

FINAL REPORT—EXECUTIVE SUMMARY

FISCAL AND ECONOMIC IMPACT ANALYSES COLUSA SUBREACH

Prepared for:

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

Prepared by:

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I. EXECUTIVE SUMMARY AND FINDINGS

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

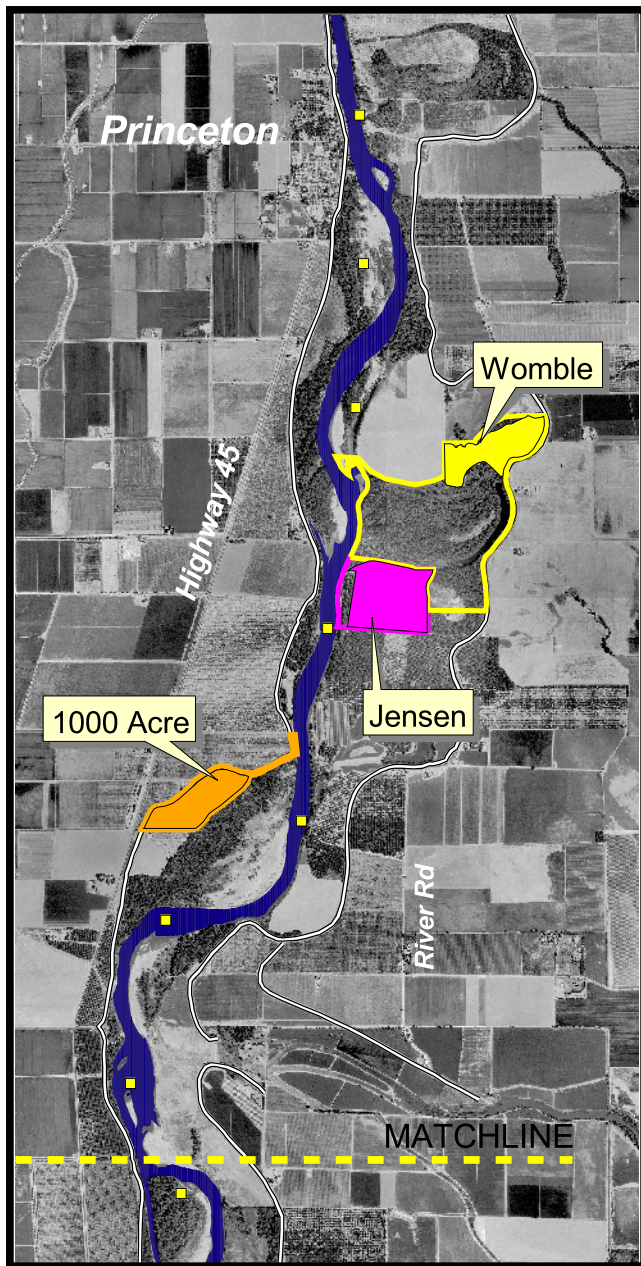


Figure 1

**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

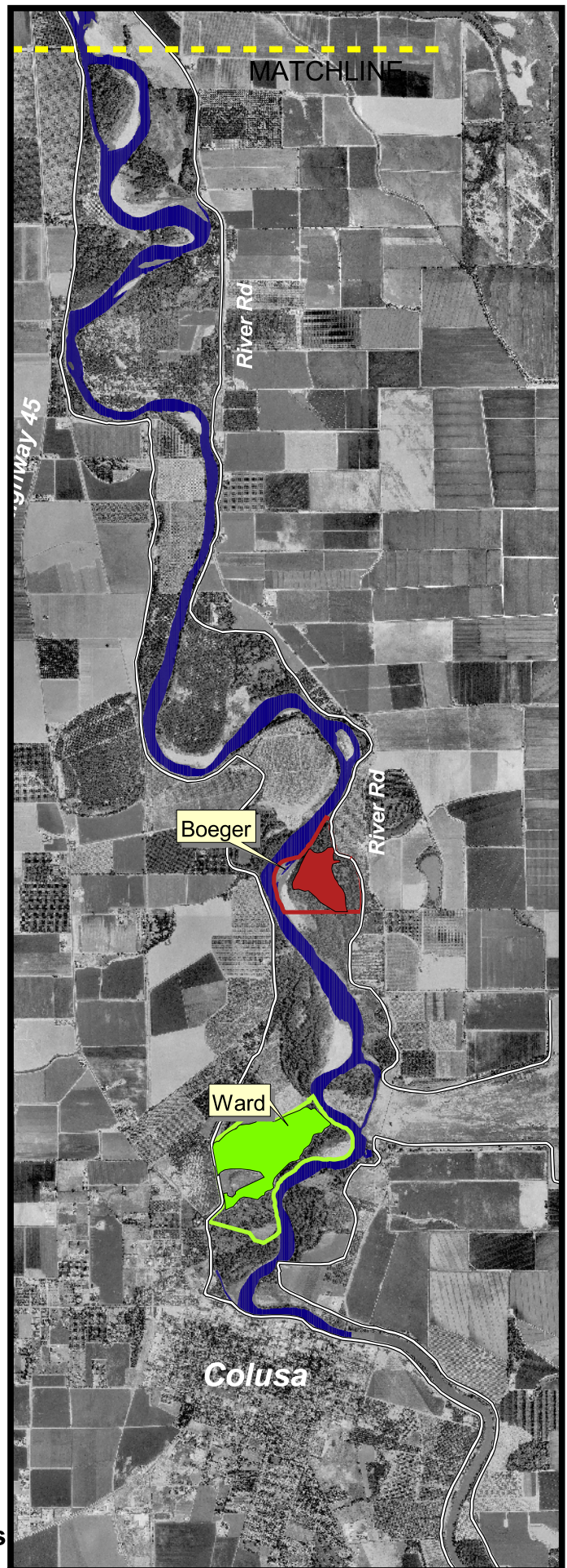
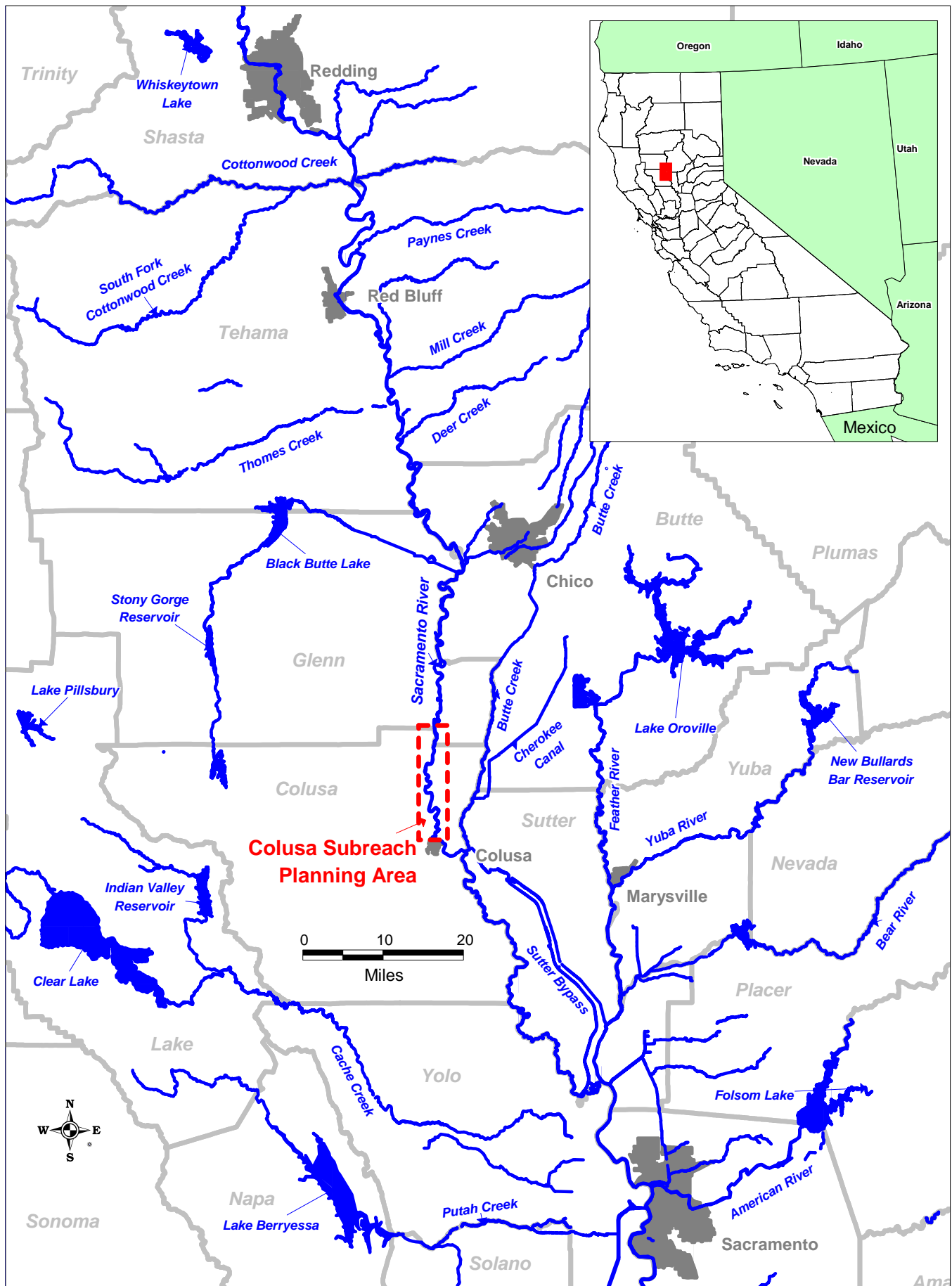


Figure 2: Colusa Subreach Planning Area



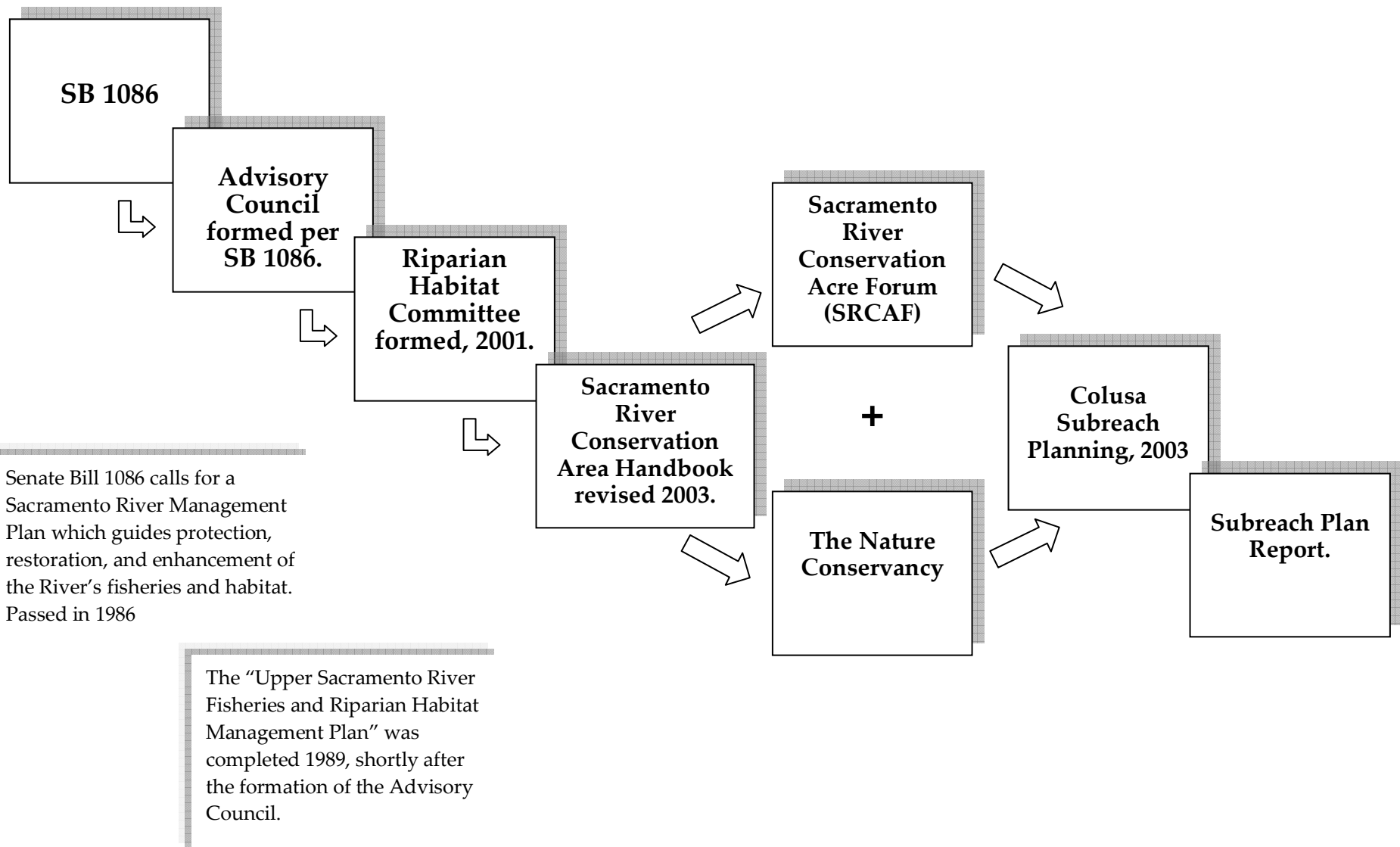
BACKGROUND

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.¹ 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.² 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.**

¹ 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.

² 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.³ 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.⁴ 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.⁵

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

⁴ 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.

⁵ 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.⁶ 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.⁷

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.

⁶ 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.

⁷ 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.