder of the report, and the methodology and data sources which underlie the analyses.

#### PURPOSE

##### ECONOMIC IMPACT ANALYSIS

The purpose of the economic analysis is to estimate the economic impacts of the transfer of private land to State DFG and State DPR land. Specifically, the analysis focuses on examining the economic impacts of (1) replacing agricultural as the primary land use on about 389 acres (372 acres in Colusa County and 17 acres in Glenn County) with State parkland and State managed riparian habitat and (2) opening 839 acres (389 agriculture acres above plus 450 private, non-agriculture land) in Colusa and Glenn Counties to the public.<sup>10</sup>

##### FISCAL IMPACT ANALYSIS

The purpose of the fiscal analysis is to estimate the impact on local government finances of the transfer of 238 acres from TNC to the State DPR and 294 acres from TNC to the State DFG. These acres include the Jensen, 1000-acre Ranch, Boeger, and Ward tracts, all located in Colusa County. The Womble tract in Glenn County has already been transferred to the State, thus any impacts on Glenn County's budget have already occurred. The impacts measured here are relative to costs and revenues to Colusa County and, where applicable, to the two incorporated cities in the County, Colusa and Williams.

#### ASSUMPTIONS

In order to complete the two analyses, several assumptions about future conditions are made, based on current indications of what is likely to transpire. Key assumptions are described below.

**The number of acres in agricultural use when The Nature Conservancy purchased the five properties studied here would have continued to be used for agriculture in the future.** When TNC and DFG purchased the properties, a total of about 389 acres were working agricultural land, out of 839 acres purchased. For this study, we assume that these 389 acres would have continued to be productive cropland. This assumption is

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<sup>10</sup> 307 of these acres are currently open to the public, though the area planned for restoration is now leased for farming.

reasonable because all of the lands are within the levee system and flood periodically, thus viable uses for the land are constrained to those which are not dependent on infrastructure which would be damaged in the floods (e.g., agriculture, habitat, or public land instead of housing or commercial development, which are not viable uses).

**The baseline for agricultural production in the economic impacts analysis is based on County averages of crop values with data on current agricultural output used as a second source of information; the baseline for property tax revenues in the fiscal impacts analysis are revenues generated under TNC ownership.** See sidebar for notes on these assumptions.

**Three properties, 1000-acre Ranch, Jensen, and Boeger, will be transferred to DFG from TNC within one to three years Ward will be transferred to the State DPR within one year.** The primary economic and fiscal impacts in this report will take place once TNC transfers the property to the State, thus ending property tax payments and terminating leases with farmers who now operate the land. In order to model these impacts, it is assumed that this land transfer will take place in 2008 for Ward and 2009 for all other tracts.

**Restoration work on all properties transferred to DFG will be completed within five years.** Plans for the restoration work, and associated investment in the local area, do not yet specify a time-frame for the completion of the work. Understanding that planning and permitting may take one to three years, and restoration work may last another one to two years, a five-year duration for the restoration work is assumed. Specific timing will depend on funding availability.

**Work on integrating the Ward property into the CSRSRA will be completed over the next three to five years.** Planning, including public meetings and outreach, for programming on the Ward property has resulted in a draft Master Concept Plan. This master concept plan is

#### A Note on the "Baseline"

In both the fiscal and economic analyses, concerns were raised in regards to the baseline - that is, what the impacts are being compared to - of the studies.

Specifically, for the economic analysis, a number of stakeholders noted that crop values provided by the current operators, who are TNC tenants, may not reflect the full value of the land, as short-term lessees do not have a stake in cultivating the land to its full potential. On the other hand, short-term tenants have an incentive to work the land in such a way that their profits today are maximized. Both crop values provided by tenants as well as historical crop values for the County are considered in the economic analysis to respond to this concern.

For the fiscal analysis, the revenues from property taxes to Colusa County are higher now than they were under previous ownership. This is because the purchase of the property by TNC prompted a reassessment. A discussion of which baseline to use - the revenues generated under previous (agricultural) ownership versus those generated under (recent) TNC ownership - is included in the Fiscal Analysis chapter.



the basis for the assumed future condition of the area. For the purposes of modeling, work is assumed to be take place from 2008 to 2012.

**Impacts are modeled over a ten-year period.** Some impacts, such as investments in restoration and park upgrades will begin and end over the short term, while others like increased visitorship and the loss of agricultural production are ongoing impacts. A ten-year study horizon captures both types of impacts.

## METHODOLOGY AND DATA SOURCES

On May 31, 2006, EPS presented a draft design of the fiscal and economic impact analyses to the Colusa Subreach Planning Advisory Workgroup. A finalized version was submitted in early June 2006. **Table 3** illustrates the basic methodology used. Both analyses include: (1) a data gathering phase (documentation and interviews), (2) an estimate of the impacts due to the assumed changes in ownership and land use, and (3) a comparison of the impacts relative to the overall economic and fiscal conditions.

### ECONOMIC

The economic impact analysis examines available data to estimate impacts due to the change in land use from agriculture to habitat/parkland. Specifically, data was evaluated to estimate:

- Crop values, personal income, and economic activity related to agricultural production;
- Investments in restoration work and parkland expansion and associated personal income and economic activity; and
- Additional visitors and visitor spending due to the increased availability of wildlife and recreation acreage.

Important sources of information for estimating impacts due to the ownership and land use change are described below.

**Annual Crop and Livestock Reports.** Agricultural reports for the years 1994 through 2005 from the Colusa County and Glenn County Agricultural commissioners' offices were reviewed to determine an average value of agricultural land by crop type in the respective Counties.

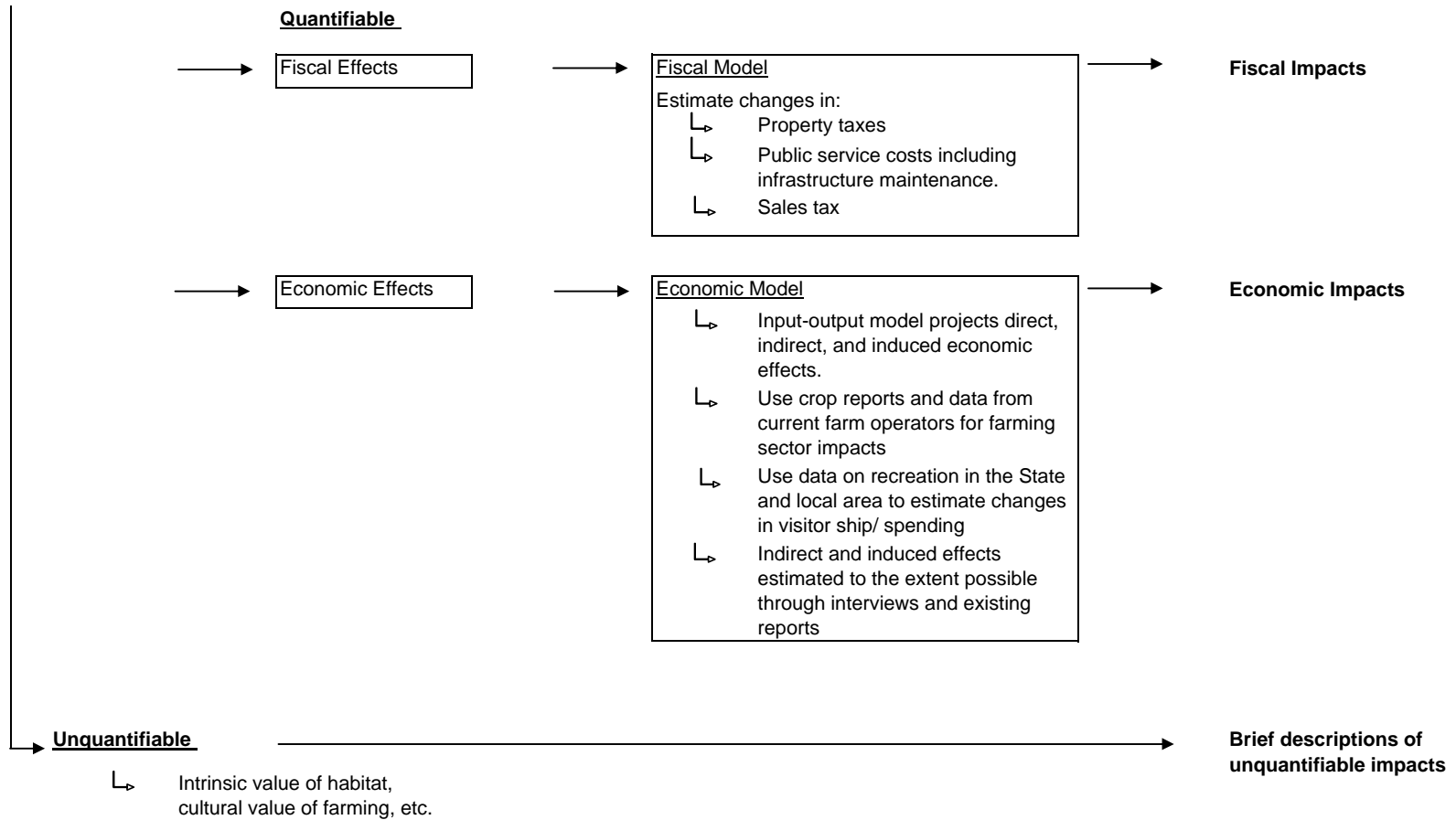
**United States Decennial Census.** The U.S. Census, 1990, 2000, and 2006 estimates are used for basic demographic information.

**Table 3**  
**Methodology Fiscal/Economic Impacts Analysis**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

**Methodology**

**Define Key Relationships**

**Final Study**



Sources: Economic & Planning Systems, Inc.

**IMPLAN 2.0.** IMPLAN 2.0 contains data from 2003 on estimated employment, personal income, and industry-wide economic output.

**Outdoor Recreation in American Life: A National Assessment of Demand and Supply Trends.** This 1999 assessment, which is conducted nationally every ten years, documents trends in visitorship and recreation activities across the nation – data is broken down by region with California included among western states (along with Alaska, Washington, Oregon, and Hawaii). This resource was consulted as background information on recreation trends.

Information from **interviews** is referred to throughout the study. Actual contacts made are documented in the **Selected Bibliography and Personal Communications** section.

### **Economic Impact Analysis: Models and Reality Checks**

An input-output model, IMPLAN, is used to analyze data on economic impacts. IMPLAN is an economic model designed by the U.S. Forest Service/U.S. Department of Agriculture to estimate economic impacts for any county or groups of counties in the United States. IMPLAN uses a large database which includes information on local industries and businesses and their interrelationships, specialized software, and algorithms to calculate existing “multipliers” for all sectors of the local economy. A “multiplier” for a sector quantifies the effect a change in one sector has on:

- (1) Sectors which depend on business from the sector which has experienced the change; this change is called the “indirect effect”; and
- (2) Sectors which depend on the *spending* of employees of the first two sectors; this effect is called the “induced effect”. (See sidebar for details.)

IMPLAN is used in conjunction with local data to estimate the economic impact of changes which are on-going. IMPLAN is not used to estimate ripple effects for short-term impacts which will only last a handful of

#### **IMPLAN: Effects Measured**

**Direct Effects:** Change in production output, employment and wages that occur on the lands.

*Industries:* Agriculture/  
Recreation

**Indirect Effects:** Change in production output, employment, and wages in sectors which supply the directly effected industries.

*Industries:* Agricultural  
suppliers/Recreation vendors

**Induced Effects:** Change in production output, employment and wages due to the change in local consumer spending that occurs when employment increases or decreases.

*Industries:* Retailers of consumer  
goods

#### **IMPLAN: Effects not Measured**

**Downstream Effects:** Impacts to industries which rely on the industry directly impacted for inputs.

*Industries:* Walnut processors,  
prune processors

years. The below listing provides an overview of the impacts estimate where IMPLAN is useful and the types of specialized, local data which is inputted into the model.

#### Inputs Underlying Estimated Impacts

<b>Input</b>	<b>+</b>	<b>Input</b>	<b>=</b>	<b>Estimated impact</b>
IMPLAN factors and multipliers	+	County Agricultural Reports & Current operator sales	=	Direct, indirect, and induced losses due to the loss of agricultural production.
Local farming information	+	County Agricultural Reports	=	Downstream effects (Impacts on industries which rely on agricultural products as inputs.)
IMPLAN factors and multipliers	+	DPR visitor ship data	=	Direct, indirect, and induced gains due to the additional recreation land.
Average restoration/ improvement costs	+	Time to restore land to habitat/ improve parkland	=	Total short-term restoration investment.

In addition, when neither IMPLAN nor local data is sufficient to estimate an impact, the impact is discussed in a qualitative manner.

## FISCAL

In order to determine the impact of this land use and ownership change on the County's budget, data from a variety of County and State departments was obtained during interviews and general research. County revenues and costs associated with the present land tenure and use are compared with estimates of revenues and costs under State ownership and public use. To understand the scale and context of these changes, a discussion of overall County revenues and expenditures is included.

The fiscal impact analysis relies on information from the Colusa County Auditor-Controller, Assessor, and State Department of Fish and Game. Key sources used in this analysis are described below.

**County of Colusa, June 30, 2006 Final Budget.** Data from the budget was used to characterize the fiscal context of the County and to describe the level of revenues currently generated through property taxes.

**Colusa County Office of the Auditor-Controller.** Staff in this office provided both current and historical assessments of the properties examined in this study.

**University of California Cooperative Extension Costs Studies.** UC Extension produces periodic studies on the costs of farming across California, for particular crops and areas of the State. These studies were used in conjunction with information provided by current operators of the study tracts to estimate annual spending on inputs to operate the agricultural land.

**Board of Equalization, Sales Tax data by County and Fiscal Year.** Data on sales tax was used to estimate the amount of sales generally occurring in the cities compared with sales in the unincorporated areas of the County.

**Board of Equalization, "Tips for the Agricultural Industry."** Published in July 2004 and revised in April 2006, this document notes which transactions related to agribusiness are regulated under State sales tax laws.

Information from **interviews** is referred to throughout the study. Actual contacts made are documented in the **Selected Bibliography and Personal Communications** section.

## IV. ECONOMIC IMPACTS ANALYSIS

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In order to place the economic impacts estimated into the local context, historical and recent demographic and economic changes for both Colusa and Glenn Counties are discussed. An emphasis on information related to agriculture is made to clearly characterize the relevant economic character of each County. With this context established, the economic impacts of the lost agricultural land are examined and estimated. Impacts resulting from the potential increases in the recreation sector due to the newly public lands are also estimated. Several other types of impacts for which specific quantitative data is not available are discussed in a qualitative manner. The chapter concludes with a summary of impacts over a ten-year period.

Throughout the analysis, impacts are related to the combined economics of Colusa and Glenn County. Though the location of much of the land under study is in Colusa County, all of the tracts are in close proximity to the County line and to the urban areas of both Counties' seats (the Cities of Colusa and Willows). Therefore, those affected by the land use change live, work, or shop in both of the Counties. This method of estimating the impact of the combined economies of the two Counties is consistent with the Advisory Council's specifications for this analysis.

### BACKGROUND DEMOGRAPHIC/ECONOMIC DATA

**Population.** Colusa and Glenn Counties are both rural counties in California. Between 1990 and 2006, Colusa County grew from 16,275 residents to 20,795, an average annual growth rate of about 1.7 percent. During the same period, Glenn County began 1990 with 24,798 residents and has since grown to 27,921 residents, an annual average change of about 0.8 percent per year. Between 1990 and 2005, California grew at an average annual rate of about 1.4 percent; thus Colusa is growing slightly faster than the State and Glenn is growing at a slower rate. **Table 4** provides population estimates and projections through 2011.

**Age Distribution.** Since 1990, the distribution of the population by age in each County has been changing. In both Counties, the proportion of children (up to age 17) has been decreasing, though this proportion is still higher than the State's overall proportion (about 29 percent versus about 26 percent Statewide). In Colusa since 1990, the proportions of 18 to 34 year olds and 35 to 54 year olds increased. In Glenn County since 1990, proportions of 35 to 54 year olds and those over 75 increased. **Figure 5** illustrates these demographic shifts.

**Household Income.** Median household income in both Counties has increased since 1990. In Colusa County median household income in 1990 was \$24,900; in 2006 it is estimated at \$41,700, an increase of about 67 percent, or an annual average increase of 3.3 percent, which is slightly higher than the rate of inflation. For Glenn County, median household income was \$22,800 in 1990. By 2006, it increased to about \$36,350,

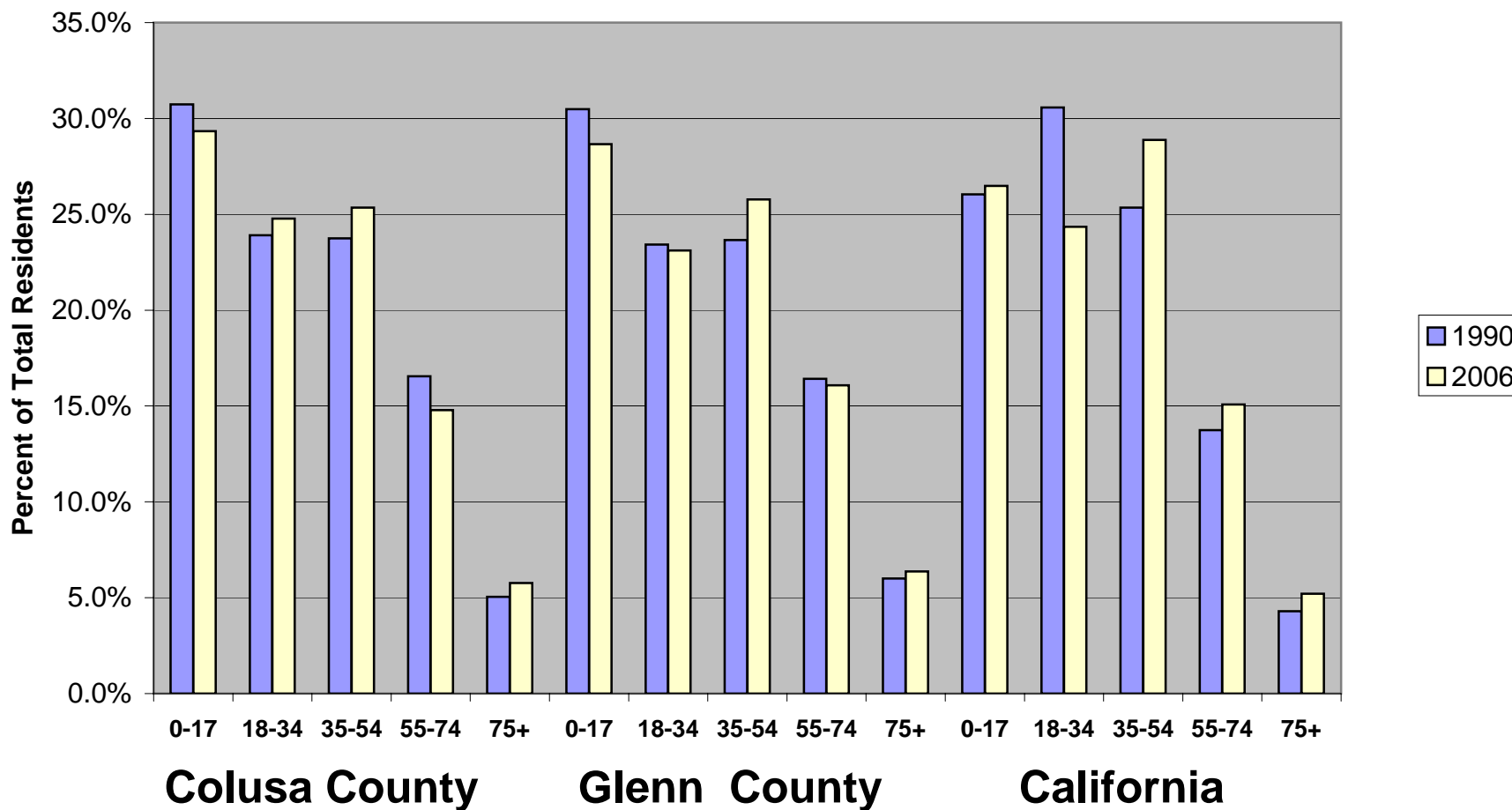


**Table 4**  
**Population**  
**Colusa Subreach Fiscal and Economic Analysis; EPS # 15093**

County	Population				1990-2011		
	1990	2000	2006	2011	#	%	%/yr
<b>Colusa County</b>	16,275	18,804	20,795	22,286	6,011	36.9%	1.5%
<b>Glenn County</b>	24,798	26,453	27,921	29,169	4,371	17.6%	0.8%
<b>California</b>	29,760,021	33,871,648	36,579,455	38,887,860	9,127,839	30.7%	1.3%

Sources: Claritas, Inc.; Economic & Planning Systems, Inc.

# Figure 5. Age Distribution, Colusa and Glenn Counties and California; 1990-2006



an increase of 59 percent or an annual average increase of 2.9 percent, about the rate of inflation. Statewide, median income is about \$54,500, a 2.7 percent annual increase since 1990. See **Table 5** for data summary.

**Unemployment Rate (seasonally adjusted).** The unemployment rate in Colusa County has increased since 1990 while Glenn County's decreased over the same period. Both Counties however, have rates significantly higher than the overall State average of 7 percent, up 0.4 percent annually since 1990. Colusa County's rate is currently 10.5 percent, up from 8.3 percent in 1990. Glenn County's unemployment rate is 9.2 percent, down from 9.8 percent in 1990. **Table 6** provides unemployment rate information.

**Occupational Distribution.** The 1990 and 2000 Censuses provide information on broad employment trends by industry in Colusa and Glenn Counties. **Table 7** provides a summary of the 1990 Census and 2006 update to the 2000 Census. The proportion of employed adults in Colusa County employed in the farming, fishing, and forestry industries decreased from 28 percent in 1990 to 15 percent in 2006. The proportion of employed adults in Glenn County in the same cluster of industries dropped from 19 percent to 12 percent between 1990 and 2006. During the same period in Colusa County, employees in management, service, and construction/extraction/maintenance occupations increased their relative proportion of employees in the County. In Glenn County, the greatest increases by industry occurred in the management and service occupations.<sup>11</sup>

## EXISTING AGRICULTURAL ECONOMIC CONDITIONS

### STATE AGRICULTURAL ECONOMY

California is the largest agriculture producer in the country, equal in size to the nation's second and third largest farming producers (Texas and Iowa, with \$14 billion and \$12 billion, respectively).<sup>12</sup> California produces the majority of many specialty crops for the United States, including strawberries, kiwis, artichokes, and a variety of nuts and other fruits. Agriculture accounts for about 10 percent of all foreign exports from the State, about \$9.8 billion out of a total of \$94 billion in 2004.

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<sup>11</sup> Because both Counties have fewer than 65,000 people, more detailed data (i.e. employment numbers just for the farming sector) are not available from the U.S. Census.

<sup>12</sup> Facts about California's agricultural production from the California Legislative Analyst's Office, "Cal Facts 2004: California's Economy and Budget in Perspective".

**Table 5**  
**Household Income**  
**Colusa Subreach Fiscal and Economic Analysis; EPS # 15093**

Household Income	1990		2000		2006		1990-2006		
	Number	% of Total	Number	% of Total	Number	% of Total	#	%	%/yr
<b>Colusa County</b>									
Less than \$15,000	1,406	25%	1,075	18%	976	15%	-430	-30.6%	-2.3%
\$15,000-\$24,999	1,389	25%	1,017	17%	918	14%	-471	-33.9%	-2.6%
\$25,000-\$49,999	1,855	33%	2,032	33%	2,093	32%	238	12.8%	0.8%
\$50,000-\$99,999	722	13%	1,575	26%	1,930	29%	1,208	167.3%	6.3%
More than \$100,000	<u>195</u>	<u>4%</u>	<u>382</u>	<u>6%</u>	<u>698</u>	<u>11%</u>	<u>503</u>	257.9%	8.3%
Total	5,567	100%	6,081	100%	6,615	100%	1,048	18.8%	1.1%
<b>Median Household Income</b>	<b>\$24,912</b>		<b>\$35,062</b>		<b>\$41,673</b>		<b>\$16,761</b>	<b>67.3%</b>	<b>3.3%</b>
<b>Glenn County</b>									
Less than \$15,000	2,842	32%	1,817	20%	1,565	16%	-1,277	-44.9%	-3.7%
\$15,000-\$24,999	1,997	23%	1,702	19%	1,598	17%	-399	-20.0%	-1.4%
\$25,000-\$49,999	2,648	30%	3,246	35%	3,251	34%	603	22.8%	1.3%
\$50,000-\$99,999	1,194	14%	1,994	22%	2,396	25%	1,202	100.7%	4.4%
More than \$100,000	<u>159</u>	<u>2%</u>	<u>438</u>	<u>5%</u>	<u>779</u>	<u>8%</u>	<u>620</u>	389.9%	10.4%
Total	8,840	100%	9,197	100%	9,589	100%	749	8.5%	0.5%
<b>Median Household Income</b>	<b>\$22,831</b>		<b>\$32,107</b>		<b>\$36,348</b>		<b>\$13,517</b>	<b>59.2%</b>	<b>2.9%</b>
<b>California</b>									
Less than \$15,000	1,969,258	\$0	1,615,869	14%	1,482,556	12.1%	-486,702	-24.7%	-1.8%
\$15,000-\$24,999	1,576,520	\$0	1,318,246	11%	1,232,776	10.0%	-343,744	-21.8%	-1.5%
\$25,000-\$49,999	3,418,380	\$0	3,061,046	27%	3,017,696	24.6%	-400,684	-11.7%	-0.8%
\$50,000-\$99,999	2,701,491	\$0	3,529,442	31%	3,786,152	30.8%	1,084,661	40.2%	2.1%
More than \$100,000	<u>734,051</u>	<u>\$0</u>	<u>1,987,417</u>	<u>17%</u>	<u>2,765,715</u>	<u>22.5%</u>	<u>2,031,664</u>	276.8%	8.6%
Total	10,399,700	1	11,512,020	100%	12,284,895	100.0%	1,885,195	18.1%	1.0%
<b>Median Household Income</b>	<b>\$35,798</b>		<b>\$47,493</b>		<b>\$54,508</b>		<b>\$18,710</b>	<b>52.3%</b>	<b>2.7%</b>

Sources: Census 1990 & 2000; Claritas, Inc.; Economic & Planning Systems, Inc.

**Table 6**  
**Unemployment**  
**Colusa Subreach Fiscal and Economic Analysis; EPS # 15093**

Unemployment	1990	2000	2006	1990-2006		
				#	%	%/yr
<b><u>Colusa County</u></b>						
Population over 16	11,794	13,632	15,453	3,659	31%	2%
Population in labor force	7,259	8,105	9,166	1,907	26%	1%
# of Civilian unemployed	606	868	967	361	60%	3%
<b>% Civilian unemployed</b>	<b>8.3%</b>	<b>10.7%</b>	<b>10.5%</b>	<b>2.2%</b>	<b>26%</b>	<b>1%</b>
<b><u>Glenn County</u></b>						
Population over 16	18,038	19,300	20,983	2,945	16.3%	0.9%
Population in labor force	10,972	11,588	12,630	1,658	15.1%	0.9%
# of Civilian unemployed	1,070	1,053	1,159	89	8.3%	0.5%
<b>% Civilian unemployed</b>	<b>9.8%</b>	<b>9.1%</b>	<b>9.2%</b>	<b>-0.6%</b>	<b>-5.9%</b>	<b>-0.4%</b>
<b><u>California</u></b>						
Population over 16	22,786,281	26,687,590	27,972,102	5,185,821	22.8%	1.3%
Population in labor force	15,262,900	17,324,829	17,486,518	2,223,618	14.6%	0.9%
# of Civilian unemployed	996,502	1,236,106	1,222,781	226,279	22.7%	1.3%
<b>% Civilian unemployed</b>	<b>6.5%</b>	<b>7.1%</b>	<b>7.0%</b>	<b>0.5%</b>	<b>7.1%</b>	<b>0.4%</b>

Sources: Census 1990 & 2000; Claritas, Inc.; Economic & Planning Systems, Inc.

**Table 7**  
**Employment by Occupation**  
**Colusa Subreach Fiscal and Economic Analysis; EPS # 15093**

Occupation	1990		2006		1990-2006		
	Number	% of Total	Number	% of Total	Change in %	#	%/yr
<b><u>Colusa County</u></b>							
Management, professional, and related occupations	1,130	17%	1,875	23%	26%	745	3.2%
Service occupations	848	13%	1,484	18%	30%	636	3.6%
Sales and office occupations	1,275	19%	1,688	21%	7%	413	1.8%
Farming, fishing, and forestry occupations	1,878	28%	1,207	15%	-92%	-671	-2.7%
Construction, extraction, and maintenance occupations	512	8%	797	10%	21%	285	2.8%
Production, transportation, and material moving occupations	<u>1,010</u>	<u>15%</u>	<u>1,148</u>	<u>14%</u>	-8%	<u>138</u>	0.8%
Total	6,653	100%	8,199	100%		1,546	1.3%
<b><u>Glenn County</u></b>							
Management, professional, and related occupations	1,715	17%	2,821	25%	30%	1,106	3.2%
Service occupations	1,249	13%	2,035	18%	29%	786	3.1%
Sales and office occupations	2,091	21%	2,520	22%	4%	429	1.2%
Farming, fishing, and forestry occupations	1,838	19%	1,347	12%	-58%	-491	-1.9%
Construction, extraction, and maintenance occupations	1,176	12%	956	8%	-42%	-220	-1.3%
Production, transportation, and material moving occupations	<u>1,827</u>	<u>18%</u>	<u>1,781</u>	<u>16%</u>	-19%	<u>-46</u>	-0.2%
Total	9,896	100%	11,460	100%		1,564	0.9%

Sources: Census 1990 & 2000; Claritas, Inc.; Economic & Planning Systems, Inc.

## COLUSA AND GLENN COUNTIES

Crop values as provided in the Annual Crop and Livestock Reports published by the County Agricultural Commissioner's Office indicate fairly stable values between 1994 and 2005. **Table 8** shows the crops values from 1994 through 2005 for both Colusa and Glenn Counties, in both nominal dollars and 2005-adjusted dollars. Total crop values in Colusa County in 1994 totaled about \$378.8 million (in 2005 dollars, adjusted by the Consumer Price Index) while the total value reported for 2005 was \$392.7 million, an annual average change of about 1 percent.

Agriculture is the most significant sector in the Glenn County economy. The total value of agriculture commodities in Glenn County in 2005 was \$393.6 million, up 14 percent or about 1.6 percent per year from \$345.1 million in 1994 (in 2005 dollars). Rice had been the highest valued commodity since the 1930s but in 2005, almonds became the highest valued agricultural good, valued at \$134.5 million.

**Table 9** provides data for 2003 for the agricultural farming industries in both Counties from IMPLAN. This table shows personal income from this industry in the Counties summing to about \$540 million, total employment totaling almost 4,000 jobs, and total industry output at about \$897 million.<sup>13</sup>

### Land in Agricultural Use

Three sources of data provide an overview of the total land in both Counties in agricultural use. They are: (1) County Agricultural Commissioner's Annual Livestock and Crop reports, (2) California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), and (3) United States Department of Agriculture Agricultural Census (most recent data, 2002, Census is published every five years). Each data source provides a slightly different portrait of the land-use situation in the Counties. The USDA data shows a decline in acreage used for farming in both Counties from 1987-1992 then increases both between 1992 and 1997 and between 1997 and 2002. The FMMP data, which is based on aerial mapping combined with local input, show slight losses in agricultural land, less than a 1 percent total loss in agricultural land between 1998 and 2004 in both Counties. **Table 10** provides information from FMMP. Generally, losses in agricultural land are due to gains in land in the "Other Land" category which includes low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or

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<sup>13</sup> "Total Output" from the industries from the IMPLAN model is defined as sales of the finished product for that industry. This total is higher than the County Agricultural Commissioner's Reports, indicating that the IMPLAN model's definition of farming output is somewhat wider than the County Ag. Reports.

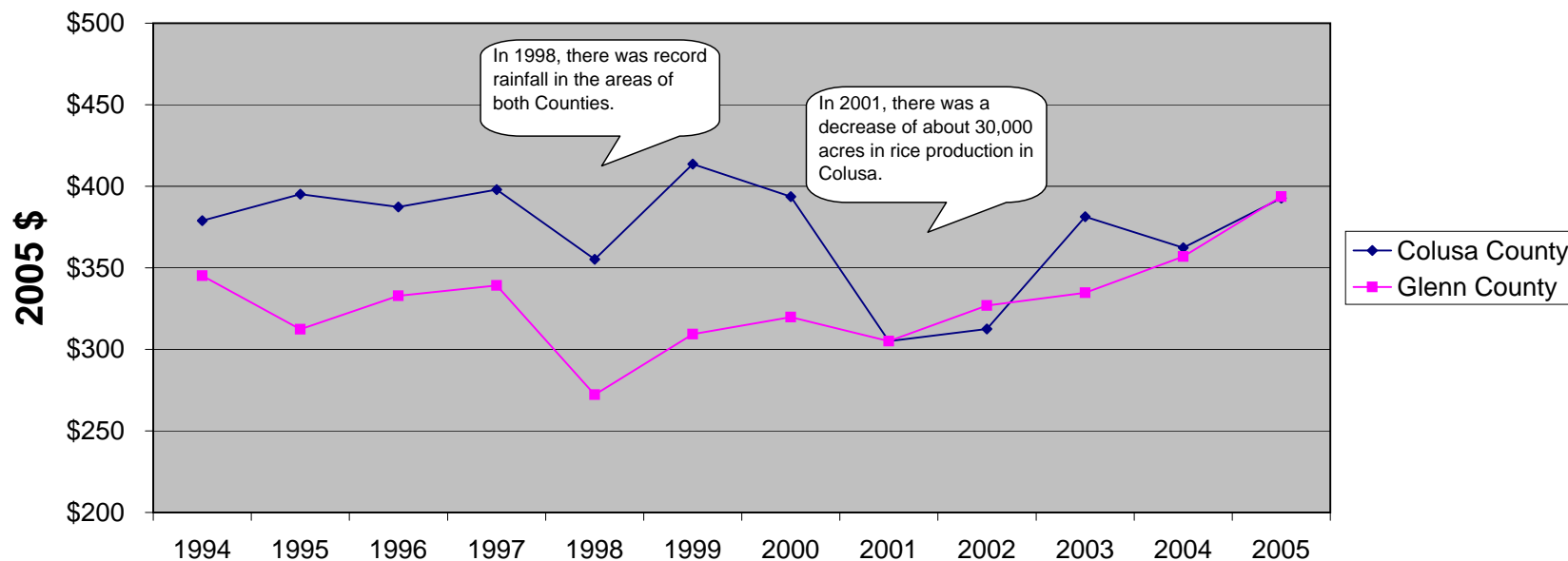
**Table 8**  
**Total Crop Values, Colusa and Glenn Counties; 1994-2005**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

County	Millions of dollars												\$ Change 1994-2005	% Change 1994-2005	Ave. Annual Change
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005			
<b>Nominal \$</b>															
Colusa County	\$284.93	\$304.90	\$306.91	\$322.92	\$293.63	\$351.28	\$345.91	\$277.83	\$290.26	\$361.57	\$351.60	\$392.68	107.7	37.8%	3.7%
Glenn County	\$259.60	\$240.99	\$263.78	\$275.28	\$224.93	\$262.61	\$281.01	\$277.95	\$303.45	\$317.39	\$346.35	\$393.61	134.0	51.6%	4.3%
<b>2005 \$ [1]</b>															
Colusa County	\$378.83	\$395.08	\$387.34	\$397.95	\$355.25	\$413.67	\$393.60	\$304.96	\$312.58	\$381.32	\$362.35	\$392.68	13.8	3.7%	1.0%
Glenn County	\$345.15	\$312.26	\$332.90	\$339.24	\$272.13	\$309.25	\$319.75	\$305.10	\$326.78	\$334.72	\$356.93	\$393.61	48.5	14.0%	1.6%

[1] Values are adjusted based on Consumer Price Index for the western United States.

Source: Colusa and Glenn Counties Annual Crop and Livestock Reports; 1994-2005; Economic & Planning Systems, Inc.

## Total Crop Values, Colusa and Glenn Counties





**Table 9****Colusa and Glenn Counties; Farming Income/ Employment/ Value  
Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

<b>Industry</b> [1]	<b>Personal Income</b> [2]	<b>Employment</b> [3]	<b>Total Output</b> [4]
<u>Agricultural Farming</u>			
Oilseed farming	\$2,565,000	31	\$4,801,000
Grain farming	\$74,129,000	1,699	\$149,407,000
Vegetable and melon farming	\$88,926,000	361	\$118,014,000
Tree nut farming	\$91,880,000	820	\$162,065,000
Fruit farming	\$124,646,000	16	\$199,207,000
Greenhouse and nursery production	\$6,078,000	59	\$6,387,000
Cotton farming	\$8,929,000	737	\$17,536,000
All other crop farming	<u>\$143,234,000</u>	<u>232</u>	<u>\$239,854,000</u>
<b>Total Agricultural Farming</b>	<b>\$540,387,000</b>	<b>3,955</b>	<b>\$897,271,000</b>

[1] Industry data from IMPLAN model, data is most recently collected, 2003.

[2] Includes: wage and salary payments plus any benefits the employee receives; Income to self-employed individuals; Income received from property rents, royalties, or dividends.

[3] Total annual average jobs. IMPLAN basis employment estimates for agriculture on the National Agricultural Statistical Service's accounting of agricultural production in a given year.

[4] Total Output is the total sales revenue from the finished product.

Source: MIG IMPLAN 1999, Economic & Planning Systems, Inc.

**Table 10**  
**Acres in Agriculture-Colusa and Glenn Counties; 1998-2004**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

FMMP Data [1]	Colusa County					Glenn County				
	1998	2000	2002	2004	98-'04 Change	1998	2000	2002	2004	98-'04 Change
Total Acres Inventoried	740,392	740,391	740,390	740,390		849,127	849,129	849,129	849,129	
Prime, Statewide, Unique, Local and Grazing Acres [1] Change in Acres	576,389	573,416 (2,969)	573,682 275	570,499 (3,183)	<b>(5,877)</b>	584,312	583,978 (338)	579,082 (4,220)	578,070 (1,012)	<b>(5,570)</b>
Urban/ Built-Land Acres [2] Change in Acres	4,293	4,257 (36)	4,431 174	4,624 193	<b>331</b>	5,378	5,609 231	5,942 342	6,080 138	<b>711</b>
Other Land Acres [3] Other land Change	157,872	160,878 3,005	160,439 (449)	163,429 2,990	<b>5,546</b>		253,784 107	258,346 3,878	259,220 874	<b>4,859</b>

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[1] "Prime", "Statewide Importance", "Unique Farmland", and "Farmland of local importance" categories are based on the CA Division of Land Resource Protection. Grazing land is land with existing vegetation suitable for grazing.

[2] According to the FMMP website, this category includes land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

[3] According to the FMMP website, the "Other Land" category is land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is placed into the Other Land category.

Source: CA Department of Conservation Farmland Mapping and Monitoring Program; Economic & Planning Systems

aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Staff of both County Agricultural Commissioner's Offices agreed that a relatively small amount of land is currently converted from agricultural to other uses.<sup>14</sup>

Overall, productive farming in these communities face several types of challenges typical in agricultural communities around the State including low margins, keeping up with advances in techniques, increasing land prices, and competing uses. In the case of Colusa and Glenn Counties, loss of suitable agricultural land seems to be a less urgent challenge than in other California communities.

## ECONOMIC IMPACTS

### SCOPE OF IMPACTS

The economic impacts analysis focuses specifically on the change in ownership of 839 acres and the change in land use on 389 of those 839 acres from agricultural production to habitat/park land. These impacts are estimated by evaluating historical agricultural values, by crop and County, and totaling the productive value of the agricultural acreage. These impacts are then inputted into the IMPLAN model to estimate the impact of the loss on related industries. The IMPLAN results are compared against available local data. Recreation impacts are totaled by the estimated new visitorship due to additional campsites on the additional CSRSRA (the Ward property). Additional potential visitorship is discussed qualitatively.

#### Impact of Agricultural Acres Converted

In order to estimate the impact on the Counties' economies due to the loss of agricultural crops, the value in terms of crop output for each tract must be

#### **Economic Analysis Treatment of Short-Term and Ongoing Impacts**

Some economic impacts are based on one-time expenses such as labor and materials to restore agricultural lands to native riparian habitat while others represent permanent changes to the County's economy such as an ownership change from private to State public lands which will have lasting impacts. In order to differentiate between these two types of impacts, **Table 23** summarizes these impacts over a ten year time period as separate line items.

The short-term impacts are shown occurring over years one through five and are focused on the sector directly affected by the impact.

Ongoing impacts are analyzed through IMPLAN, which includes the indirect and induced effects. Because these ongoing impacts represent a permanent change in the local economy, it is expected that industries related to the directly impacted sector will similarly experience permanent economic changes.

<sup>14</sup> These comments bolster the findings of the FMMP data, that a couple of thousand acres over a six-year period have come out of agricultural production. Although the USDA Census of Agriculture shows significant gains in the number of acres in farms in both Counties (which showed gains of tens of thousands of acres between 1992 and 2002), staff in both local Ag. Commissioners Offices agree that agricultural land is neither being gained nor lost in significant amounts. Staff members note that the main sources of land use changes from agricultural uses are conversions to public land and a relatively small amount of conversion for residential uses.

determined. The lost value is estimated based on historical crop values for each County and on recent sales by the current land operators. **Table 11** shows crop values-per acre for walnuts, prunes, wheat, beans, and safflower in Colusa County from 1994 to 2005. **Table 12** shows values for sunflower, safflower, and beans for Glenn County. Both tables show values in both nominal and values adjusted for inflation; the adjusted dollars are used in the analysis and nominal dollars are shown for information only. The value per acre harvested amount captures fluctuations in both the price of the good and the per-acre production of land in the County.

Estimating annual average value for each tract requires some assumptions about what production is forgone by converting the land to park/habitat including assumptions about which crop type would have been planted, whether crops would have been rotated or how much land would have been left fallow, and the future price of crops. Based on discussions with locals familiar with the land, crops are cultivated every year and any crop damage due to flooding is assumed to be mitigated by insurance payments. Other assumptions, by tract, are listed below.

- **Womble:** Assume land would have been used for sunflower, safflower, and bean production.
- **Jensen:** Assume walnut orchard would continue production over entire study time-horizon. Orchard would have to be replaced over study period in order to remain productive over ten year horizon.
- **1000-acre Ranch:** Assume prune orchard would continue production over entire study time-horizon. Orchard would have to be replaced over study period in order to remain productive over ten year horizon.
- **Boeger:** Assume wheat and safflower would be cultivated on land over the horizon of the study.
- **Ward:** Assume wheat and beans would be rotated through the study horizon.

**Table 13** details the resulting annual value of each tract in terms of agricultural production, based on the assumptions above. In addition, data on sales from the current operators is noted in the table. Jensen, 1000-acre Ranch, and Ward tract sales were varying amounts below the County averages for the pertinent crops. Therefore, a midpoint between the County averages and the reported sales are used to assess the total production value of the land. Total annual production value of the land for Glenn County is about \$10,000 and about \$296,000 for Colusa County. The combined impact on the two-county economy is \$306,000.

Using these figures as the annual values lost in the respective farming sectors of each County, the IMPLAN input-output model estimates the indirect effect and induced effects due to these losses. The indirect effects are the total losses in industries which rely on the respective farming sectors for their business. The induced effects are losses to businesses which rely on personal consumption by the workers in both the directly impacted sectors and the indirectly impacted sectors.

**Table 11**  
**Historical Crop Values, Colusa County, per Acre**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

	Total Value per Acre Harvested												Average	
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average	Annual % Change
<b>Nominal \$</b>														
Walnut orchards	\$1,175	\$1,300	\$1,595	\$1,690	\$1,650	\$1,359	\$1,624	\$1,560	\$1,484	\$1,437	\$1,477	\$2,520	\$1,573	9.1%
Prune orchard	\$1,540	\$1,495	\$1,890	\$1,500	\$858	\$1,520	\$1,505	\$862	\$1,216	\$1,224	\$638	\$1,680	\$1,327	13.7%
Wheat	\$336	\$345	\$416	\$324	\$220	\$228	\$210	\$197	\$219	\$264	\$255	\$170	\$265	-4.2%
Safflower	\$360	\$300	\$396	\$390	\$240	\$290	\$308	\$264	\$264	\$216	\$220	\$300	\$296	0.7%
Beans	\$651	\$595	\$651	\$595	\$810	\$588	\$490	\$540	\$488	\$570	\$627	\$576	\$598	0.3%
Sunflower	\$660	\$550	\$683	\$840	\$612	\$660	\$600	\$587	\$564	\$1,035	\$847	\$1,265	\$742	10.1%
<b>2005\$ [1]</b>														
Walnut orchards	\$1,562	\$1,684	\$2,013	\$2,083	\$1,996	\$1,600	\$1,848	\$1,712	\$1,598	\$1,515	\$1,522	\$2,520	\$1,805	6.3%
Prune orchard	\$2,048	\$1,937	\$2,385	\$1,849	\$1,038	\$1,790	\$1,713	\$947	\$1,309	\$1,291	\$658	\$1,680	\$1,554	10.7%
Wheat	\$447	\$447	\$525	\$399	\$266	\$269	\$239	\$216	\$235	\$278	\$263	\$170	\$313	-6.7%
Safflower	\$479	\$389	\$500	\$481	\$290	\$342	\$350	\$290	\$284	\$228	\$227	\$300	\$347	-1.9%
Beans	\$866	\$771	\$822	\$733	\$980	\$692	\$558	\$593	\$526	\$601	\$646	\$576	\$697	-2.2%
Sunflower	\$877	\$713	\$862	\$1,035	\$740	\$777	\$683	\$645	\$607	\$1,092	\$873	\$1,265	\$847	7.3%
<b>Average Change, 2005\$ [2]</b>														2.3%

[1] Values are adjusted based on Consumer Price Index for the western United States.

[2] This average change will be used as an inflator to reflect estimated improvements in crop value in Table 23, the 10 year summary of impacts.

Source: Colusa County Department of Agriculture Crops Reports, 1994-2005; Economic & Planning Systems

**Table 12**  
**Historical Crop Values, Glenn County, per Acre**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Item	Total Value per Acre Harvested												Average	
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average	Annual % Change
<b><u>Nominal \$</u></b>														
Sunflower	n/a	\$648	\$810	\$750	\$488	\$484	\$612	\$699	\$445	\$520	\$653	\$484	<b>\$599</b>	0.3%
Safflower	n/a	\$225	\$365	\$240	\$180	\$225	\$154	\$125	\$188	\$164	\$308	\$317	<b>\$226</b>	10.6%
Beans	\$546	\$618	\$813	\$600	\$815	\$488	\$437	\$669	\$606	\$794	\$925	\$735	<b>\$671</b>	6.8%
<b><u>2005 \$ [1]</u></b>														
Sunflower	n/a	\$840	\$1,022	\$925	\$591	\$569	\$696	\$767	\$480	\$549	\$673	\$484	<b>\$691</b>	-2.4%
Safflower	n/a	\$292	\$461	\$296	\$218	\$265	\$175	\$137	\$203	\$173	\$318	\$317	<b>\$259</b>	7.9%
Beans	\$726	\$801	\$1,026	\$739	\$986	\$575	\$497	\$734	\$653	\$838	\$953	\$735	<b>\$772</b>	4.0%
<b>Average Change, 2005\$</b>													<b>3.2%</b>	

[1] Values are adjusted based on Consumer Price Index for the western United States.

Source: Glenn County Department of Agriculture Crops Reports, 1994-2005; Economic & Planning Systems

**Table 13**  
**Annual Agricultural Value**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Tract	Total Ag. Acres [1]	Existing Ag. [2]	2005 \$			Total Value [4]
			County Average: Value per Acre [3]	Reported Amounts: Lessees	Midpoint: Value per Acre	
<u>Colusa County</u>						
Jensen [5]	83	Walnut orchards	\$1,805	\$1,628	\$1,717	\$142,470
1000-acre Ranch [6]	50	Prune orchard	\$1,554	\$476	\$1,015	\$50,751
Boeger [7]	55	Wheat/ Safflower	\$330	n/a	\$330	\$18,134
Ward [8]	143	Wheat/ Lima beans	\$432	\$402	\$417	\$59,636
Womble	41	Sunflower/ Safflower/ Beans	\$630	n/a	\$602	\$24,688
<u>Glenn County</u>						
Womble [9]	17	Sunflower/ Safflower/ Beans	\$574	n/a	\$602	\$10,237
Colusa County Total	372					\$295,680
Glenn County Total	<u>17</u>					<u>\$10,237</u>
Total Both	389					\$305,917

[1] Based on the acres in agriculture on the tract at the time of TNC purchase.

[2] Based on information from current lessees.

[3] Colusa County values are based on eleven year crop value averages, for the pertinent crop. Glenn County value is based on eleven year averages for all of the crops listed. For the Womble property, it is assumed that the crop-type would be rotated.

[4] Annual value is average value multiplied by the number of acres in the tract.

[5] Walnut orchards now cultivated on Jensen; assume orchards remain for time of this study.

[6] Prune orchards now cultivated on 1000-acre Ranch, assume orchards remain for time of this study.

[7] Over the period TNC has leased Boeger, these crops have been raised on the land.

[8] Wheat and lima beans cultivated on Ward; assume these types of crops remain for time of this study.

[9] Beans now on land; lessee interested in safflower and sunflowers as well. Assume crops will be rotated.

Source: TNC; DFG; Economic & Planning Systems

IMPLAN utilizes multipliers based on industries' interdependencies to calculate the losses in personal income and employment, as well as indirect and induced effects, due to a loss of total output. Using these multipliers, a full picture of impacts on an economy can be captured based on a single change in output (in this study, the loss of agricultural output). **Table 14** illustrates the relationships imbedded in IMPLAN, using the example of a \$1,000 loss of production in grain farming. The table illustrates how a change in direct output in one industry (the highlighted box) has multiplier effects for output in related industries' output, wages, and total employment. A complete list of impacts is provided in **Appendix A2-A-7**.

**Table 15** summarizes the results of the total impacts estimated in agriculture. The total impact in both counties on personal income is a loss of about \$97,700 with \$64,000 from losses directly in the agriculture production sectors and the remainder from sectors which rely on producers for their revenue. About 3.3 jobs are lost, with 2 jobs lost directly in agricultural production. Total lost output sums to about \$379,400 with about \$306,000 the direct loss of agricultural production, as calculated in **Table 13**.

Impacts estimated through IMPLAN include those industries directly affected by the economic change, sectors which provide supplies or services to those directly affected industries, and industries affected by the change in personal spending of employees from both industries. IMPLAN does not provide an estimate of impacts on industries that *purchase* inputs from the directly affected industry. These industries "downstream" from the directly impacted sector may be affected if the change is great enough to threaten its supply of inputs. Downstream effects particularly apply to the agricultural industry in the cases of crop/ livestock processing plants which may be strategically located nearby farms in order to minimize transportation costs between direct production and processing. In the case of these

## RESTORATION/PARKLAND INVESTMENT IMPACTS

### Ongoing Impacts

According to California Department of Parks and Recreation, an estimated cost for work on the CSRSRA is about \$500,000 over the short-term and up to \$1 million total over the long-term. Officials note that staffing for the enlarged park should warrant one additional State park ranger and park maintenance employee as well as two seasonal employees. For this analysis, only the anticipated two seasonal workers are included over the study time horizon, as Park officials note that the additional full-time employees may not come aboard for several years. The effects due to the addition of these two seasonal employees are included in a summary of ongoing impacts due to visitor ship gains discussed later in the report (see **Tables 21 and 22**).



**Table 14**  
**IMPLAN Multipliers - Flow Table**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Direct Effect	Indirect Effect	Induced Effects	Total (across all industries)
Grain farming industry only.	Agricultural support industries, maintenance and repair of farm supplies, truck transportation, etc.	Vehicle sales, food and beverage stores, health and personal care stores, gasoline stations, newspaper sales, etc.	
<div>Output</div> <div>(\$1,000)</div>	<div>Output</div> <div>(\$125)</div>	<div>Output</div> <div>(\$80)</div>	= <div>Total Output</div> <div>(\$1,205)</div>
<div>Income</div> <div>(\$496)</div>	<div>Income</div> <div>(\$74)</div>	<div>Income</div> <div>(\$48)</div>	= <div>Total Wages</div> <div>(\$618)</div>
<div>Employment</div> <div>-0.011</div>	<div>Employment</div> <div>-0.0020</div>	<div>Employment</div> <div>-0.0001</div>	= <div>Total Jobs</div> <div>-0.013</div>

Filled in box indicates **change** that begins the reaction the other industries.

Source: MIG IMPLAN 1999, Economic & Planning Systems, Inc.

**Table 15**  
**Agricultural Impacts**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Impact	Personal Income				Employment				Output			
	Direct Effects	Indirect Effects	Induced Effects	Total	Direct Effects	Indirect Effects	Induced Effects	Total	Direct Effects	Indirect Effects	Induced Effects	Total
									[1]			
Agricultural Impact [2]	(\$64,000)	(\$23,700)	(\$10,000)	<b>(\$97,700)</b>	(2.00)	(0.90)	(0.40)	<b>(3.30)</b>	(\$305,900)	(\$41,200)	(\$32,300)	<b>(\$379,400)</b>

[1] \$305,900 is from Table 13, rounded. This is the total estimated impact based on crop values. All other impacts are derived from this number.

[2] All figures rounded to nearest hundred.

Source: IMPLAN Professional ®; Economic & Planning Systems, Inc.

## Short-Term Impacts

Average costs for habitat restoration work is estimated at about \$5,500 per acre, which includes clearing, replanting, maintenance, and monitoring over five years. Typically, the restoration process consists of the development of a plan for the area with all the needed grading, vegetation types, planting schedule and maintenance identified, then the plan must go through the necessary permitting which may be one year or more.

Construction then begins and may last about one year, and finally maintenance and monitoring of the area occurs for about three years to determine the success of the restoration project and to provide any needed remediation. During this three-year period, irrigation, weed control, and plant replacement are ongoing. DFG does not anticipate hiring additional full-time employees based on the acreage expected to be added in Colusa and Glenn Counties.

**Table 16** shows the total estimates to restore habitat lands and integrate the Ward acreage into the CSRSRA. Costs to restore habitat in both Counties total about \$1.36 million, invested over a five year period. Costs to restore integrate the Ward tract into CSRSRA total about \$750,000 over a four year period. A detailed breakdown of costs (divided into labor, equipment, and materials) is not available, but a rough calculation based on previous projects suggests that 60 to 70 percent of costs may be for labor while 30 to 40 percent are split between materials and equipment. **Table 17** provides an overview of potential local impacts due to the restoration and park improvement actions. Assuming that about half of the short-term labor is sourced locally, additional personal income to the area sums to about \$683,500 and purchases of materials are estimated at \$368,000, both over a four to five year term in the local Counties.

## Recreation Impacts

In order to gauge the types and levels of impacts on recreation due to the creation of 839 acres of newly public land, a variety of reports focusing on local and regional recreation trends were reviewed.

After gauging data availability for quantifying impacts, only visitor spending related to increases in the number of campsites in the CSRSRA is quantified. Quantified visitor impacts due to an increase in wildlife viewing, hunting, fishing, and boating activities are not included because of a lack of reliable data. These activities are discussed in a qualitative manner. Their exclusion suggests that the recreation spending impacts estimate is a conservative one.

## Regional Trends

A publication of the U.S. Fish and Wildlife Service has been documenting and analyzing recreation trends every ten years since about 1960. This publication, *Outdoor Recreation in American Life: A National Assessment of Demand and Supply Trends*, forecasts future

**Table 16**  
**Restoration/ Parkland Spending**  
**Colusa Subreach Study Design; EPS #15093**

Tract	Total Acres	Total Acres Restored/ Parkland	Economic Investment (\$/acre)	Total Investment	Timeframe to Complete Proj. (Years)	Total \$ per Year
<u>Colusa County</u>						
Restoration Costs [1]	294	229	\$5,500	\$1,259,500	5	\$251,900
Park Investment [2]	238	143	\$5,245	\$750,000	4	\$187,500
<u>Glenn County</u>						
Restoration Costs [1]	307	17	\$5,500	\$93,500	5	\$18,700
Total Colusa County	532	372		\$2,009,500		\$439,400
Total Glenn County	307	17		\$93,500		\$18,700
<b>Total Both Counties</b>	<b>839</b>	<b>389</b>		<b>\$2,103,000</b>		<b>\$458,100</b>

[1] Cost estimate provided by the Department of Fish and Game. The cost includes: design, hydraulic evaluation, permitting, seed collection and plant propagation, installation of an irrigation system, planting woody species and a native grass understory, 3-years of maintenance, monitoring, and reporting.

[2] Cost estimate provided by State Department of Parks; \$1 million total may eventually be invested over the longer term.

Source: DPR; DFG; Economic & Planning Systems

**Table 17**  
**Short-Term Restoration/ Investment Impacts**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Item [1]	Total [2]	Assumed Local [3]	Total Local Impact
<u>Colusa County</u>			
Restoration Investment	\$1,259,500		
Labor	\$818,675	50%	\$409,338 in personal income
Materials/ Equipment	\$440,825	50%	\$220,413 in purchases
Park Investment	\$750,000		
Labor	\$487,500	50%	\$243,750 in personal income
Materials/ Equipment	\$262,500	50%	\$131,250 in purchases
<u>Glenn County</u>			
Restoration Investment	\$93,500		
Labor	\$60,775	50%	\$30,388 in personal income
Materials/ Equipment	\$32,725	50%	\$16,363 in purchases
<b>Total Colusa County</b>	<b>\$2,009,500</b>		
Labor	\$1,306,175	50%	\$653,088 in personal income
Materials/ Equipment	\$703,325	50%	\$351,663 in purchases
<b>Total Glenn County</b>	<b>\$93,500</b>		
Labor	\$60,775	50%	\$30,388 in personal income
Materials/ Equipment	\$32,725	50%	\$16,363 in purchases
<b>Total Both Counties</b>	<b>\$2,103,000</b>		<b>\$1,051,500</b>
Labor	\$1,366,950	50%	<b>\$683,475 in personal income</b>
Materials/ Equipment	\$736,050	50%	<b>\$368,025 in purchases</b>

[1] Because these investments are expected to be short term, their indirect and induced impacts are not calculated.

[2] Total amounts from Table 16.

[3] The amount of investment which actually remains with the local community is unclear; given that both Counties contain businesses which supply agriculture businesses and have a pool of seasonal laborers on hand who are familiar with the area, the assumed 50 percent allocation seems to be a reasonable or even a conservative amount.

Sources: California Department of Parks and Recreation, California Department of Fish and Game; Economic and Planning Systems

recreation participation, by region.<sup>15</sup> **Table 18** shows results from the projection of recreation use in 2010 and 2020. Common types of recreation related to proximity to a river are summarized including canoeing, motor-boating, fishing, hunting, and wildlife viewing. The number of days people are engaged in the activities is expected to increase by, on average, about 35 percent and the number of participants is expected to increase by about 20 percent. Hunting is the only activity which is projected to experience a decline in both days of participation and number of participants.

### Local Data

**Boating.** Boating on the Sacramento River has increased in the past several years. According to data from Glenn County, boat launch permits for the Butte City and Ord Bend launches have increased by about 80 to 100 percent since 2000. **Table 19** shows boat launch passes and derived river uses. River uses totaled about 2,200 in 2000-2001, based on the number of boat launch permits issued. By 2005-06, that number had more than doubled to about 4,500 uses. Though additional wildlife acreage may attract a greater number of boaters, the primary boat launch in the area is now out of service because of River movement.<sup>16</sup> Boaters could theoretically access the area via the Butte City launch, but the River from that area to Colusa is quite challenging and those unfamiliar with the area may not attempt to pass. Positive recreation impacts to this area will be affected primarily by any change in the boat launch situation. Without an operable launch, the addition of 601 acres (DFG land only) that support a greater variety of wildlife will have difficulty, in and of itself, in attracting non-local visitors.

**Fishing.** Efforts at habitat restoration and fishery enhancements have been ongoing in the study area, particularly since the publication of the 1989 Upper Sacramento River Fisheries and Riparian Habitat Management Plan. Also, the goal of Senate Bill 2261 Salmon, Steelhead Trout, and Anadromous Fisheries Program Act, passed in 1988, was to double the catch rates in the Sacramento River. Though the additional 601 acres of riparian habitat between Colusa City and the community of Princeton undoubtedly could contribute to fish populations, no quantitative data exists to suggest the portion of economic impacts these particular lands may contribute. Effects on angler spending due to habitat restoration are therefore not included in this study.

**Camping/Visitorship.** Total visitors to the CSRSRA are illustrated in **Table 20**. The total number of visitors, which includes paid, free, and camping visits, has fluctuated considerable since 1996, from about 49,000 visitor days to 222,000 in 2005. During 2006, the lack of boat launch utility has reduced camping and visitor ship, according to DPR staff familiar with the area.

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<sup>15</sup> California is in the Pacific region, which also includes Alaska, Washington, Oregon, and Hawaii.

<sup>16</sup> State grant money for the replacement of the Colusa boat launch is currently being sought.

**Table 18**  
**National Recreation Trends**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

		1995 (Millions of Days or Millions of People)	2000 (Projection, Relative to 1995 Index)	2010 [1]	2020
Canoeing	Days	9.70	1.08	1.18	1.29
	Participation	1.20	1.06	1.21	1.30
Motorboating	Days	8.20	1.11	1.38	1.69
	Participation	6.30	1.07	1.22	1.32
Fishing	Days	119.10	1.05	1.16	1.25
	Participation	7.50	1.05	1.12	1.20
Hunting	Days	36.00	0.94	0.95	0.96
	Participation	1.70	0.94	0.85	0.79
Wildlife Viewing	Days	838.50	1.10	1.33	1.58
	Participation	16.70	1.08	1.23	1.37
Average Change in Days, Relative to 1995 Index					1.35
Average Change in Participants Relative to 1995 Index					1.20

[1] An index of "1.08" means the projection is 8% above the 1995 base. In the case of Canoeing Days, the 1995 estimate is that 9.7 million days were spent canoeing in the Pacific region. The projection for 2000, based on the 1.08 index, is for 10.47 million days ( $9.7 \times 1.08 = 10.47$ ).

Source: Outdoor Recreation in American Life; Cordell; Economic & Planning Systems

**Table 19**  
**Number of Boat Launch Permits; Butte City and Ord Bend, 2000-2006**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Item	FY 2000-01	FY 2001-02	FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	No. Change	% Change
Annual Passes [1]	25	39	57	78	91	150	125	500%
Daily Passes	<u>1,731</u>	<u>1,130</u>	<u>2,137</u>	<u>2,922</u>	<u>2,518</u>	<u>2,993</u>	<u>1,262</u>	73%
Total Passes Issued	1,756	1,169	2,194	3,000	2,609	3,143	1,387	79%
Total River Uses [2]	2,231	1,910	2,707	3,702	3,428	4,493	2,262	101%

[1] Cost of annual passes was \$60 in these fiscal years; the cost was reduced to \$30 in FY02-03. Thus, the river-uses assumed per annual pass is 20 in FYs 00-01 and 01-02.

[2] Current cost of an annual pass is \$30; a single use pass is \$3; Total river uses assumes that annual pass holders will use river at least 10 times to justify the cost of their annual pass.

Source: Glenn County; Economic & Planning Systems



### *Camping Visitor Ongoing Impacts*

DPR visitor information is reported annually and is broken down by type of visitor and by Park area. As is shown in **Table 20**, visitorship for camping is relatively steady, compared to the overall attendance which has wider fluctuations, 33 percent average change compared with about 8 percent change for camping. The average number of visitors camping between 1996 and 2005 was about 7,000.

**Table 21** provides the calculated estimate of additional local spending due to increased visitors utilizing the additional campsites planned for the Ward property. Based on the visitorship data in **Table 20**, and the planned new campsites, about 4,700 additional camping visitors are estimated. Some of these campers however, will be residents of Glenn and Colusa County and should be subtracted from this analysis which is totaling *outside* spending in the two-county area. According to a survey completed by the Department of Water Resources from 1980, about 23 percent of visitors to recreation areas along the Sacramento River (269 miles Keswick Dam and Delta at Courtland) are from Counties which are not adjacent to the River and 77 percent are from Counties along to the River. Adjusting for campers from Colusa and Glenn who will use the new campsites, it is assumed that about 70 percent of new visitors are from outside the two Counties.<sup>17</sup>

In order to estimate the level of spending of these types of visitors, DPR data on a Statewide basis is used. In 2005, DPR published a fact sheet on spending related to Parks and noted that 2002 data indicated that 85.2 million visitors generated about \$2.6 billion in visitor spending in local communities, or about \$30 per visitor. FY 99/00 and FY01/2002 showed similar findings, with spending about \$28 and \$30 per visitor, respectively. **Table 21** provides information on the estimated number of new campers to the CSRSRA, per visitor spending amount, and assumed percent of the spending which Colusa County could expect to capture. Based on the visitorship to the existing campsites, the new sites are expected to accommodate about 4,680 visitors per year. Assuming that of the \$30, about half is spent in Colusa County, these visitors would generate about \$49,100 in spending per year.

### Ongoing Direct, Indirect, and Induced Effects

Because this change can be expected to be ongoing—that is the new campsites will continue to attract visitors annually—this new spending is inputted into IMPLAN in order to estimate the ongoing indirect and induced effects. **Table 22** shows the results of new spending due to camping, as well as the planned addition of two new seasonal employees in the CSRSRA. The amounts shown for direct personal income and employment are the result of the additional workers to the CSRSRA. The total output direct effect is the result of the summation of total local visitor spending (estimated above at \$49,100) plus the wages of the additional Park workers. Adding direct, indirect

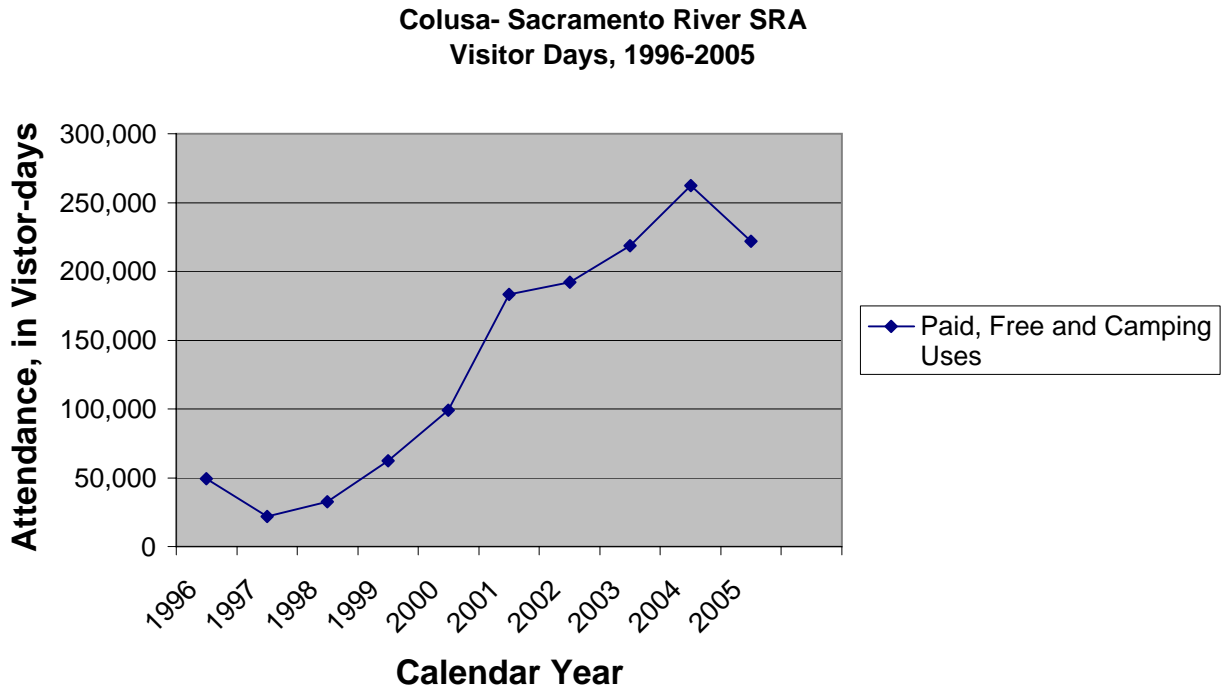
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<sup>17</sup> Because we are tracking new spending in the two Counties, estimated spending by campers from Colusa or Glenn is not counted.

**Table 20**  
**Colusa-Sacramento River SRA Visitorship Data**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Calendar Year	Paid Day Use	Free Day Use	Paid/ Free Attendance		Overnight Camping (12 reservable sites)	% Change, Camping Attendance
			Number	% Change		
1996	7,594	33,608	41,202		8,104	
1997	2,155	13,706	15,861	-62%	5,960	0
1998	6,287	20,544	26,831	69%	5,848	-2%
1999	4,688	51,211	55,899	108%	6,272	7%
2000	10,437	81,658	92,095	65%	6,817	9%
2001	41,983	134,670	176,653	92%	6,515	-4%
2002	26,430	158,764	185,194	5%	6,968	7%
2003	25,086	185,674	210,760	14%	8,020	15%
2004	24,414	228,652	253,066	20%	9,153	14%
2005	21,909	193,441	215,350	-15%	6,524	-29%
Average	17,098	110,193	127,291	33%	7,018	8%

Sources: California Department of Parks and Recreation; Economic & Planning Systems



**Table 21**  
**Total Estimated New Visitors to CSRSRA**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

<b>Recreation Impacts</b>	<b>Item</b>
<b><u>Visitorship</u></b>	
Total Camp Visitors, Average 96-05	7,018
Total number of campsites	12
Visitors	585 per campsite, per year
Estimated additional Campsites [1]	8
Assumed Visitors [2]	585 per Campsite per year
Total additional visitors	4,679 per year
Assumed non-local [3]	70%
Total additional non-local visitors	3,275
<b><u>Spending</u></b>	
Spending [4]	\$30 per person per trip
Assumed proportion to local economy	50%
Total local spending	\$15 per visitor
<b>Total New Visitor Spending [5]</b>	<b>\$49,100 per year</b>

[1] The estimated total number of campsites from Ward property Concept Plan is actually 9: 6 campsites for parties of 6-8 people, 2 campsites for up to 15 people each, and 1 large group site for up to 30. The large group site is a specialty location and it is thought that it may be used less frequently than the other, standard sized sites.

[2] Number of visitors derived from: State Park visitorship data divided by the number of functioning campsites at the current CSRSRA.

[3] This estimate is based on a 1980 Department of Water Resources survey that indicated about 77% of visitors to recreation areas along the Sacramento River reside in eight counties adjacent to the River, with the other 23% from outside those counties. Assuming that Glenn and Colusa residents are twice as likely as residents of the other six counties, it is estimated that about 70% of visitors to the CSRSRA will be from outside Glenn or Colusa.

[4] Estimated \$30 per visitor per trip from California State Park data - Total amount of spending in local areas divided by number of visitors to California State Parks.

[5] Rounded to the nearest hundred.

Sources: California State Parks Visitor Services; Ward Concept Plan (draft); "Dollars and Cents"-California State Parks publication; Department of Water Resources Visitor Survey, 1980; Economic & Planning Systems

**Table 22**  
**Summary of Ongoing Impacts: Recreation plus CSRSRA Expansion**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Impact	Personal Income				Employment				Output [1]			
	Direct Effects	Indirect Effects	Induced Effects	Total	Direct Effects	Indirect Effects	Induced Effects	Total	Direct Effects	Indirect Effects	Induced Effects	Total
Visitor Spending + Two Seasonal Employees [2]	\$63,200	\$2,600	\$7,100	<b>\$72,900</b>	2.1	0.1	0.3	<b>2.5</b>	\$101,800	\$9,600	\$22,800	<b>\$134,200</b>

[1] Visitor spending is estimated per year on Table 21; two seasonal employees estimated by DPR staff.

[2] All figures rounded to nearest hundred.

Source: IMPLAN Professional ®; Economic & Planning Systems, Inc.

and induced effects, visitor spending plus the two seasonal employees is estimated to generate about \$72,900 in personal income, about 2.5 jobs, and about \$134,200 in total economic output.

## OTHER ECONOMIC IMPACTS

**Habitat's impact on adjacent farms.** Currently, a study by EDAW is underway which will estimate changing populations of rodents and pests related to the restoration of habitat. Results from the study are anticipated prior to the final date for this economic analysis. Results will be integrated into the economic analysis, as applicable.

**Flooding potential.** Local community members mentioned that impacts on the potential of changes in flooding due to land use conversion should be explored. Results from this type of study can also be integrated into the economic and potentially the fiscal impact analyses, depending on the results and timing of the study's release.

## SUMMARY OF IMPACTS

A ten-year time horizon is shown in **Tables 23** illustrating all economic impacts discussed in the study. The ongoing impacts in the agricultural and recreation industries are shown first. These are impacts which are expected to occur indefinitely into the future. Over a 10 year period, direct, indirect, and induced impacts due to the loss of agricultural value are estimated at about \$3.5 million.<sup>18</sup> Loss of employment due to these impacts is estimated at about 3.3 jobs. Increases in visitorship due to the addition of new campsites at the CSRSRA and two new seasonal positions are estimated to add about \$805,200 in direct, indirect, and induced positive economic impacts over the 10 year period. About 2.5 additional jobs are associated with this change.

Short-term impacts are also shown on the summary table, though only the direct impacts due to investments or market output are indicated.<sup>19</sup> Investments in the area in materials and short-term employment during parkland improvements and habitat restoration are estimated to total about \$2 million.

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<sup>18</sup> Crop values may fluctuate due to prices, climate, and innovation in crop variety. In order to capture these changes, the impacts are inflated by the average change in the per acre crop values noted on **Table 11**. On average, the per-acre value of crops on this table increased by about 2.3 percent per year.

<sup>19</sup> Indirect and induced effects may not necessarily accrue to the area as short-term employees may not live/spend in the locale.

**Table 23**  
**10 Year Summary - Impacts**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Impact Both Counties 2006\$ [1]	2008 [2]	2009 [3]	2010	2011	2012	2013	2014	2015	2016	2017	Total, 10 Year Period
<b>Ongoing Impacts [4]</b>											
<u>Agricultural Impact</u>											
Direct, Indirect, Induced Output [5]	(\$113,820)	(\$193,982)	(\$310,372)	(\$387,965)	(\$396,723)	(\$405,679)	(\$414,838)	(\$424,203)	(\$433,779)	(\$443,572)	(\$3,524,933)
Employees	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)
<u>Visitor Spending +</u>											
<u>Two Seasonal Employees [6]</u>											
Direct, Indirect, Induced Output	\$0	\$0	\$0	\$0	\$134,200	\$134,200	\$134,200	\$134,200	\$134,200	\$134,200	\$805,200
Employees	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
<b>Short-Term Impacts [7]</b>											
<u>Habitat Restoration/ Recreation</u>											
<u>Area Improvements [8]</u>											
Local Restoration Investment (Materials+Labor \$)	\$0	\$270,600	\$270,600	\$270,600	\$270,600	\$270,600	\$0	\$0	\$0	\$0	\$1,353,000
Local Ward Property Integration (Materials+Labor\$)	\$187,500	\$187,500	\$187,500	\$187,500	\$0	\$0	\$0	\$0	\$0	\$0	\$750,000

[1] All dollar estimates are in 2006\$.

[2] 2008 is the estimated start date for transfer of the Ward property. Ward is assumed to be out of production that year.

[3] By 2009, properties to be transferred to DFG would begin coming out of agricultural production.

[4] "Ongoing Impacts" are those which will continue indefinitely into the future. For these impacts, IMPLAN is used to estimate the indirect and induced effects in addition to the direct effect.

[5] The Ward tract is assumed to come out of ag production in 2008; by 2009, about half of the 839 acres is assumed to be out of production; by 2010 80 percent of the impacts are assumed; and by 2011 the full impact of all 389 acres taken out of production are assumed to occur. During 2008, four of the five tracts are assumed to still be in ag. production. Total impact from Table 15, though impact is slightly higher than that shown in Table 15 because average, historical productivity increases for Colusa and Glenn agriculture are included in the amount.

[6] Visitor spending increases due to the increase in the number of campsites and the two additional seasonal workers hired at the CSRSRA due to the increase in acreage are assumed to start in 2012, when improvements to the Ward tract are complete. Because of the focus on campers spending, this line item may not capture all of the increases in recreation/ visitor ship due to the change in land use. Total impact from Table 22.

[7] Short term impacts are those which will end over the study period (10 years). These impacts are totaled only for the industries directly impacted by the change in land use.

[8] From Table 17.

Source: IMPLAN Professional ®; Economic & Planning Systems, Inc.

## V. FISCAL IMPACTS ANALYSIS

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The fiscal impact analysis is conducted to determine the impact on the budget of Colusa County due to the ownership transfer of 532 acres from TNC to the State and due to the land use change of 331 acres (a subset of the 532 total) from private agriculture to State land, open to the public. The change in revenues from the loss of property taxes and the change in sales tax to the Cities and Colusa and Williams are also calculated.<sup>20</sup> Fiscal impacts to Glenn County are not projected because no land transfer from TNC to the State is currently planned in this County.

### EXISTING FISCAL CONDITIONS

#### COUNTY OF COLUSA

Colusa County's total revenues were \$35.3 million in FY 2003/2004 while the FY 05/06 revenue total decreased to \$34.9 million, a decrease of about 1 percent.<sup>21</sup> **Table 24** shows the adopted budget for FY 2005/2006. It also categorizes County revenues by source. For the finalized budget in FY 2005/2006, the largest source of revenue is Aid from Other Government agencies, making up nearly half of the County's revenues. Property taxes make up about 11 percent of total revenues for this fiscal year, the third highest source of revenues to the County budget. Of the General Fund, property taxes make up about 20 percent of General Fund sources.

Total expenditures by operating fund for the County are shown in **Table 25**. Similar to most counties, the majority of expenditures are made through the General Fund, about 54 percent, through which general County services are provided.

### FISCAL IMPACTS

#### PROPERTY TAX REVENUES

As public lands are not subject to taxes, transferring the ownership of the tracts of land under study in Colusa County from a private entity (TNC) to a public one (the State) would result in a loss of property taxes for the County.<sup>22</sup> The County's current assessed property value is \$863.9 million. The assessed value and property taxes to all jurisdictions for the subject properties are summarized in **Table 26**. The total assessed value for the four tracts which total about 510 acres is about \$2.1 million, about

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<sup>20</sup> Based on the findings of the County's service costs, which were minimal, a full inquiry into any change in service costs for the Cities was not conducted.

<sup>21</sup> In order to compare the two budgets, the "Other Revenue" category from the FY 05/06 is excluded. The FY 03/04 total does not include this source.

<sup>22</sup> Inter-jurisdictional transfers which from DFG to Colusa County which may mitigate the loss are discussed in detail later.

**Table 24**  
**County Revenue Sources**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Item	Approved Budget 05/06	
	Total \$	% of Total Budget
<b><u>Taxes</u></b>		
Secured Property Taxes	\$5,326,023	15%
Unsecured Property Taxes	\$421,541	1%
Taxes other than Property	<u>\$3,067,582</u>	9%
<b>Subtotal: Taxes</b>	<b>\$8,815,146</b>	<b>25%</b>
<b><u>Non-Tax Sources</u></b>		
Licenses and Permits	\$943,589	3%
Fines, Forfeitures/Penalties	\$1,314,575	4%
Revenue from Use of Money	\$195,530	1%
Aid from Other Gov. Agency	\$21,871,179	63%
Charges for Current Services	<u>\$1,825,137</u>	5%
<b>Subtotal: Non-Tax Sources</b>	<b>\$26,150,010</b>	<b>75%</b>
<b>Total County Budget [2]</b>	<b>\$34,965,156</b>	<b>100%</b>

[1] Includes a variety of sources such as development fees, utility reimbursements, and other transfers.

[2] "Other revenue" category totals \$11.7 million, in addition to this amount. It is excluded from the total in order to compare the FY 04/05 budget to the 03/04 budget, which does not include this category in its total.

Source: County of Colusa Final Budget, June 30, 2006; Economic & Planning Systems



**Table 25**  
**County Expenditures by Operating Fund**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Fund	Approved Budget 05/06	
	Total \$	% of Total Budget
<u>Countywide Operating Funds</u>		
General Fund	\$25,163,105	53.9%
Welfare to Work	\$45,000	0.1%
In-Home Supportive Services	\$383,753	0.8%
Categorical Aids	\$3,093,348	6.6%
Department of Public Works	\$2,506,432	5.4%
Bridge Fund	\$1,113,660	2.4%
Building Fund	(\$800)	0.0%
Countywide Road District	\$610,115	1.3%
Fish and Game	\$6,050	0.0%
Airport Special	\$285,174	0.6%
Parks and Recreation	\$1,350,200	2.9%
Migrant Farm Housing	\$431,405	0.9%
Williams Farm Labor Housing	\$22,726	0.0%
Central Services Fund	<u>(\$1,000)</u>	<u>0.0%</u>
Subtotal: Operating Funds	\$35,009,168	75.0%
Special Revenue Funds	\$11,658,634	25.0%
<b>Total Expenditures</b>	<b>\$46,667,802</b>	<b>100%</b>

Source: County of Colusa Final Budget, June 30, 2006; Economic & Planning Systems

**Table 26**  
**Property Tax Assessment**  
**Colusa Subreach Study Design; EPS #15093**

Tract	TNC rptd Size (acres)	Assessor Size (acres)	Parcel #	Assessed Value [1]	1% of Value
Jenson	105	106	012-120019	\$621,883	\$6,219
1000-acre Ranch	60	59.4	012-160062	\$360,338	\$3,603
Boeger [2]	129	109.5	015-030070	\$98,793	\$988
Ward	<u>238</u>	<u>235</u>	015-070136	<u>\$1,072,661</u>	<u>\$10,727</u>
<b>Total</b>	532	509.9		\$2,153,675	\$21,537

[1] Assessed value provided by Colusa County Auditor-Controller's office.

[2] This land is contracted with the State under the Williamson Act. Under the act, the assessment of the land is based on a lower estimate than non-Williamson Act agricultural land.

Source: Colusa County Auditor-Controller; Economic & Planning Systems

0.2 percent of the County's total assessed property value. Based on this assessed value, property taxes from these properties in 2005 totaled approximately \$21,500, to all applicable jurisdictions.

Property taxes are distributed among a variety of city and county funds. The greatest proportion (about 22.5 percent) of property taxes is provided to the County's General Fund. The total impact on the County's General Fund is estimated to be \$5,100, about 0.1 percent of the County's total property tax revenue. **Figure 6** illustrates the allocation of the tracts' property tax revenue to the eight recipient agencies that receive the greatest proportion of the revenues.

Between the years 2000 and 2003, TNC purchased the Jensen, 1000-acre Ranch, Boeger, and Ward tracts. Property taxes assessed on the properties under the prior ownership are shown in **Table 27**. The total value of the four parcels according to the County auditor-controllers office prior to TNC purchase was about \$1.08 million, generating about \$10,800 in property taxes to all applicable jurisdictions and about half the property tax revenue the tracts are now generating under TNC ownership. Because the change in ownership triggered the higher reassessment, the assessed value under the prior owners might be considered the appropriate baseline for the fiscal study. This analysis, however, assumes that the prior landowners may have sold their property to another entity other than TNC. Thus, the change in property taxes is measured from the amount of revenue the properties have been generating for the County under TNC ownership, rather than on revenues it received under prior ownership.

## SALES TAX REVENUE

Sales tax is generated for the County budget when taxable sales occur in unincorporated communities in Colusa. Similarly, sales tax for Williams and Colusa are generated when taxable sales are made within City limits. Altering the land use from agriculture to habitat and recreation uses is likely to have two impacts on sales tax revenue: (1) Sales tax generated from local businesses which sell taxable goods/services to agriculture will decrease as a result of the loss of agricultural land; and (2) Taxable sales to visitors who can be accommodated with the additional State public land acreage will increase.

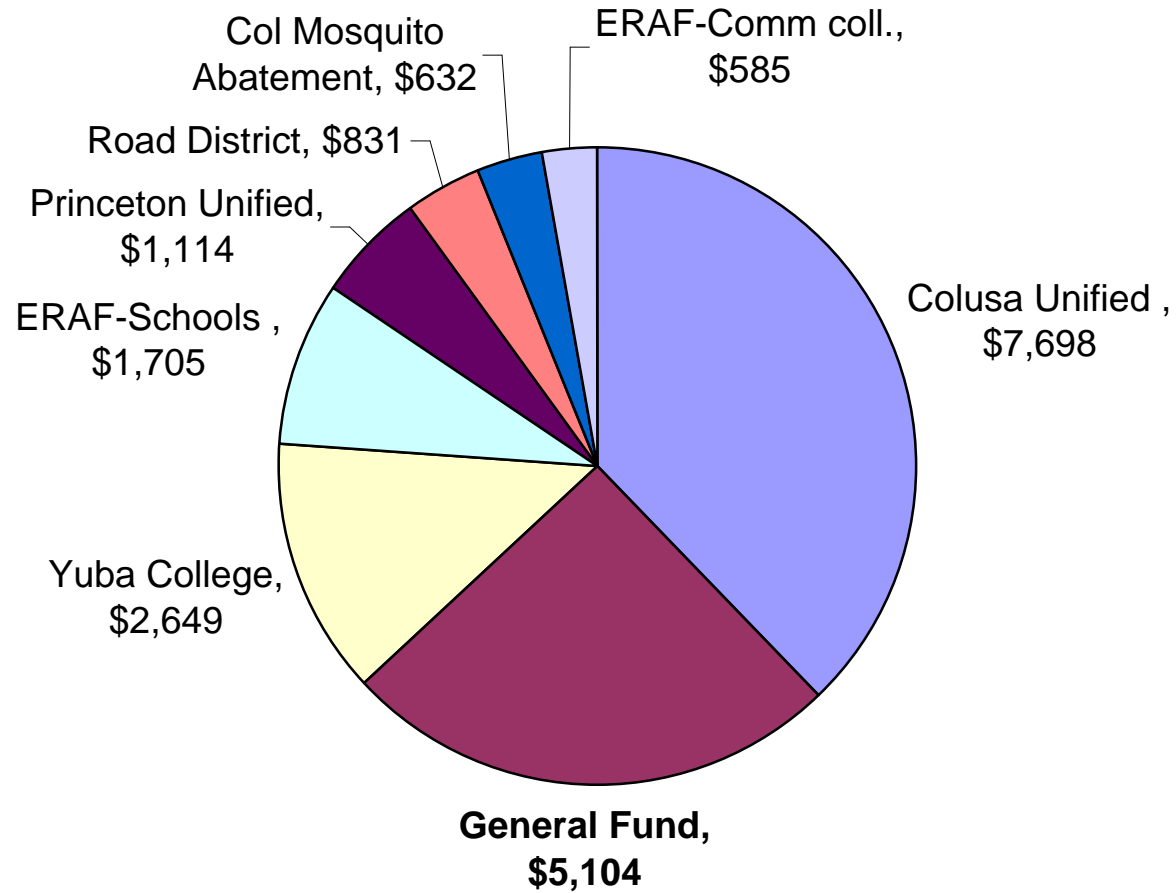
### Estimating Lost Sales Tax Revenue

In order to estimate the amount of revenue local governments would reap from land in agriculture use, the following factors must be evaluated:

- How much an operator might spend on taxable inputs, to farm the land; and
- How much of those inputs would be purchased locally.

**Figure 6. Subreach Tracts' Property Taxes**

*Tax Destination, Amount; Based on 2006 Tax Revenue*



**Table 27**  
**Assessed Values Prior to TNC Purchase**  
**Colusa Subreach Study Design; EPS #15093**

Tract	Acres	Fiscal Year of Assessment	Assessed Value	1% of Value
Jenson	106	99-00	\$400,521	\$4,005
1000-acre Ranch	59.4	02-03	\$87,030	\$870
Boeger [1]	109.5	99-00	\$203,020	\$2,030
Ward	<u>235</u>	99-00	<u>\$389,215</u>	<u>\$3,892</u>
<b>Total</b>	<b>510</b>		<b>\$1,079,786</b>	<b>\$10,798</b>
Current Assessment			<u>\$2,153,675</u>	<u>\$21,537</u>
<b>Difference</b>			<b>\$1,073,889</b>	<b>\$10,739</b>

[1] Due to the method of assessment based on the Williamson Act, after TNC purchase of this property, the total assessed value actually decreased.

Source: Colusa County Auditor-Controller's Office; Economic & Planning Systems

### Farming Costs

UC Davis Extension publishes “Cost Studies” by crop and by locale. These studies are surveys of cost to operate land, on an annualized basis. **Table 28** summarizes these cost studies, by crop type and per acre, with costs included that appear to be subject to sales tax.<sup>23</sup> The studies include costs for consumable materials such as fertilizers and pesticides as well as annualized costs for capital equipment. The studies indicate that per acre costs are between about \$150 and \$1,250, depending on the crop.

### Locally Purchased Goods

Operators of TNC land provided a list of farm suppliers for services and goods. About half of the vendors were located in the County while the other half were in adjacent counties. Based on this information, to estimate the amount of sales tax from the acres in agriculture, it is assumed that about 50 percent of taxable purchases are purchased locally.

### **Estimating Sales Tax Gained**

**Table 21** showed the estimated number of visitors expected due to the expansion of the CSRSRA. This calculation assumed that about half of all spending would occur in the local County. In order to estimate the amount of sales tax this spending would generate to local budget revenues, an additional assumption about the proportion of the spending which is subject to sales tax is needed. For the purposes of this estimate, it is assumed that about half of local purchases are non-taxable items (such as food not consumed on the premises) while the other half are taxable (eat-in dining purchases, supplies, and gas).

### **Sales Tax Result**

**Table 29** summarizes total estimated sales tax lost based on fewer farm-related local purchases and sales tax gains based on increased visitor spending. It shows the estimated spending per acre on recurring farm inputs (based on information from **Table 28**), total sales, and estimated sales tax for all transactions. The amount of sales tax generated from visitor spending is also shown, based on a prior discussion of visitor spending summarized in **Table 21**. A loss in sales tax of about \$7,270 and a gain of about \$1,850 in increased visitor spending from converted agricultural land is expected. **Table 30** shows the total sales tax generated and the distribution to the State, County, and Cities. This table shows taxable sales for each jurisdiction over the last three fiscal years. The proportion of sales among the three has remained relatively stable over time; therefore the proportions found historically – about 36 percent to Colusa City, about 20 percent to Williams City, and about 44 percent to the County. **Table 31** applies the distribution of sales tax among the three jurisdictions found in **Table 30** to the lost sales

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<sup>23</sup> The State Board of Equalization publications “Tax Tips for the Agriculture Business”, revised April 2006 and Regulation 1533.1, regarding farm equipment taxes, were consulted to determine the types of farming inputs which are subject to sales tax. Though the State grants some partial exemptions for certain types of equipment, local government may still charge sales tax on these items.

**Table 28**  
**Average Operating Costs; Taxable**  
**Colusa Subreach Fiscal/Economic Impacts; EPS #15093**

Taxable Inputs	Baby Lima					
	Prunes [1]	Beans [2]	Wheat [3]	Walnuts [4]	Safflower [5]	Sunflower [6]
<b>2005 \$</b>						
Culture (Material, Fuel, Lube, and Repair costs)	\$423	\$312	\$96	\$485	\$98	\$213
Harvest	\$0	\$6	\$13	\$58	\$17	\$19
Capital (annualized, per acre)	<u>\$550</u>	<u>\$12</u>	<u>\$36</u>	<u>\$701</u>	<u>\$30</u>	<u>\$193</u>
<b>Total [7]</b>	<b>\$973</b>	<b>\$331</b>	<b>\$145</b>	<b>\$1,244</b>	<b>\$145</b>	<b>\$425</b>

[1] Costs published in 2001, converted to 2005\$.

[2] Costs published in 2004, converted to 2005\$.

[3] Costs published in 2004, converted to 2005\$.

[4] Costs published in 2002, converted to 2005\$.

[5] Costs published in 2005.

[6] Costs published in 2004, converted to 2005\$.

[7] Totals do not include labor costs. All totals are between 25% and 45% of the production values found on Table 11.

Sources: UC Cooperative Extension; Economic & Planning Systems, Inc.

**Table 29**  
**Sales: Agriculture and Visitor Spending**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Taxable Transaction [1]	Amount	per Unit	Multiplier	per Unit	Total Transaction	Local %	Total <b>Sales</b> from Transaction	Total <b>Sales</b> <b>Tax</b> from Transaction [2]
<u>Agricultural Loss [3]</u>								
Jenson	\$1,244	per acre	83 acres		\$103,235	50%	\$51,618	\$3,871
1000-acre Ranch	\$973	per acre	50 acres		\$48,627	50%	\$24,314	\$1,824
Boeger	\$145	per acre	55 acres		\$7,984	50%	\$3,992	\$299
Ward	\$238	per acre	143 acres		<u>\$34,043</u>	<u>50%</u>	<u>\$17,021</u>	<u>\$1,277</u>
<b>Total Loss</b>					<b>\$193,889</b>		<b>\$96,944</b>	<b>\$7,271</b>
<u>Recreation Gain</u>								
<b>Additional Visitors</b>	<b>\$30</b>	<b>per visitor</b>	<b>3,275 visitors/year</b>		<b>\$98,253</b>	<b>25%</b> [4]	<b>\$24,563</b>	<b>\$1,842</b>
<u>Net Impact</u>								

[1] Transactions for agriculture from Table 29; Visitor spending shown on Table 21.

[2] Sales tax in Colusa is 7.25%. A tax of 6.25% goes to the State. Of the remaining 1% tax, 0.25% goes to the Local Public Safety Fund. The remaining 0.75% goes to City and County operating budgets, depending on the location of purchase.

[3] The change in sales tax related to agriculture is based on calculations in Table 28. The amount of taxable purchases per acre are estimated on that table; Boeger and Ward tracts are dollar per acre amounts based on averages of more than one crop.

[4] This amount is derived by assuming about half of visitor spending; then assuming half of the spending is taxable.

Source: California State Board of Equalization *Tax Tips for the Agricultural Industry*, Publication 66, Revised April 2006; California Department of Parks and Recreation, Dollars and Cents publication; Economic & Planning Systems



**Table 30**  
**Taxable Sales, Colusa County, Colusa City, Williams**  
**Colusa Subreach Fiscal/Economic Impacts; EPS #15093**

<b>Jurisdiction</b>	<b>2002-2003</b>	<b>2003-2004</b>	<b>2004-2005</b>	<b>Average</b>
<u>Taxable Sales Total</u>				
Colusa City	\$80,552,000	\$82,166,000	\$86,353,000	
Williams City	\$41,515,000	\$45,050,000	\$49,203,000	
Colusa County	<u>\$87,756,000</u>	<u>\$102,667,000</u>	<u>\$109,169,000</u>	
Total	\$209,823,000	\$229,883,000	\$244,725,000	
<u>Proportion of Taxable Sales</u>				
Colusa City	38%	36%	35%	<b>36%</b>
Williams City	20%	20%	20%	<b>20%</b>
Colusa County	<u>42%</u>	<u>45%</u>	<u>45%</u>	<b>44%</b>
	100%	100%	100%	

Sources: State Board of Equalization; Economic & Planning Systems, Inc.

**Table 31**  
**Sales Tax: Net Impact Due to Changes in Ag/ Visitor Spending**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Impact	Total Sales Tax from transaction  [2]	Distribution					Total County Loss/Gain
		State Portion 6.25% [3]	County Law Enforcement 0.25% [4]	City and County Operations 0.75% [1]			
				County 44%	Williams 20%	Colusa 36%	
<u>Agricultural Loss</u>							
Jenson	\$3,871	\$3,337	\$133	\$233	\$106	\$195	\$367
1000-acre Ranch	\$1,824	\$1,572	\$63	\$110	\$50	\$92	\$173
Boeger	\$299	\$258	\$10	\$18	\$8	\$15	\$28
Ward	<u>\$1,277</u>	<u>\$1,101</u>	<u>\$44</u>	<u>\$77</u>	<u>\$35</u>	<u>\$64</u>	<u>\$121</u>
<b>Total Loss</b>	<b>\$7,271</b>	<b>\$6,268</b>	<b>\$251</b>	<b>\$438</b>	<b>\$199</b>	<b>\$366</b>	<b>\$689</b>
<u>Recreation Gain</u>							
<b>Additional Visitors</b>	<b>\$1,842</b>	<b>\$1,588</b>		<b>\$111</b>	<b>\$50</b>	<b>\$93</b>	<b>\$254</b>
Net Impact		[5]		(\$327)	(\$148)	(\$273)	(\$435)

[1] From previous table, Table 30.

[2] Sales tax in Colusa is 7.25%. A tax of 6.25% goes to the State. Of the remaining 1% tax, 0.25% goes to the Local Public Safety Fund. The remaining 0.75% goes to City and County operating budgets, depending on the location of purchase. From Table 30.

[3] Of the 7.25 percent sales tax, 6.25 percent goes to State revenues.

[4] The County collects a 0.25 percent tax from sales for Law Enforcement related services.

[5] Impact on the State's finances is not under study here.

Source: California State Board of Equalization *Tax Tips for the Agricultural Industry*, Publication 66, Revised April 2006; California Department of Parks and Recreation, Dollars and Cents publication; Economic & Planning Systems

tax amount in **Table 29** to calculate the losses/ gains to each local jurisdiction. **Table 31** shows a potential net loss of about \$435 to the County of Colusa due to the conversion of agricultural land.

### **Other Revenues Related to Visitorship**

The Cities of Colusa and Williams are likely to experience an increase in other taxes related to visitorship such as transient occupancy taxes. This increase was not quantified because the fiscal analysis focuses on the County revenues and costs and because the loss to the City governments related to the land use and ownership change is relatively small, compared to the County loss.

### **SERVICE COSTS**

Local governments incur costs serving local residents and visitors in various ways including providing public safety services, community services such as libraries and recreation facilities, licensing/regulation enforcement, and welfare administration. In some cases, altering a property's land use may impact the costs to the government to provide services to the area. Service costs in the following categories were explored to evaluate what impact, if any, the land use change would have on local service costs: fire protection and law enforcement.

**Fire Protection.** The Sacramento River Fire Protection (SRFP) district provides fire protection services along the Sacramento River north of Colusa. Fire services on State land are provided by the California Department of Forestry (CDF). SRFP estimated that it handled about 10 to 12 calls last year at the CSRSRA related to emergency response. An increase in the size of the State Recreation Area will likely increase these calls, though the extent of the increase is unclear.<sup>24</sup>

**Law Enforcement.** Law enforcement on State lands is provided by game wardens or park rangers, depending on which agency controls the land. The Colusa Sheriff's department does not expect a change in service costs due to the land ownership and land use change. Currently, the Sheriff's department occasionally responds to calls for service on existing public land in the County. The Department does not expect the number of calls to which they now respond to increase based on the proposed change.<sup>25</sup>

**Agricultural Commissioner's Office.** The County Agricultural Commissioner receives a portion of its operating budget from fees and taxes paid by farmers. For example, in FY05 the Commissioner's office received about \$198,000 in pesticide mill taxes from about 250,000 acres of land in production. The loss of the approximately 370 acres of agricultural land will likely have a small impact on the Commissioner's office budget.

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<sup>24</sup> According to the Fire Chief at Sacramento River Fire Protection as well as the Department of Parks and Recreation.

<sup>25</sup> Based on conversations with Scott Marshall, Colusa Sheriff.

Office staff estimate the impact would be under the worst case scenario, a negative of about \$425 annually.

Based on conversations with relevant departments, the costs to local government to serve these lands under the proposed land use and ownership arrangement are unlikely to change.

## VI. MITIGATION FOR LOSS OF FUNDS

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The primary fiscal loss to local government revenue is due to the loss of property tax payments. The State DFG has anticipated this result for counties across the State and has a program in place, Payment-In-Lieu-of-Taxes (PILT), to backfill lost property taxes. This program, when funded by the State legislature, provides payments equal to the property taxes lost when land is transferred to DFG, with no provision for appreciation.

### **PILT**

When the State purchases private land for public use, that property is exempt from any taxes. This represents a loss of property tax revenue for the county and the PILT program was developed to compensate for that loss. PILT payments are made on lands acquired by the DFG and are equal the property tax lost for the purchased property. It is important to note that the assessed property tax at the time of the purchase is never scheduled for reassessment, precluding the County from any increased revenue due to land appreciation. Each year, the counties submit a request for the amount of lost property tax to the DFG. The DFG in turn requests that amount as part of their annual budget from the State Legislature. The Legislature determines how much it can fund that year and the DFG distributes those funds according to the “need” of each county. If PILT is not fully funded for any given year, those payments must be made at a later date.

Until fiscal year 2000-2001, PILT had been fully funded. In fiscal year 2001-02, only two-thirds of the counties received full PILT funding. Colusa received an entire payment that year, but beginning fiscal year 2002-03 and every year since, no funding has been provided.

The current annual in-lieu fee obligation to Colusa County is \$3,091.21 and has remained at this level since the early 1990s. Because the PILT funds are general purpose funds and are thus not automatically apportioned to the counties, they are an unstable source of funding. Unrestricted revenue sources are important in allowing counties the flexibility to fund or enhance programs and services. The PILT program as an unstable revenue source causes difficulty for counties to properly allocate their budget and fund various programs and services.

### **LOCAL CONCERNS**

Though the PILT program is designed to address the local concern over lost property taxes due to the restoration of habitat, there are a number of elements of the program which are diminishing its success in addressing the lost property taxes issue.

- **PILT funding is an unstable source of revenue.** Currently funding for PILT requires legislative approval and the legislature can choose not to fund PILT. Although PILT had been fully funded until 2000-2001 it was only partially funded in 2001-2002 and from 2002-2003 to the present the state has not made any PILT payment. **Table 32** shows the funding to Colusa from the PILT program from 2001 to 2006. It also shows the potential high and low impact on the County's finances if the PILT program continues to be unfunded. By 2015, the annual deficit is a loss of about \$6,100 under the high impact scenario and a loss of about \$4,300 under the low impact scenario.
- **PILT funding does not appreciate.** PILT revenues, although intended to replace property taxed, fail to appreciate by 2 percent like property tax. Unlike property tax, PILT revenues are never reassessed and consequently are frozen in perpetuity at the amount when they were purchased. **Table 32** shows the amount of potential PILT payment on the three DFG tracts in 2008/09 and going forward at \$1,764. By 2015/16, the appreciated tax revenue would be \$2,235— with no appreciation factor, the County loses about \$470 by the ninth year of the program even on properties covered by PILT.
- **PILT only applies to DFG land.** The Ward property generates about \$3,800 of the \$5,100 lost property taxes sum. **Table 32** includes this lost property tax in each of the calculations.<sup>26</sup>

## POTENTIAL FISCAL MITIGATION MEASURES

**1. Fix the PILT program.** The PILT program is designed to address the fiscal loss to local governments due to the acquisition of property by the State DFG. The local concerns related to the instability of the funding and the lack an appreciation factor are valid grievances. Altering the program so that its funding is automatic in the DFG budget and contains some factor of appreciation which estimates the average rate of turnover of land would likely decrease some local opposition to land acquisitions for habitat restoration.

**2. Create an agreement with DPR whereby additional charges are levied to CSRSRA visitors and are directed to backfill County losses from property taxes.** In the case under study, the transfer of property to DPR is responsible for almost 50 percent of the total loss from property taxes. DPR does not have a program like PILT in place to mitigate the loss of property taxes.

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<sup>26</sup> The rationale by DPR for not offering a program similar to PILT is that State Parks have been shown to have positive fiscal impacts on locales where the Parks are located. In this particular State Recreation Area, our findings indicate that gains in sales tax from visitors will not make up for the loss in property tax value to the County. Subsequent to improvements to the boat launch at the CSRSRA, data may show that visitorship does increase sufficiently to overcome the loss of property tax.

**Table 32**  
**PILT Program Overview**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Impact on County Finances	Fiscal Year														
	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
Historic:															
Actual PILT Payments [1]	\$3,091	\$0	\$0	\$0	\$0	--	--	--	--	--	--	--	--	--	--
<u>Tax Payments to County</u>															
Baseline: No Change in Ownership, land remains with TNC [2]	--	--	--	--	--	\$5,104	\$5,206	\$5,311	\$5,417	\$5,525	\$5,636	\$5,748	\$5,863	\$5,980	\$6,100
1. High Impact: PILT remains unstable: No PILT funding through 2015 [3]	--	--	--	--	--	--	--	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2. Low Impact: PILT funded [4]	--	--	--	--	--	--	--	\$1,764	\$1,764	\$1,764	\$1,764	\$1,764	\$1,764	\$1,764	\$1,764
Difference: Baseline and 1. High Impact								(\$5,311)	(\$5,417)	(\$5,525)	(\$5,636)	(\$5,748)	(\$5,863)	(\$5,980)	(\$6,100)
Difference: Baseline and 2. Low Impact								(\$3,547)	(\$3,653)	(\$3,761)	(\$3,872)	(\$3,984)	(\$4,099)	(\$4,217)	(\$4,336)

[1] Because the program includes a provision for back-payments to the counties, the State will maintain a running total of PILT payments owed.

[2] Assuming that the four tracts were purchased (and thus reassessed), this full appreciated amount indicates the amount of taxes the County could have received, if the land remains in private ownership.

[3] This scenario calculates the highest deficit to the County's budget, assuming no PILT funding is made available during the study period.

[4] This calculation is the lowest impact to the County's budget, assuming PILT funding is reinstated in 2008-09, the program continues to not include an appreciation factor. The losses to the County are: the loss of taxes from the Ward property and the loss of appreciation from the DFG tracts.

Sources: Department of Fish and Game; Economic & Planning Systems

Studies completed by DPR indicate that State parks generate revenue for the locale; though their economic impact may assist many locales, their fiscal impact in the particular case of these acres appears to be negative for the County.

## **SUMMARY OF IMPACTS**

**Table 33** summarizes the fiscal impacts of the land use change and ownership transfer. In order to avoid underestimating the impact on the County's budget, one scenario shows a property tax loss, assuming the PILT program is not funded during the course of the ten years shown, with an annual loss of about \$5,750. Combining this annual loss with the estimated loss in sales tax loss over ten years sums to about \$62,000. In the second scenario, PILT funding covers the loss from property tax losses from DFG land, so the property tax loss is from DPR's acquisition of the Ward tract. This loss combined with the sales tax loss over ten years sums to about \$45,000. These represent a loss of about 0.1 percent of the County's overall \$25 million General Fund budget.



**Table 33**  
**10 Year Summary - Colusa County Losses (Ongoing)**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Scenario	Fiscal Year										Total, 10 Year Period
	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	
2006\$ [1]											
<u>High Impact [2]</u>											
(PILT Funding remains unstable through 2018)	(\$5,750)	(\$5,850)	(\$5,960)	(\$6,070)	(\$6,180)	(\$6,300)	(\$6,420)	(\$6,530)	(\$6,530)	(\$6,660)	(\$62,000)
<u>Low Impact [3]</u>											
(PILT Funding becomes available each year until 2018)	(\$3,980)	(\$4,090)	(\$4,200)	(\$4,310)	(\$4,420)	(\$4,530)	(\$4,650)	(\$4,770)	(\$4,890)	(\$5,020)	(\$45,000)

[1] All revenues are expected to increase at the same rate as inflation.

[2] This assumes that the PILT program is not funded for the next ten years, from Table 32. Total is the loss of property taxes plus sales tax. Total is rounded.

[3] Assuming that the PILT program is funded, remaining loss is property taxes lost associated with DPR land, from Table 32. Total is the loss of property taxes plus sales tax. Total is rounded.

Source: Economic & Planning Systems



**Economic &  
Planning Systems**

*Real Estate Economics*

*Regional Economics*

*Public Finance*

*Land Use Policy*

## SELECTED BIBLIOGRAPHY/PERSONAL COMMUNICATIONS

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# Personal Communications

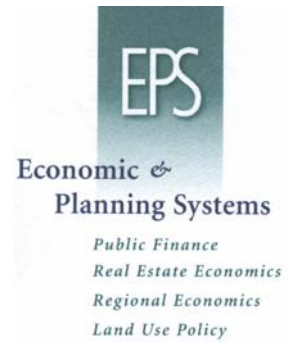
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Contact Name	Organization
Billings, Peggy	Glenn County Planning
Dawley, Janet	Colusa County Auditor-Controller's Office
Fehling, Mike	DPR
Garner, John	Local farmer
Gonzales, Armand	DFG
Grey, Balinda	DPR
Gross, Debbie	City of Colusa City Manager's office
Hoffman, Paul	DFG
Jukusky, Peter	Colusa County Economic Development Corporation
Kittle, Pat	Kittle's Outdoor Sport Company
Kostlevy, Robert	Colusa County Environmental Health Division
Krug, Harry	Colusa County Agricultural Commissioner
Lomeli, Henry	DFG
Marshall, Scott	Colusa County Sheriff's Department
Martin, Angenet	Colusa Basin Subwatershed Coalition
Miller, Jeanne	Glenn County Agricultural Commissioner's Office
Murray, Michael	UC Cooperative Extension
Nemanic, Marc	Tri-County Economic Development Corporation (Butte, Glenn, Tehama)
Penberth, Molly	California Department of Conservation, Farm Mapping and Monitoring Program
Richter, Jon	Colusa County - Deputy Agricultural Commissioner
Scroggins, Peggy	Colusa
Sutton, Jeffery	FWA
Taylor, Sharon	DFG, Payment-in-Lieu of Taxes program
Thomas, Fred	Cerus Consulting
Townley, Frank	Local fishing guide
Wallace, Mike	Crain Shelling
Wurm, Vincent	Farm Credit Services of Colusa-Glenn, Manager
Young, Susan	USDA National Agricultural Statistics Service, California Field Office
Zoller, Wayne	Colusa County Assessor's Office
	Glenn County Office of Emergency Services - Sherriff

## SUMMARY OF OUTREACH

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March 2006	Project initiated.
May 20, 2006	Draft Study Design presented to Advisory Workgroup.
June 2006	Finalized Study Design submitted.
August 10, 2006	Letter sent to key stakeholders, detailing the aims of the study and soliciting input. See attached for example of letters.
April – December 2006	Personal communications with stakeholders – See “Personal Communications” for list of stakeholders contacted.
October 2006	Draft Fiscal and Economic Impacts Analysis Study completed.
October 3, 2006	Letter sent to key stakeholders, with the draft Study enclosed, soliciting input.
October 23, 2006	Comments on draft due.
November 6, 2006	Draft Fiscal and Economic Impacts Analysis Study presented to Advisory Workgroup.
December 1, 2006	Final letter to key stakeholders soliciting comments on the draft Study.
December 8, 2006	Final date for comments on draft Study.
December 20, 2006	Final Study submitted.
“Key Stakeholders” Written Communication Recipients	Staci Buttermore, Glenn County Farm Bureau Armand Gonzales, DFG Stephen Hackney, Colusa County Planning Department Melodie Johnson, Colusa County Farm Bureau Harry Krug, Colusa Agricultural Commissioner Mike Murry, UC Cooperative Extension Marc Nemaniac, Tri-County Economic Development Corporation Peggy Scroggins, Colusa County Auditor-Controller Jeff Sutton, Family Water Alliance Vincent Wurm, Farm Credit Services of Colusa-Glenn Woddy Yerza, Farmer



October 3, 2006

Melodie Johnson, Manager  
Colusa County Farm Bureau  
P.O. Box 1179  
Colusa, CA 95932

Subject: Economic/Fiscal Impacts Draft Study, Enclosed; EPS #15093

Dear Ms. Johnson:

Economic and Planning Systems (EPS) has been working with the Colusa Subreach Planning partnership on a study which analyzes local fiscal and economic effects resulting from the conversion of five tracts of agricultural land in Colusa and Glenn Counties to riparian habitat and recreation areas. The draft study enclosed is provided for your review and comment. Please provide comments no later than **October 23, 2006**.

The economic impacts section of the draft study examines losses from lost agricultural value caused by conversion to habitat as well as economic gains from increased visitorship associated with increased recreation lands. The fiscal impacts section looks at changes to local public finances caused by the transfer of land from private ownership (The Nature Conservancy) to public ownership (the State of California). The fiscal section also analyses changes in sales tax and local service costs resulting from the land use change.

EPS and the Colusa Subreach Planning partnership are very interested in receiving your comments or questions on this draft. Please provide your comments in writing to me at [rbenassini@epsys.com](mailto:rbenassini@epsys.com) or mail them to the address below, or call me at (510) 841-9190.

This draft will be discussed at an upcoming meeting of the Colusa Subreach Planning Advisory Workgroup, scheduled for November 6, 2006. Once we receive public comments as well as comments from the Workgroup, a final version of the report will be completed in December 2006. Thank you for your interest in the Colusa Subreach Planning process.

Sincerely,

ECONOMIC & PLANNING SYSTEMS, INC.

Rebecca Benassini  
Associate

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**Economic &  
Planning Systems**

*Real Estate Economics*

*Regional Economics*

*Public Finance*

*Land Use Policy*

## APPENDIX A

**Table A-1**  
**Native Plants and Habitats along the Sacramento River Riparian Corridor**  
**Colusa Fiscal/Economic Impact, EPS #15093**

Name	Significance
Willow Scrub	The pioneer riparian community is found on depositional areas near the river's edge. The narrow bands of young cottonwoods in this community will become the riparian forests of the future. The common species include various types of willows and young cottonwoods. Young sycamores, box elders, walnuts and Oregon ash may become established as the ground becomes shaded by willows and cottonwoods.
Cottonwood Riparian Forest	This mixed riparian forest is dominated by cottonwoods, with many species germinating under their dense canopy cover. Berries, wild grape, poison oak, and many tree species develop into a dense understory. Yellow-billed cuckoos and other medium to small-bodied land birds are often associated with this plant community during the spring and summer.
Mixed Riparian Forest	A dense community mixture of tall cottonwood and willows, as well as sycamores, box elders, walnuts and alder. Buttonbrush, blackberries, and poison oak are often covered by an assortment of vines. Perennial grasses such as creeping rye and the Santa Barbara sedge form dense pockets in the understory. Openings and openings contain elderberry savannas. The community supports nesting yellow-billed cuckoos and other medium-small-bodied land birds.
Oak Riparian Forest	Valley Oaks dominate this closed canopy riparian forest with significant numbers of black walnuts, sycamore, and ash. The understory is dense with various vines, typical shrub species and perennial grasses and sedges. Specimens of elderberry are also present between Red Bluff and Colusa.
Valley Oak Woodland	This community occurs on the deep alluvial soils of the higher floodplain terraces but can also be found in other upland communities. Isolated islands of majestic, old valley oaks occur in alluvial soils on the river's historical floodplain.
Spawning Gravels	A mixture of predominantly coarse particle sizes, excavated and sorted by the female salmon during spawning.
Sand and Gravel Bars	Deposited in the Sacramento River, sand and gravel bars provide habitat for nesting killdeer, spotted sandpiper, and lesser nighthawks, along with many foraging water birds.
Shaded Riverine Aquatic Habitat	Created as the river erodes into a bank supporting riparian forests, this habitat is characterized by "variable amounts of woody debris, such as leaves, logs, branches and roots, as well as variable depths, velocities and currents." It provides feeding and cover for aquatic species such as salmon, and when less vegetated provides burrowing substrate for bank swallows.

Sources: Sacramento River Conservation Area Forum, and Economic & Planning Systems, Inc.



**Table A-2**  
**Agricultural Impacts: Personal Income**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Industry	Direct	Indirect	Induced	Total
Oilseed farming	\$0	(\$8)	(\$1)	(\$8)
Grain farming	(\$19,923)	(\$347)	(\$17)	(\$20,286)
Vegetable and melon farming	\$0	(\$90)	(\$29)	(\$119)
Tree nut farming	(\$32,834)	(\$309)	(\$21)	(\$33,163)
Fruit farming	(\$11,280)	(\$294)	(\$29)	(\$11,602)
Greenhouse and nursery production	\$0	(\$26)	(\$8)	(\$35)
Cotton farming	\$0	(\$14)	(\$2)	(\$16)
All other crop farming	\$0	(\$24)	(\$7)	(\$31)
Cattle ranching and farming	\$0	(\$8)	(\$4)	(\$12)
Poultry and egg production	\$0	\$0	(\$2)	(\$2)
Animal production- except cattle and poultry and e	\$0	(\$5)	(\$1)	(\$6)
Agriculture and forestry support activities	\$0	(\$16,678)	(\$32)	(\$16,709)
Stone mining and quarrying	\$0	\$0	\$0	\$0
Sand- gravel- clay- and refractory mining	\$0	\$0	\$0	\$0
Natural gas distribution	\$0	(\$9)	(\$14)	(\$23)
Water- sewage and other systems	\$0	(\$156)	(\$35)	(\$191)
Maintenance and repair of farm and nonfarm residential	\$0	(\$7)	(\$18)	(\$25)
Maintenance and repair of nonresidential buildings	\$0	(\$151)	(\$26)	(\$177)
Other maintenance and repair construction	\$0	(\$27)	(\$12)	(\$40)
Other animal food manufacturing	\$0	\$0	\$0	\$0
Rice milling	\$0	\$0	(\$8)	(\$8)
Other oilseed processing	\$0	\$0	\$0	\$0
Fruit and vegetable canning and drying	\$0	\$0	(\$7)	(\$7)
Cheese manufacturing	\$0	\$0	(\$21)	(\$21)
Animal- except poultry- slaughtering	\$0	\$0	(\$1)	(\$1)
Bread and bakery product- except frozen- manufacturing	\$0	\$0	(\$30)	(\$30)
Roasted nuts and peanut butter manufacturing	\$0	\$0	(\$4)	(\$4)
Reconstituted wood product manufacturing	\$0	\$0	\$0	\$0
Engineered wood member and truss manufacturing	\$0	(\$1)	(\$1)	(\$2)
Other millwork- including flooring	\$0	(\$1)	(\$1)	(\$2)
Miscellaneous wood product manufacturing	\$0	(\$4)	(\$2)	(\$6)
Commercial printing	\$0	(\$19)	(\$22)	(\$41)
Cellulosic organic fiber manufacturing	\$0	\$0	\$0	\$0
Plastics packaging materials- film and sheet	\$0	(\$1)	(\$2)	(\$2)
Foam product manufacturing	\$0	\$0	(\$3)	(\$3)
Cement manufacturing	\$0	\$0	\$0	\$0
Ready-mix concrete manufacturing	\$0	\$0	\$0	\$0
Concrete block and brick manufacturing	\$0	\$0	\$0	\$0
Concrete pipe manufacturing	\$0	(\$5)	\$0	(\$6)
Mineral wool manufacturing	\$0	(\$1)	(\$8)	(\$9)
Sheet metal work manufacturing	\$0	\$0	\$0	\$0
Miscellaneous fabricated metal product manufacturing	\$0	\$0	\$0	\$0
Farm machinery and equipment manufacturing	\$0	(\$61)	\$0	(\$61)
Other communication and energy wire manufacturing	\$0	(\$1)	(\$1)	(\$1)
Aircraft manufacturing	\$0	\$0	\$0	\$0
Other household and institutional furniture	\$0	\$0	(\$2)	(\$2)
Office furniture- except wood- manufacturing	\$0	\$0	\$0	\$0
Showcases- partitions- shelving- and lockers	\$0	\$0	\$0	\$0
Sporting and athletic goods manufacturing	\$0	\$0	(\$1)	(\$1)
Buttons- pins- and all other miscellaneous manufacturing	\$0	(\$2)	(\$1)	(\$3)
Wholesale trade	\$0	(\$1,230)	(\$582)	(\$1,812)
Rail transportation	\$0	(\$9)	(\$1)	(\$10)
Truck transportation	\$0	(\$433)	(\$153)	(\$586)
Transit and ground passenger transportation	\$0	(\$2)	(\$12)	(\$14)
Scenic and sightseeing transportation and support	\$0	(\$28)	(\$22)	(\$50)
Postal service	\$0	(\$64)	(\$83)	(\$147)
Couriers and messengers	\$0	(\$16)	(\$18)	(\$34)
Warehousing and storage	\$0	(\$670)	(\$26)	(\$696)
Motor vehicle and parts dealers	\$0	(\$14)	(\$535)	(\$548)
Furniture and home furnishings stores	\$0	(\$1)	(\$30)	(\$32)
Electronics and appliance stores	\$0	(\$1)	(\$23)	(\$24)
Building material and garden supply stores	\$0	(\$8)	(\$316)	(\$324)
Food and beverage stores	\$0	(\$12)	(\$450)	(\$462)

**Table A-2**  
**Agricultural Impacts: Personal Income**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**  
(con't)

Industry	Direct	Indirect	Induced	Total
Health and personal care stores	\$0	(\$6)	(\$231)	(\$237)
Gasoline stations	\$0	(\$5)	(\$175)	(\$180)
Clothing and clothing accessories stores	\$0	(\$1)	(\$32)	(\$33)
Sporting goods- hobby- book and music stores	\$0	(\$1)	(\$41)	(\$42)
General merchandise stores	\$0	(\$5)	(\$184)	(\$188)
Miscellaneous store retailers	\$0	(\$2)	(\$80)	(\$82)
Nonstore retailers	\$0	(\$2)	(\$61)	(\$62)
Newspaper publishers	\$0	(\$109)	(\$107)	(\$216)
Motion picture and video industries	\$0	(\$1)	(\$45)	(\$45)
Telecommunications	\$0	(\$33)	(\$84)	(\$118)
Information services	\$0	(\$1)	(\$1)	(\$2)
Nondepository credit intermediation	\$0	(\$28)	(\$24)	(\$53)
Securities- commodity contracts- investments	\$0	(\$16)	(\$89)	(\$106)
Insurance carriers	\$0	(\$44)	(\$27)	(\$71)
Insurance agencies- brokerages	\$0	(\$20)	(\$12)	(\$32)
Monetary authorities and depository credit intermediaries	\$0	(\$176)	(\$179)	(\$354)
Real estate	\$0	(\$798)	(\$161)	(\$959)
Automotive equipment rental and leasing	\$0	(\$15)	(\$13)	(\$28)
Video tape and disc rental	\$0	\$0	(\$26)	(\$26)
Machinery and equipment rental and leasing	\$0	(\$87)	(\$6)	(\$93)
Legal services	\$0	(\$84)	(\$193)	(\$277)
Accounting and bookkeeping services	\$0	(\$138)	(\$52)	(\$190)
Architectural and engineering services	\$0	(\$46)	(\$12)	(\$58)
Custom computer programming services	\$0	\$0	\$0	(\$1)
Management consulting services	\$0	(\$16)	(\$19)	(\$35)
Environmental and other technical consulting services	\$0	(\$9)	(\$8)	(\$17)
Advertising and related services	\$0	(\$3)	(\$3)	(\$6)
Veterinary services	\$0	(\$2)	(\$54)	(\$56)
Office administrative services	\$0	(\$7)	(\$5)	(\$12)
Facilities support services	\$0	\$0	\$0	\$0
Employment services	\$0	(\$11)	(\$14)	(\$25)
Business support services	\$0	(\$1)	(\$2)	(\$2)
Travel arrangement and reservation services	\$0	(\$2)	(\$18)	(\$19)
Investigation and security services	\$0	(\$11)	(\$11)	(\$22)
Services to buildings and dwellings	\$0	(\$34)	(\$52)	(\$87)
Other support services	\$0	(\$8)	(\$9)	(\$17)
Waste management and remediation services	\$0	(\$49)	(\$14)	(\$63)
Elementary and secondary schools	\$0	\$0	(\$16)	(\$16)
Other educational services	\$0	\$0	(\$20)	(\$21)
Offices of physicians- dentists- and other health	\$0	\$0	(\$808)	(\$808)
Other ambulatory health care services	\$0	\$0	(\$79)	(\$79)
Hospitals	\$0	\$0	(\$657)	(\$657)
Nursing and residential care facilities	\$0	\$0	(\$634)	(\$634)
Child day care services	\$0	\$0	(\$96)	(\$96)
Social assistance- except child day care services	\$0	\$0	(\$227)	(\$227)
Independent artists- writers- and performers	\$0	(\$4)	(\$4)	(\$8)
Museums- historical sites- zoos- and parks	\$0	\$0	(\$5)	(\$5)
Fitness and recreational sports centers	\$0	(\$1)	(\$10)	(\$11)
Bowling centers	\$0	\$0	(\$1)	(\$1)
Other amusement- gambling- and recreation industries	\$0	(\$5)	(\$47)	(\$52)
Hotels and motels- including casino hotels	\$0	(\$24)	(\$68)	(\$92)
Other accommodations	\$0	(\$1)	(\$10)	(\$11)
Food services and drinking places	\$0	(\$36)	(\$1,117)	(\$1,154)
Car washes	\$0	(\$1)	(\$21)	(\$22)
Automotive repair and maintenance- except car wash	\$0	(\$134)	(\$397)	(\$531)
Electronic equipment repair and maintenance	\$0	\$0	\$0	(\$1)
Commercial machinery repair and maintenance	\$0	(\$288)	(\$10)	(\$299)
Household goods repair and maintenance	\$0	(\$1)	(\$6)	(\$7)
Personal care services	\$0	\$0	(\$10)	(\$10)
Death care services	\$0	\$0	(\$42)	(\$42)
Drycleaning and laundry services	\$0	(\$2)	(\$22)	(\$23)
Other personal services	\$0	\$0	(\$1)	(\$1)
Religious organizations	\$0	\$0	(\$322)	(\$322)
Grantmaking and giving and social advocacy organization	\$0	\$0	(\$7)	(\$7)
Civic- social- professional and similar organization	\$0	(\$50)	(\$78)	(\$128)
Private households	\$0	\$0	(\$191)	(\$191)
Other Federal Government enterprises	\$0	(\$3)	(\$5)	(\$8)
State and local government passenger transit	\$0	(\$16)	(\$123)	(\$139)
State and local government electric utilities	\$0	(\$73)	(\$50)	(\$122)
Other State and local government enterprises	\$0	(\$573)	(\$243)	(\$817)
	(\$64,036)	(\$23,724)	(\$9,992)	(\$97,753)

**Table A-3**  
**Agricultural Impacts: Jobs**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Industry	Direct	Indirect	Induced	Total
Oilseed farming	0	0	0	0
Grain farming	-1.3	0	0	-1.3
Vegetable and melon farming	0	0	0	0
Tree nut farming	-0.5	0	0	-0.6
Fruit farming	-0.2	0	0	-0.2
Greenhouse and nursery production	0	0	0	0
Cotton farming	0	0	0	0
All other crop farming	0	0	0	0
Cattle ranching and farming	0	0	0	0
Poultry and egg production	0	0	0	0
Animal production- except cattle and poultry and e	0	0	0	0
Agriculture and forestry support activities	0	-0.7	0	-0.7
Stone mining and quarrying	0	0	0	0
Sand- gravel- clay- and refractory mining	0	0	0	0
Natural gas distribution	0	0	0	0
Water- sewage and other systems	0	0	0	0
Maintenance and repair of farm and nonfarm residential	0	0	0	0
Maintenance and repair of nonresidential buildings	0	0	0	0
Other maintenance and repair construction	0	0	0	0
Other animal food manufacturing	0	0	0	0
Rice milling	0	0	0	0
Other oilseed processing	0	0	0	0
Fruit and vegetable canning and drying	0	0	0	0
Cheese manufacturing	0	0	0	0
Animal- except poultry- slaughtering	0	0	0	0
Bread and bakery product- except frozen- manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	0	0	0
Reconstituted wood product manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	0	0	0
Other millwork- including flooring	0	0	0	0
Miscellaneous wood product manufacturing	0	0	0	0
Commercial printing	0	0	0	0
Cellulosic organic fiber manufacturing	0	0	0	0
Plastics packaging materials- film and sheet	0	0	0	0
Foam product manufacturing	0	0	0	0
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	0	0	0
Concrete block and brick manufacturing	0	0	0	0
Concrete pipe manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Sheet metal work manufacturing	0	0	0	0
Miscellaneous fabricated metal product manufacturing	0	0	0	0
Farm machinery and equipment manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	0
Other household and institutional furniture	0	0	0	0
Office furniture- except wood- manufacturing	0	0	0	0
Showcases- partitions- shelving- and lockers	0	0	0	0
Sporting and athletic goods manufacturing	0	0	0	0
Buttons- pins- and all other miscellaneous manufacturing	0	0	0	0
Wholesale trade	0	0	0	0
Rail transportation	0	0	0	0
Truck transportation	0	0	0	0
Transit and ground passenger transportation	0	0	0	0
Scenic and sightseeing transportation and support	0	0	0	0
Postal service	0	0	0	0
Couriers and messengers	0	0	0	0
Warehousing and storage	0	0	0	0
Motor vehicle and parts dealers	0	0	0	0
Furniture and home furnishings stores	0	0	0	0
Electronics and appliance stores	0	0	0	0
Building material and garden supply stores	0	0	0	0
Food and beverage stores	0	0	0	0

Table A-3

## Agricultural Impacts: Jobs

## Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093

(con't)

Industry	Direct	Indirect	Induced	Total
Health and personal care stores	0	0	0	0
Gasoline stations	0	0	0	0
Clothing and clothing accessories stores	0	0	0	0
Sporting goods- hobby- book and music stores	0	0	0	0
General merchandise stores	0	0	0	0
Miscellaneous store retailers	0	0	0	0
Nonstore retailers	0	0	0	0
Newspaper publishers	0	0	0	0
Motion picture and video industries	0	0	0	0
Telecommunications	0	0	0	0
Information services	0	0	0	0
Nondepository credit intermediation	0	0	0	0
Securities- commodity contracts- investments	0	0	0	0
Insurance carriers	0	0	0	0
Insurance agencies- brokerages	0	0	0	0
Monetary authorities and depository credit intermediaries	0	0	0	0
Real estate	0	0	0	0
Automotive equipment rental and leasing	0	0	0	0
Video tape and disc rental	0	0	0	0
Machinery and equipment rental and leasing	0	0	0	0
Legal services	0	0	0	0
Accounting and bookkeeping services	0	0	0	0
Architectural and engineering services	0	0	0	0
Custom computer programming services	0	0	0	0
Management consulting services	0	0	0	0
Environmental and other technical consulting services	0	0	0	0
Advertising and related services	0	0	0	0
Veterinary services	0	0	0	0
Office administrative services	0	0	0	0
Facilities support services	0	0	0	0
Employment services	0	0	0	0
Business support services	0	0	0	0
Travel arrangement and reservation services	0	0	0	0
Investigation and security services	0	0	0	0
Services to buildings and dwellings	0	0	0	0
Other support services	0	0	0	0
Waste management and remediation services	0	0	0	0
Elementary and secondary schools	0	0	0	0
Other educational services	0	0	0	0
Offices of physicians- dentists- and other health	0	0	0	0
Other ambulatory health care services	0	0	0	0
Hospitals	0	0	0	0
Nursing and residential care facilities	0	0	0	0
Child day care services	0	0	0	0
Social assistance- except child day care services	0	0	0	0
Independent artists- writers- and performers	0	0	0	0
Museums- historical sites- zoos- and parks	0	0	0	0
Fitness and recreational sports centers	0	0	0	0
Bowling centers	0	0	0	0
Other amusement- gambling- and recreation industries	0	0	0	0
Hotels and motels- including casino hotels	0	0	0	0
Other accommodations	0	0	0	0
Food services and drinking places	0	0	-0.1	-0.1
Car washes	0	0	0	0
Automotive repair and maintenance- except car wash	0	0	0	0
Electronic equipment repair and maintenance	0	0	0	0
Commercial machinery repair and maintenance	0	0	0	0
Household goods repair and maintenance	0	0	0	0
Personal care services	0	0	0	0
Death care services	0	0	0	0
Drycleaning and laundry services	0	0	0	0
Other personal services	0	0	0	0
Religious organizations	0	0	0	0
Grantmaking and giving and social advocacy organization	0	0	0	0
Civic- social- professional and similar organization	0	0	0	0
Private households	0	0	0	0
Other Federal Government enterprises	0	0	0	0
State and local government passenger transit	0	0	0	0
State and local government electric utilities	0	0	0	0
Other State and local government enterprises	0	0	0	0
	-2	-0.9	-0.4	-3.3

**Table A-4**  
**Agricultural Impacts: Output**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Industry	Direct	Indirect	Induced	Total
Oilseed farming	\$0	(\$36)	(\$3)	(\$39)
Grain farming	(\$112,695)	(\$1,965)	(\$94)	(\$114,753)
Vegetable and melon farming	\$0	(\$319)	(\$103)	(\$422)
Tree nut farming	(\$142,470)	(\$1,339)	(\$90)	(\$143,899)
Fruit farming	(\$50,751)	(\$1,322)	(\$129)	(\$52,202)
Greenhouse and nursery production	\$0	(\$94)	(\$30)	(\$124)
Cotton farming	\$0	(\$102)	(\$18)	(\$120)
All other crop farming	\$0	(\$144)	(\$42)	(\$186)
Cattle ranching and farming	\$0	(\$386)	(\$182)	(\$568)
Poultry and egg production	\$0	\$0	(\$23)	(\$23)
Animal production- except cattle and poultry and e	\$0	(\$166)	(\$24)	(\$190)
Agriculture and forestry support activities	\$0	(\$15,723)	(\$30)	(\$15,753)
Stone mining and quarrying	\$0	(\$2)	\$0	(\$2)
Sand- gravel- clay- and refractory mining	\$0	\$0	\$0	\$0
Natural gas distribution	\$0	(\$159)	(\$229)	(\$388)
Water- sewage and other systems	\$0	(\$311)	(\$69)	(\$380)
Maintenance and repair of farm and nonfarm residential	\$0	(\$28)	(\$70)	(\$98)
Maintenance and repair of nonresidential buildings	\$0	(\$335)	(\$57)	(\$392)
Other maintenance and repair construction	\$0	(\$45)	(\$20)	(\$65)
Other animal food manufacturing	\$0	(\$1)	(\$1)	(\$2)
Rice milling	\$0	\$0	(\$104)	(\$104)
Other oilseed processing	\$0	\$0	\$0	(\$1)
Fruit and vegetable canning and drying	\$0	\$0	(\$51)	(\$52)
Cheese manufacturing	\$0	(\$3)	(\$303)	(\$305)
Animal- except poultry- slaughtering	\$0	\$0	(\$24)	(\$24)
Bread and bakery product- except frozen- manufacturing	\$0	(\$1)	(\$109)	(\$110)
Roasted nuts and peanut butter manufacturing	\$0	\$0	(\$37)	(\$37)
Reconstituted wood product manufacturing	\$0	(\$1)	(\$1)	(\$2)
Engineered wood member and truss manufacturing	\$0	(\$3)	(\$5)	(\$9)
Other millwork- including flooring	\$0	(\$5)	(\$6)	(\$11)
Miscellaneous wood product manufacturing	\$0	(\$15)	(\$7)	(\$22)
Commercial printing	\$0	(\$31)	(\$35)	(\$66)
Cellulosic organic fiber manufacturing	\$0	\$0	\$0	\$0
Plastics packaging materials- film and sheet	\$0	(\$5)	(\$14)	(\$20)
Foam product manufacturing	\$0	(\$2)	(\$17)	(\$19)
Cement manufacturing	\$0	\$0	\$0	\$0
Ready-mix concrete manufacturing	\$0	(\$1)	(\$1)	(\$2)
Concrete block and brick manufacturing	\$0	(\$1)	(\$1)	(\$1)
Concrete pipe manufacturing	\$0	(\$21)	(\$1)	(\$22)
Mineral wool manufacturing	\$0	(\$5)	(\$39)	(\$43)
Sheet metal work manufacturing	\$0	(\$1)	\$0	(\$1)
Miscellaneous fabricated metal product manufacturing	\$0	\$0	\$0	(\$1)
Farm machinery and equipment manufacturing	\$0	(\$718)	(\$3)	(\$721)
Other communication and energy wire manufacturing	\$0	(\$3)	(\$3)	(\$6)
Aircraft manufacturing	\$0	\$0	(\$2)	(\$2)
Other household and institutional furniture	\$0	(\$1)	(\$7)	(\$7)
Office furniture- except wood- manufacturing	\$0	\$0	\$0	\$0
Showcases- partitions- shelving- and lockers	\$0	\$0	\$0	\$0
Sporting and athletic goods manufacturing	\$0	\$0	(\$3)	(\$3)
Buttons- pins- and all other miscellaneous manufacturing	\$0	(\$4)	(\$3)	(\$7)
Wholesale trade	\$0	(\$2,884)	(\$1,365)	(\$4,249)
Rail transportation	\$0	(\$24)	(\$3)	(\$27)
Truck transportation	\$0	(\$1,183)	(\$418)	(\$1,602)
Transit and ground passenger transportation	\$0	(\$3)	(\$26)	(\$30)
Scenic and sightseeing transportation and support	\$0	(\$40)	(\$32)	(\$72)
Postal service	\$0	(\$94)	(\$121)	(\$214)
Couriers and messengers	\$0	(\$33)	(\$37)	(\$71)
Warehousing and storage	\$0	(\$1,307)	(\$50)	(\$1,357)
Motor vehicle and parts dealers	\$0	(\$27)	(\$1,050)	(\$1,077)
Furniture and home furnishings stores	\$0	(\$2)	(\$69)	(\$72)
Electronics and appliance stores	\$0	(\$1)	(\$42)	(\$43)
Building material and garden supply stores	\$0	(\$18)	(\$684)	(\$702)
Food and beverage stores	\$0	(\$27)	(\$1,022)	(\$1,049)

Table A-4

## Agricultural Impacts: Output

## Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093

(con't)

Industry	Direct	Indirect	Induced	Total
Health and personal care stores	\$0	(\$14)	(\$514)	(\$528)
Gasoline stations	\$0	(\$11)	(\$366)	(\$377)
Clothing and clothing accessories stores	\$0	(\$2)	(\$79)	(\$81)
Sporting goods- hobby- book and music stores	\$0	(\$2)	(\$72)	(\$73)
General merchandise stores	\$0	(\$9)	(\$361)	(\$370)
Miscellaneous store retailers	\$0	(\$4)	(\$155)	(\$160)
Nonstore retailers	\$0	(\$5)	(\$209)	(\$215)
Newspaper publishers	\$0	(\$278)	(\$272)	(\$550)
Motion picture and video industries	\$0	(\$3)	(\$227)	(\$231)
Telecommunications	\$0	(\$158)	(\$402)	(\$560)
Information services	\$0	(\$9)	(\$8)	(\$17)
Nondepository credit intermediation	\$0	(\$66)	(\$56)	(\$121)
Securities- commodity contracts- investments	\$0	(\$37)	(\$199)	(\$236)
Insurance carriers	\$0	(\$158)	(\$95)	(\$253)
Insurance agencies- brokerages	\$0	(\$46)	(\$28)	(\$74)
Monetary authorities and depository credit intermediaries	\$0	(\$725)	(\$737)	(\$1,462)
Real estate	\$0	(\$5,106)	(\$1,030)	(\$6,136)
Automotive equipment rental and leasing	\$0	(\$87)	(\$74)	(\$161)
Video tape and disc rental	\$0	\$0	(\$105)	(\$105)
Machinery and equipment rental and leasing	\$0	(\$144)	(\$10)	(\$154)
Legal services	\$0	(\$166)	(\$382)	(\$547)
Accounting and bookkeeping services	\$0	(\$321)	(\$122)	(\$443)
Architectural and engineering services	\$0	(\$86)	(\$22)	(\$107)
Custom computer programming services	\$0	\$0	\$0	(\$1)
Management consulting services	\$0	(\$31)	(\$37)	(\$68)
Environmental and other technical consulting services	\$0	(\$23)	(\$21)	(\$44)
Advertising and related services	\$0	(\$10)	(\$9)	(\$19)
Veterinary services	\$0	(\$6)	(\$139)	(\$145)
Office administrative services	\$0	(\$48)	(\$39)	(\$86)
Facilities support services	\$0	(\$1)	\$0	(\$1)
Employment services	\$0	(\$12)	(\$15)	(\$27)
Business support services	\$0	(\$2)	(\$3)	(\$5)
Travel arrangement and reservation services	\$0	(\$6)	(\$67)	(\$73)
Investigation and security services	\$0	(\$19)	(\$18)	(\$36)
Services to buildings and dwellings	\$0	(\$94)	(\$143)	(\$237)
Other support services	\$0	(\$35)	(\$39)	(\$74)
Waste management and remediation services	\$0	(\$186)	(\$51)	(\$237)
Elementary and secondary schools	\$0	\$0	(\$32)	(\$32)
Other educational services	\$0	(\$1)	(\$101)	(\$102)
Offices of physicians- dentists- and other health	\$0	\$0	(\$1,264)	(\$1,264)
Other ambulatory health care services	\$0	\$0	(\$251)	(\$251)
Hospitals	\$0	\$0	(\$1,127)	(\$1,127)
Nursing and residential care facilities	\$0	\$0	(\$1,025)	(\$1,025)
Child day care services	\$0	\$0	(\$384)	(\$384)
Social assistance- except child day care services	\$0	\$0	(\$581)	(\$581)
Independent artists- writers- and performers	\$0	(\$15)	(\$12)	(\$27)
Museums- historical sites- zoos- and parks	\$0	\$0	(\$9)	(\$9)
Fitness and recreational sports centers	\$0	(\$2)	(\$21)	(\$22)
Bowling centers	\$0	\$0	(\$5)	(\$5)
Other amusement- gambling- and recreation industries	\$0	(\$15)	(\$149)	(\$164)
Hotels and motels- including casino hotels	\$0	(\$60)	(\$169)	(\$229)
Other accommodations	\$0	(\$4)	(\$48)	(\$52)
Food services and drinking places	\$0	(\$109)	(\$3,336)	(\$3,445)
Car washes	\$0	(\$3)	(\$66)	(\$69)
Automotive repair and maintenance- except car wash	\$0	(\$351)	(\$1,041)	(\$1,392)
Electronic equipment repair and maintenance	\$0	(\$2)	(\$2)	(\$5)
Commercial machinery repair and maintenance	\$0	(\$1,037)	(\$37)	(\$1,074)
Household goods repair and maintenance	\$0	(\$7)	(\$48)	(\$56)
Personal care services	\$0	\$0	(\$25)	(\$25)
Death care services	\$0	\$0	(\$83)	(\$83)
Drycleaning and laundry services	\$0	(\$4)	(\$42)	(\$46)
Other personal services	\$0	\$0	(\$11)	(\$11)
Religious organizations	\$0	\$0	(\$379)	(\$379)
Grantmaking and giving and social advocacy organization	\$0	\$0	(\$35)	(\$35)
Civic- social- professional and similar organization	\$0	(\$159)	(\$249)	(\$408)
Private households	\$0	\$0	(\$191)	(\$191)
Other Federal Government enterprises	\$0	(\$8)	(\$12)	(\$21)
State and local government passenger transit	\$0	(\$17)	(\$131)	(\$149)
State and local government electric utilities	\$0	(\$430)	(\$294)	(\$724)
Other State and local government enterprises	\$0	(\$2,109)	(\$895)	(\$3,005)
Owner-occupied dwellings	\$0	\$0	(\$7,222)	(\$7,222)
Total	(\$305,916)	(\$41,185)	(\$32,293)	(\$379,394)

**Table A-5**  
**Recreation Impacts: Personal Income**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Industry	Direct	Indirect	Induced	Total
Oilseed farming	\$0	\$0	\$0	\$0
Grain farming	\$0	\$9	\$12	\$21
Vegetable and melon farming	\$0	\$49	\$21	\$69
Tree nut farming	\$0	\$3	\$15	\$18
Fruit farming	\$0	\$7	\$20	\$27
Greenhouse and nursery production	\$0	\$0	\$6	\$6
Cotton farming	\$0	\$0	\$2	\$2
All other crop farming	\$0	\$16	\$5	\$21
Cattle ranching and farming	\$0	\$11	\$3	\$14
Poultry and egg production	\$0	\$6	\$2	\$8
Animal production- except cattle and poultry	\$0	\$2	\$1	\$3
Agriculture and forestry support activities	\$0	\$25	\$22	\$48
Stone mining and quarrying	\$0	\$0	\$0	\$0
Sand- gravel- clay- and refractory mining	\$0	\$0	\$0	\$0
Natural gas distribution	\$0	\$6	\$10	\$16
Water- sewage and other systems	\$0	\$9	\$25	\$34
Maintenance and repair of farm and nonfarm residential	\$0	\$1	\$13	\$14
Maintenance and repair of nonresidential buildings	\$0	\$72	\$18	\$90
Other maintenance and repair construction	\$0	\$5	\$9	\$14
Other animal food manufacturing	\$0	\$0	\$0	\$0
Rice milling	\$0	\$7	\$6	\$13
Other oilseed processing	\$0	\$0	\$0	\$0
Fruit and vegetable canning and drying	\$0	\$22	\$5	\$27
Cheese manufacturing	\$0	\$74	\$15	\$88
Animal- except poultry- slaughtering	\$0	\$3	\$1	\$3
Bread and bakery product- except frozen- manufacturing	\$0	\$113	\$21	\$134
Roasted nuts and peanut butter manufacturing	\$0	\$6	\$3	\$8
Reconstituted wood product manufacturing	\$0	\$0	\$0	\$0
Engineered wood member and truss manufacturing	\$0	\$1	\$1	\$2
Other millwork- including flooring	\$0	\$1	\$1	\$2
Miscellaneous wood product manufacturing	\$0	\$1	\$1	\$2
Commercial printing	\$0	\$48	\$15	\$63
Cellulosic organic fiber manufacturing	\$0	\$0	\$0	\$0
Plastics packaging materials- film and sheet	\$0	\$1	\$1	\$2
Foam product manufacturing	\$0	\$23	\$2	\$25
Cement manufacturing	\$0	\$0	\$0	\$0
Ready-mix concrete manufacturing	\$0	\$0	\$0	\$0
Concrete block and brick manufacturing	\$0	\$0	\$0	\$0
Concrete pipe manufacturing	\$0	\$0	\$0	\$0
Mineral wool manufacturing	\$0	\$68	\$6	\$74
Sheet metal work manufacturing	\$0	\$0	\$0	\$0
Miscellaneous fabricated metal product manufacturing	\$0	\$0	\$0	\$0
Farm machinery and equipment manufacturing	\$0	\$0	\$0	\$1
Other communication and energy wire manufacturing	\$0	\$0	\$0	\$1
Aircraft manufacturing	\$0	\$0	\$0	\$0
Other household and institutional furniture	\$0	\$0	\$1	\$1
Office furniture- except wood- manufacturing	\$0	\$0	\$0	\$0
Showcases- partitions- shelving- and lockers	\$0	\$0	\$0	\$0
Sporting and athletic goods manufacturing	\$0	\$0	\$1	\$1
Buttons- pins- and all other miscellaneous manufacturing	\$0	\$1	\$1	\$2
Wholesale trade	\$0	\$431	\$412	\$843
Rail transportation	\$0	\$2	\$1	\$2
Truck transportation	\$0	\$158	\$108	\$266
Transit and ground passenger transportation	\$0	\$1	\$8	\$10
Scenic and sightseeing transportation and support	\$0	\$22	\$16	\$38
Postal service	\$0	\$61	\$59	\$119
Couriers and messengers	\$0	\$23	\$13	\$35
Warehousing and storage	\$0	\$18	\$18	\$36
Motor vehicle and parts dealers	\$0	\$21	\$378	\$399
Furniture and home furnishings stores	\$0	\$2	\$22	\$23
Electronics and appliance stores	\$0	\$1	\$17	\$18
Building material and garden supply stores	\$0	\$12	\$224	\$236
Food and beverage stores	\$0	\$18	\$319	\$337
Health and personal care stores	\$0	\$9	\$164	\$173
Gasoline stations	\$0	\$8	\$124	\$132
Clothing and clothing accessories stores	\$0	\$1	\$23	\$24

**Table A-5**  
**Recreation Impacts: Personal Income**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

(con't)

Industry	Direct	Indirect	Induced	Total
Sporting goods- hobby- book and music stores	\$0	\$2	\$29	\$30
General merchandise stores	\$0	\$7	\$130	\$137
Miscellaneous store retailers	\$0	\$3	\$57	\$60
Nonstore retailers	\$0	\$2	\$43	\$45
Newspaper publishers	\$0	\$313	\$76	\$388
Motion picture and video industries	\$0	\$45	\$31	\$76
Telecommunications	\$0	\$17	\$60	\$77
Information services	\$0	\$1	\$1	\$1
Nondepository credit intermediation and related	\$0	\$27	\$17	\$44
Securities- commodity contracts- investments	\$0	\$15	\$63	\$79
Insurance carriers	\$0	\$2	\$19	\$20
Insurance agencies- brokerages- and related	\$0	\$1	\$8	\$9
Monetary authorities and depository credit intermediary	\$0	\$39	\$127	\$165
Real estate	\$0	\$130	\$115	\$245
Automotive equipment rental and leasing	\$0	\$2	\$9	\$11
Video tape and disc rental	\$0	\$0	\$18	\$18
Machinery and equipment rental and leasing	\$0	\$7	\$4	\$11
Legal services	\$0	\$28	\$137	\$165
Accounting and bookkeeping services	\$0	\$64	\$37	\$101
Architectural and engineering services	\$0	\$8	\$8	\$17
Custom computer programming services	\$0	\$1	\$0	\$1
Management consulting services	\$0	\$26	\$13	\$40
Environmental and other technical consulting services	\$0	\$5	\$6	\$11
Advertising and related services	\$0	\$9	\$2	\$11
Veterinary services	\$0	\$3	\$38	\$41
Office administrative services	\$0	\$4	\$4	\$8
Facilities support services	\$0	\$0	\$0	\$0
Employment services	\$0	\$11	\$10	\$21
Business support services	\$0	\$1	\$1	\$2
Travel arrangement and reservation services	\$0	\$1	\$12	\$13
Investigation and security services	\$0	\$9	\$8	\$17
Services to buildings and dwellings	\$0	\$20	\$37	\$56
Other support services	\$0	\$3	\$6	\$10
Waste management and remediation services	\$0	\$13	\$10	\$22
Elementary and secondary schools	\$0	\$0	\$11	\$11
Other educational services	\$0	\$0	\$14	\$14
Offices of physicians- dentists- and other health	\$0	\$0	\$572	\$572
Other ambulatory health care services	\$0	\$0	\$56	\$56
Hospitals	\$0	\$0	\$466	\$466
Nursing and residential care facilities	\$0	\$0	\$449	\$449
Child day care services	\$0	\$0	\$68	\$68
Social assistance- except child day care services	\$0	\$0	\$160	\$161
Independent artists- writers- and performers	\$0	\$4	\$3	\$7
Museums- historical sites- zoos- and parks	\$0	\$0	\$3	\$3
Fitness and recreational sports centers	\$0	\$1	\$7	\$8
Bowling centers	\$0	\$0	\$1	\$1
Other amusement- gambling- and recreation industries	\$0	\$2	\$33	\$35
Hotels and motels- including casino hotels	\$0	\$14	\$48	\$62
Other accommodations	\$0	\$0	\$7	\$7
Food services and drinking places	\$16,444	\$126	\$790	\$17,360
Car washes	\$0	\$1	\$15	\$16
Automotive repair and maintenance- except car wash	\$0	\$38	\$281	\$319
Electronic equipment repair and maintenance	\$0	\$1	\$0	\$1
Commercial machinery repair and maintenance	\$0	\$33	\$7	\$40
Household goods repair and maintenance	\$0	\$2	\$4	\$6
Personal care services	\$0	\$0	\$7	\$7
Death care services	\$0	\$0	\$30	\$30
Drycleaning and laundry services	\$0	\$13	\$15	\$28
Other personal services	\$0	\$0	\$1	\$1
Religious organizations	\$0	\$0	\$228	\$228
Grantmaking and giving and social advocacy organization	\$0	\$0	\$5	\$5
Civic- social- professional and similar organization	\$0	\$6	\$55	\$61
Private households	\$0	\$0	\$134	\$134
Other Federal Government enterprises	\$0	\$1	\$3	\$4
State and local government passenger transit	\$0	\$13	\$87	\$100
State and local government electric utilities	\$0	\$34	\$35	\$69
Other State and local government enterprises	\$0	\$87	\$172	\$259
State & Local Non-Education	<u>\$46,801</u>	<u>\$0</u>	<u>\$0</u>	<u>\$46,801</u>
<b>Total</b>	<b>\$63,245</b>	<b>\$2,572</b>	<b>\$7,074</b>	<b>\$72,891</b>



Table A-6

## Recreation Impacts: Jobs

## Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093

Industry	Direct	Indirect	Induced	Total
Oilseed farming	0	0	0	0
Grain farming	0	0	0	0
Vegetable and melon farming	0	0	0	0
Tree nut farming	0	0	0	0
Fruit farming	0	0	0	0
Greenhouse and nursery production	0	0	0	0
Cotton farming	0	0	0	0
All other crop farming	0	0	0	0
Cattle ranching and farming	0	0	0	0
Poultry and egg production	0	0	0	0
Animal production- except cattle and poultry	0	0	0	0
Agriculture and forestry support activities	0	0	0	0
Stone mining and quarrying	0	0	0	0
Sand- gravel- clay- and refractory mining	0	0	0	0
Natural gas distribution	0	0	0	0
Water- sewage and other systems	0	0	0	0
Maintenance and repair of farm and nonfarm residential	0	0	0	0
Maintenance and repair of nonresidential buildings	0	0	0	0
Other maintenance and repair construction	0	0	0	0
Other animal food manufacturing	0	0	0	0
Rice milling	0	0	0	0
Other oilseed processing	0	0	0	0
Fruit and vegetable canning and drying	0	0	0	0
Cheese manufacturing	0	0	0	0
Animal- except poultry- slaughtering	0	0	0	0
Bread and bakery product- except frozen- manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	0	0	0
Reconstituted wood product manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	0	0	0
Other millwork- including flooring	0	0	0	0
Miscellaneous wood product manufacturing	0	0	0	0
Commercial printing	0	0	0	0
Cellulosic organic fiber manufacturing	0	0	0	0
Plastics packaging materials- film and sheet	0	0	0	0
Foam product manufacturing	0	0	0	0
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	0	0	0
Concrete block and brick manufacturing	0	0	0	0
Concrete pipe manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Sheet metal work manufacturing	0	0	0	0
Miscellaneous fabricated metal product manufacturing	0	0	0	0
Farm machinery and equipment manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	0
Other household and institutional furniture	0	0	0	0
Office furniture- except wood- manufacturing	0	0	0	0
Showcases- partitions- shelving- and lockers	0	0	0	0
Sporting and athletic goods manufacturing	0	0	0	0
Buttons- pins- and all other miscellaneous manufacturing	0	0	0	0
Wholesale trade	0	0	0	0
Rail transportation	0	0	0	0
Truck transportation	0	0	0	0
Transit and ground passenger transportation	0	0	0	0
Scenic and sightseeing transportation and support	0	0	0	0
Postal service	0	0	0	0
Couriers and messengers	0	0	0	0
Warehousing and storage	0	0	0	0
Motor vehicle and parts dealers	0	0	0	0
Furniture and home furnishings stores	0	0	0	0
Electronics and appliance stores	0	0	0	0
Building material and garden supply stores	0	0	0	0
Food and beverage stores	0	0	0	0
Health and personal care stores	0	0	0	0
Gasoline stations	0	0	0	0
Clothing and clothing accessories stores	0	0	0	0

**Table A-6**  
**Recreation Impacts: Jobs**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

(con't)

Industry	Direct	Indirect	Induced	Total
Sporting goods- hobby- book and music stores	0	0	0	0
General merchandise stores	0	0	0	0
Miscellaneous store retailers	0	0	0	0
Nonstore retailers	0	0	0	0
Newspaper publishers	0	0	0	0
Motion picture and video industries	0	0	0	0
Telecommunications	0	0	0	0
Information services	0	0	0	0
Nondepository credit intermediation and related	0	0	0	0
Securities- commodity contracts- investments	0	0	0	0
Insurance carriers	0	0	0	0
Insurance agencies- brokerages- and related	0	0	0	0
Monetary authorities and depository credit intermediary	0	0	0	0
Real estate	0	0	0	0
Automotive equipment rental and leasing	0	0	0	0
Video tape and disc rental	0	0	0	0
Machinery and equipment rental and leasing	0	0	0	0
Legal services	0	0	0	0
Accounting and bookkeeping services	0	0	0	0
Architectural and engineering services	0	0	0	0
Custom computer programming services	0	0	0	0
Management consulting services	0	0	0	0
Environmental and other technical consulting services	0	0	0	0
Advertising and related services	0	0	0	0
Veterinary services	0	0	0	0
Office administrative services	0	0	0	0
Facilities support services	0	0	0	0
Employment services	0	0	0	0
Business support services	0	0	0	0
Travel arrangement and reservation services	0	0	0	0
Investigation and security services	0	0	0	0
Services to buildings and dwellings	0	0	0	0
Other support services	0	0	0	0
Waste management and remediation services	0	0	0	0
Elementary and secondary schools	0	0	0	0
Other educational services	0	0	0	0
Offices of physicians- dentists- and other health	0	0	0	0
Other ambulatory health care services	0	0	0	0
Hospitals	0	0	0	0
Nursing and residential care facilities	0	0	0	0
Child day care services	0	0	0	0
Social assistance- except child day care services	0	0	0	0
Independent artists- writers- and performers	0	0	0	0
Museums- historical sites- zoos- and parks	0	0	0	0
Fitness and recreational sports centers	0	0	0	0
Bowling centers	0	0	0	0
Other amusement- gambling- and recreation industries	0	0	0	0
Hotels and motels- including casino hotels	0	0	0	0
Other accommodations	0	0	0	0
Food services and drinking places	1.1	0	0.1	1.1
Car washes	0	0	0	0
Automotive repair and maintenance- except car wash	0	0	0	0
Electronic equipment repair and maintenance	0	0	0	0
Commercial machinery repair and maintenance	0	0	0	0
Household goods repair and maintenance	0	0	0	0
Personal care services	0	0	0	0
Death care services	0	0	0	0
Drycleaning and laundry services	0	0	0	0
Other personal services	0	0	0	0
Religious organizations	0	0	0	0
Grantmaking and giving and social advocacy organization	0	0	0	0
Civic- social- professional and similar organization	0	0	0	0
Private households	0	0	0	0
Other Federal Government enterprises	0	0	0	0
State and local government passenger transit	0	0	0	0
State and local government electric utilities	0	0	0	0
Other State and local government enterprises	0	0	0	0
State & Local Non-Education	1	0	0	1
<b>Total</b>	<b>2.1</b>	<b>0.1</b>	<b>0.3</b>	<b>2.5</b>

**Table A-7**  
**Recreation Impacts: Output**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

Industry	Direct	Indirect	Induced	Total
Oilseed farming	\$0	\$0	\$2	\$2
Grain farming	\$0	\$51	\$66	\$117
Vegetable and melon farming	\$0	\$172	\$73	\$245
Tree nut farming	\$0	\$13	\$64	\$76
Fruit farming	\$0	\$31	\$91	\$123
Greenhouse and nursery production	\$0	\$1	\$21	\$22
Cotton farming	\$0	\$1	\$13	\$14
All other crop farming	\$0	\$98	\$29	\$127
Cattle ranching and farming	\$0	\$515	\$129	\$645
Poultry and egg production	\$0	\$59	\$16	\$76
Animal production- except cattle and poultry	\$0	\$67	\$17	\$84
Agriculture and forestry support activities	\$0	\$24	\$21	\$45
Stone mining and quarrying	\$0	\$0	\$0	\$0
Sand- gravel- clay- and refractory mining	\$0	\$0	\$0	\$0
Natural gas distribution	\$0	\$108	\$162	\$270
Water- sewage and other systems	\$0	\$18	\$49	\$67
Maintenance and repair of farm and nonfarm residential	\$0	\$4	\$49	\$54
Maintenance and repair of nonresidential buildings	\$0	\$160	\$40	\$201
Other maintenance and repair construction	\$0	\$9	\$14	\$23
Other animal food manufacturing	\$0	\$1	\$1	\$1
Rice milling	\$0	\$96	\$73	\$169
Other oilseed processing	\$0	\$1	\$0	\$2
Fruit and vegetable canning and drying	\$0	\$175	\$36	\$211
Cheese manufacturing	\$0	\$1,084	\$215	\$1,299
Animal- except poultry- slaughtering	\$0	\$69	\$17	\$86
Bread and bakery product- except frozen- manufacturing	\$0	\$414	\$77	\$491
Roasted nuts and peanut butter manufacturing	\$0	\$50	\$26	\$76
Reconstituted wood product manufacturing	\$0	\$1	\$1	\$1
Engineered wood member and truss manufacturing	\$0	\$5	\$4	\$9
Other millwork- including flooring	\$0	\$5	\$4	\$9
Miscellaneous wood product manufacturing	\$0	\$3	\$5	\$7
Commercial printing	\$0	\$77	\$24	\$101
Cellulosic organic fiber manufacturing	\$0	\$0	\$0	\$0
Plastics packaging materials- film and sheet	\$0	\$10	\$10	\$20
Foam product manufacturing	\$0	\$138	\$12	\$150
Cement manufacturing	\$0	\$0	\$0	\$0
Ready-mix concrete manufacturing	\$0	\$1	\$1	\$1
Concrete block and brick manufacturing	\$0	\$0	\$0	\$1
Concrete pipe manufacturing	\$0	\$1	\$1	\$1
Mineral wool manufacturing	\$0	\$319	\$27	\$347
Sheet metal work manufacturing	\$0	\$0	\$0	\$1
Miscellaneous fabricated metal product manufacturing	\$0	\$0	\$0	\$1
Farm machinery and equipment manufacturing	\$0	\$4	\$2	\$7
Other communication and energy wire manufacturing	\$0	\$2	\$2	\$4
Aircraft manufacturing	\$0	\$0	\$1	\$1
Other household and institutional furniture	\$0	\$0	\$5	\$5
Office furniture- except wood- manufacturing	\$0	\$0	\$0	\$0
Showcases- partitions- shelving- and lockers	\$0	\$0	\$0	\$0
Sporting and athletic goods manufacturing	\$0	\$0	\$2	\$2
Buttons- pins- and all other miscellaneous manufacturing	\$0	\$3	\$2	\$5
Wholesale trade	\$0	\$1,010	\$967	\$1,977
Rail transportation	\$0	\$4	\$2	\$6
Truck transportation	\$0	\$432	\$296	\$728
Transit and ground passenger transportation	\$0	\$3	\$18	\$21
Scenic and sightseeing transportation and support	\$0	\$31	\$22	\$54
Postal service	\$0	\$88	\$85	\$173
Couriers and messengers	\$0	\$48	\$26	\$74
Warehousing and storage	\$0	\$34	\$35	\$70
Motor vehicle and parts dealers	\$0	\$41	\$743	\$784
Furniture and home furnishings stores	\$0	\$4	\$49	\$53
Electronics and appliance stores	\$0	\$2	\$30	\$32
Building material and garden supply stores	\$0	\$26	\$484	\$511
Food and beverage stores	\$0	\$40	\$723	\$764
Health and personal care stores	\$0	\$21	\$364	\$385
Gasoline stations	\$0	\$17	\$259	\$276
Clothing and clothing accessories stores	\$0	\$3	\$56	\$59

**Table A-7**  
**Recreation Impacts: Output**  
**Colusa Subreach Fiscal/Economic Impacts Analysis; EPS #15093**

(con't)

Industry	Direct	Indirect	Induced	Total
Sporting goods- hobby- book and music stores	\$0	\$3	\$51	\$54
General merchandise stores	\$0	\$14	\$256	\$270
Miscellaneous store retailers	\$0	\$6	\$110	\$116
Nonstore retailers	\$0	\$8	\$148	\$156
Newspaper publishers	\$0	\$795	\$192	\$987
Motion picture and video industries	\$0	\$227	\$161	\$388
Telecommunications	\$0	\$80	\$285	\$365
Information services	\$0	\$7	\$6	\$13
Nondepository credit intermediation and related	\$0	\$63	\$39	\$102
Securities- commodity contracts- investments	\$0	\$34	\$141	\$176
Insurance carriers	\$0	\$5	\$67	\$73
Insurance agencies- brokerages- and related	\$0	\$2	\$20	\$21
Monetary authorities and depository credit intermediary	\$0	\$160	\$522	\$683
Real estate	\$0	\$833	\$733	\$1,566
Automotive equipment rental and leasing	\$0	\$12	\$53	\$65
Video tape and disc rental	\$0	\$0	\$74	\$74
Machinery and equipment rental and leasing	\$0	\$11	\$7	\$18
Legal services	\$0	\$55	\$270	\$325
Accounting and bookkeeping services	\$0	\$148	\$87	\$234
Architectural and engineering services	\$0	\$15	\$15	\$31
Custom computer programming services	\$0	\$1	\$0	\$1
Management consulting services	\$0	\$51	\$26	\$77
Environmental and other technical consulting services	\$0	\$13	\$15	\$28
Advertising and related services	\$0	\$28	\$7	\$35
Veterinary services	\$0	\$8	\$98	\$107
Office administrative services	\$0	\$29	\$27	\$56
Facilities support services	\$0	\$0	\$0	\$1
Employment services	\$0	\$12	\$11	\$22
Business support services	\$0	\$2	\$2	\$5
Travel arrangement and reservation services	\$0	\$3	\$47	\$51
Investigation and security services	\$0	\$15	\$13	\$28
Services to buildings and dwellings	\$0	\$54	\$101	\$154
Other support services	\$0	\$15	\$28	\$43
Waste management and remediation services	\$0	\$48	\$36	\$85
Elementary and secondary schools	\$0	\$0	\$22	\$22
Other educational services	\$0	\$0	\$71	\$72
Offices of physicians- dentists- and other health	\$0	\$0	\$895	\$895
Other ambulatory health care services	\$0	\$0	\$178	\$178
Hospitals	\$0	\$0	\$799	\$799
Nursing and residential care facilities	\$0	\$0	\$727	\$727
Child day care services	\$0	\$0	\$271	\$271
Social assistance- except child day care services	\$0	\$0	\$411	\$411
Independent artists- writers- and performers	\$0	\$15	\$9	\$23
Museums- historical sites- zoos- and parks	\$0	\$0	\$6	\$6
Fitness and recreational sports centers	\$0	\$2	\$15	\$17
Bowling centers	\$0	\$0	\$4	\$4
Other amusement- gambling- and recreation industries	\$0	\$6	\$105	\$111
Hotels and motels- including casino hotels	\$0	\$35	\$119	\$154
Other accommodations	\$0	\$1	\$34	\$35
Food services and drinking places	\$49,100	\$377	\$2,359	\$51,836
Car washes	\$0	\$2	\$47	\$49
Automotive repair and maintenance- except car wash	\$0	\$99	\$736	\$834
Electronic equipment repair and maintenance	\$0	\$5	\$2	\$6
Commercial machinery repair and maintenance	\$0	\$119	\$26	\$145
Household goods repair and maintenance	\$0	\$13	\$34	\$47
Personal care services	\$0	\$0	\$18	\$18
Death care services	\$0	\$0	\$60	\$60
Drycleaning and laundry services	\$0	\$26	\$30	\$55
Other personal services	\$0	\$0	\$8	\$8
Religious organizations	\$0	\$0	\$268	\$268
Grantmaking and giving and social advocacy organization	\$0	\$0	\$25	\$25
Civic- social- professional and similar organization	\$0	\$19	\$176	\$195
Private households	\$0	\$0	\$134	\$134
Other Federal Government enterprises	\$0	\$2	\$9	\$11
State and local government passenger transit	\$0	\$14	\$93	\$107
State and local government electric utilities	\$0	\$199	\$209	\$408
Other State and local government enterprises	\$0	\$320	\$634	\$954
State & Local Non-Education	\$52,736	\$0	\$0	\$52,736
Owner-occupied dwellings	\$0	\$0	\$5,096	\$5,096
<b>Total</b>	<b>101,836</b>	<b>\$9,603</b>	<b>\$22,848</b>	<b>\$134,287</b>