Hamilton City Flood Damage Reduction and Ecosystem Restoration, California

Hamilton City Citizens In Action

"A Committee to Serve the Citizens of Hamilton City"

CALIFORNIA BAY-DELTA AUTHORITY

Sacramento and San Joaquin River Basins Comprehensive Study

THE RECLAMATION BOARD STATE OF CALIFORNIA

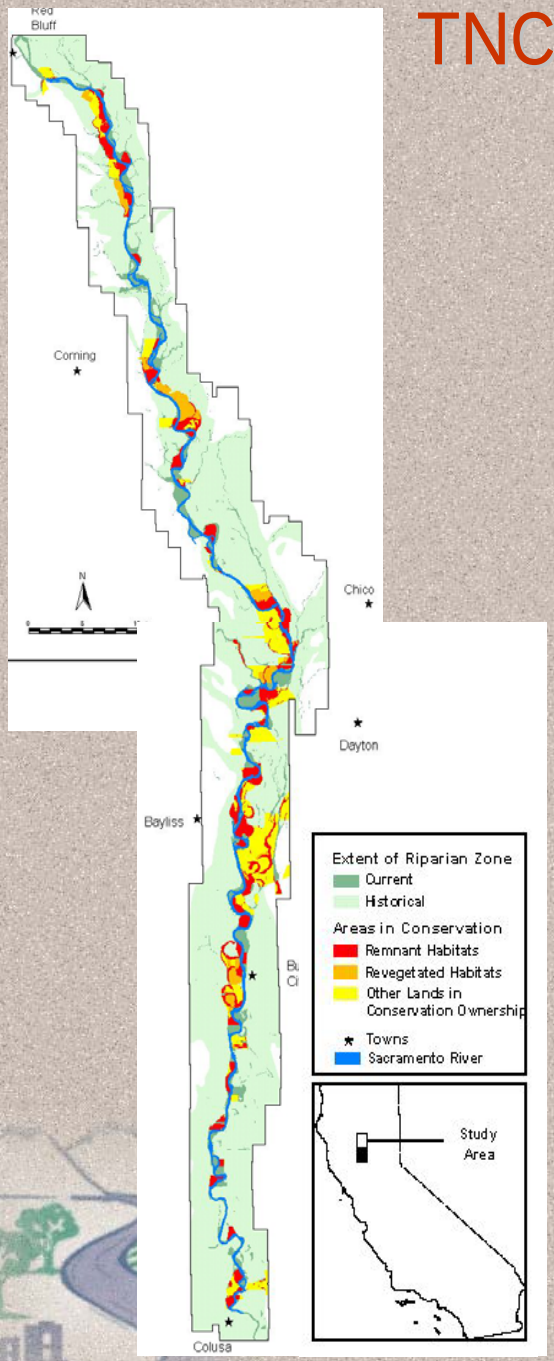
sacramento river conservation area forum
a voice for all interests

COUNTY OF GLENN

The Nature Conservancy
SAVING THE LAST GREAT PLACES ON EARTH

US Army Corps of Engineers

TNC's Sacramento River Project



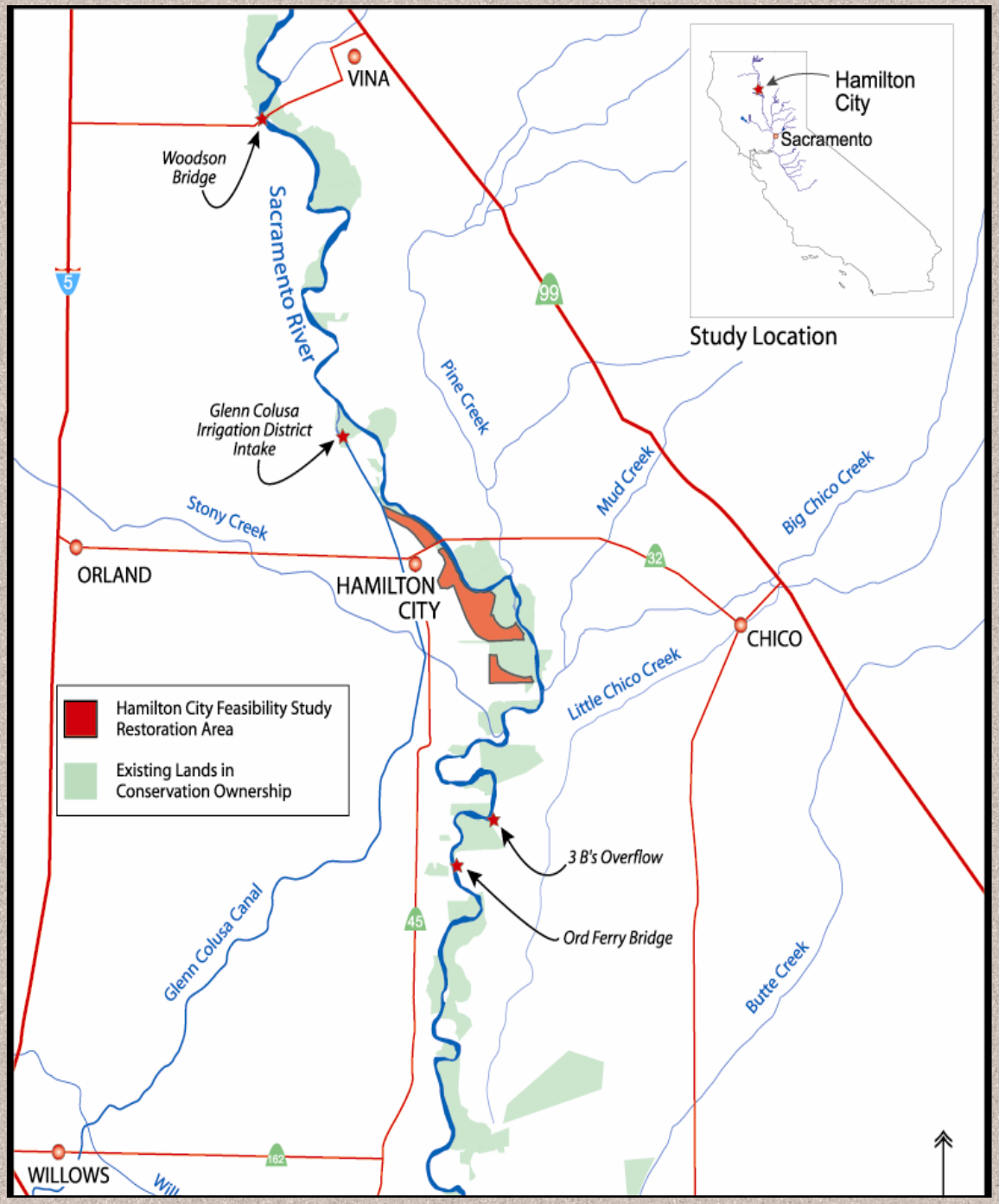
1) Acquire flood-prone lands and existing habitat
   - ~ 20,000 acres

2) Revegetate land with native trees, shrubs, and understory
   - ~ 3,500 acres

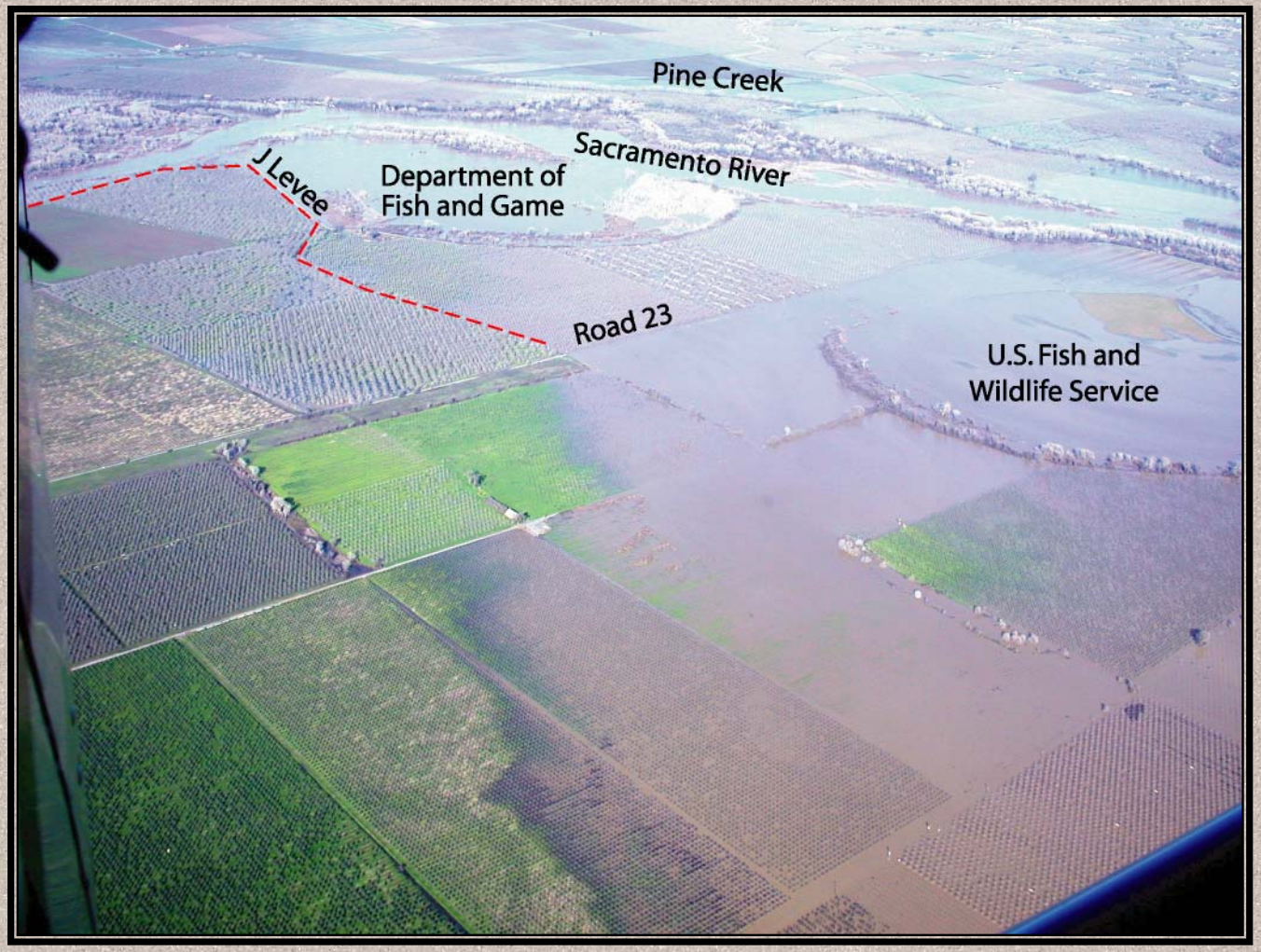
3) Restore natural river process (flood plain connectivity)
   - Hamilton City Project

Other Programs

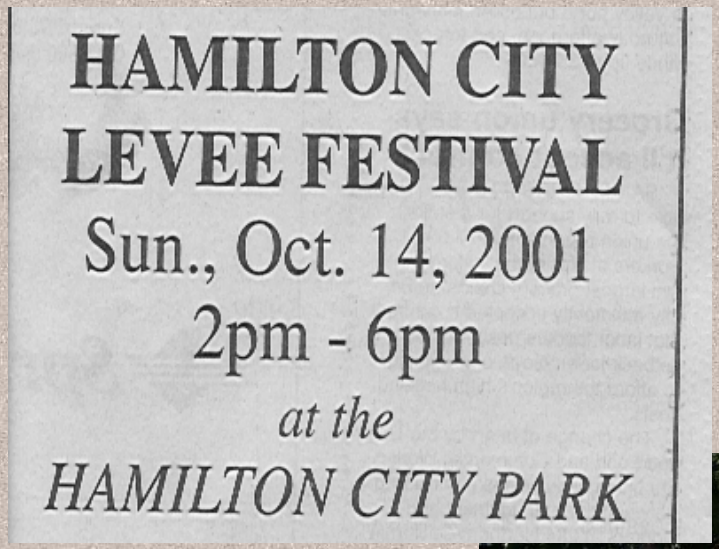
- USFWS
- DF&G
- SRCAF
- CALFED



Project Area During a 4 Year Flood (February 2004)



Local Involvement


HAMILTON CITY
LEVEE FESTIVAL
Sun., Oct. 14, 2001
2pm - 6pm
at the
HAMILTON CITY PARK

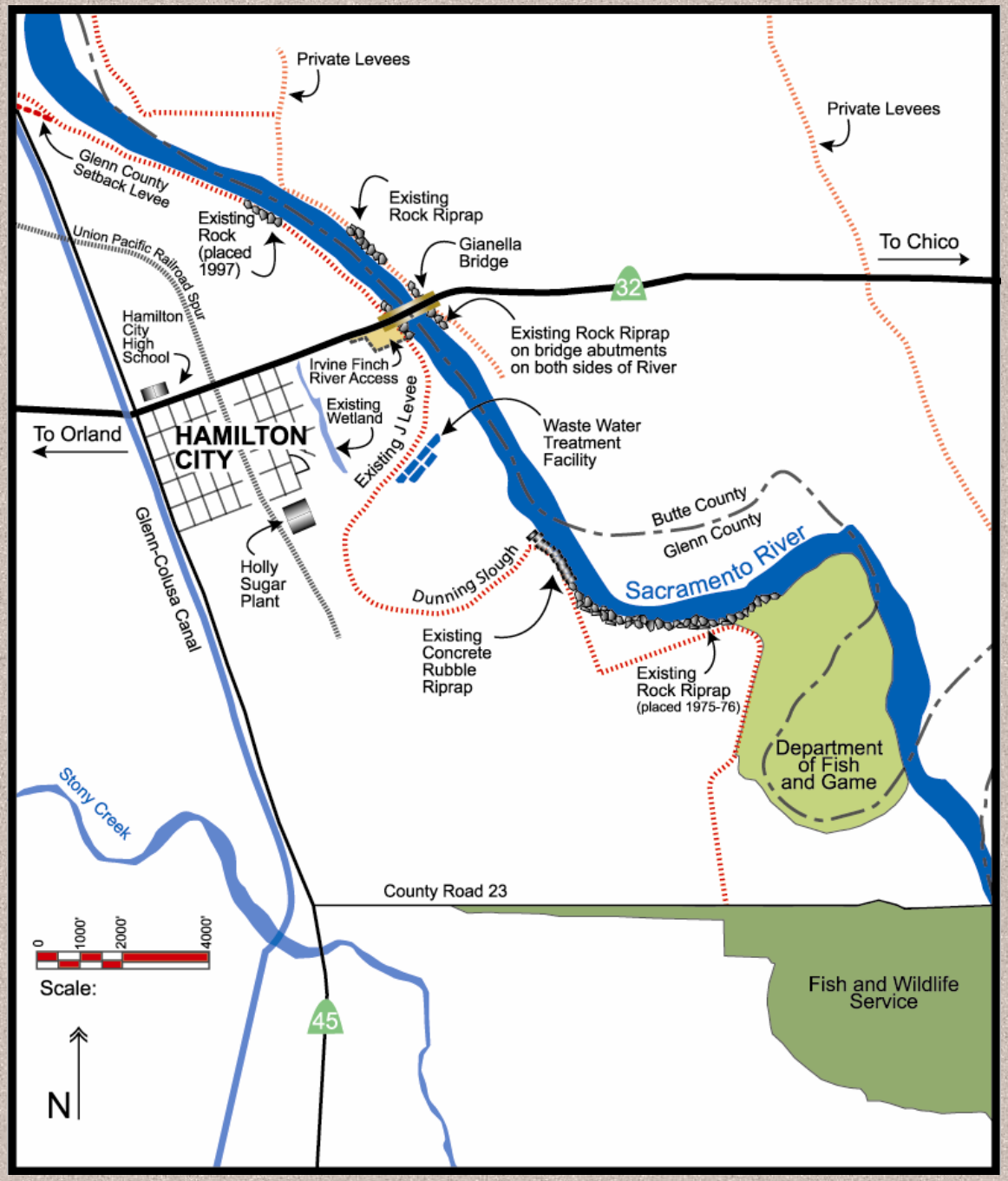
- 3 Previous Corps studies
- Evacuated 6 times in past 20 years
- Flood fighting 5 times in past 20 years
- Annual levee festivals since 1998, raised ~$85,000

Study Authority

- Flood Control Act of 1962, authorized the Secretary of the Army to conduct surveys in the Sacramento River Basin.
- Water Resources Development Act of 1996 established environmental protection and restoration as a primary project purpose.
- Energy and Water Development Appropriations Act 1998.

Study Area

- 2,500 permanent residents
- $9,050 per capita
- Failing private levee (circa 1905)

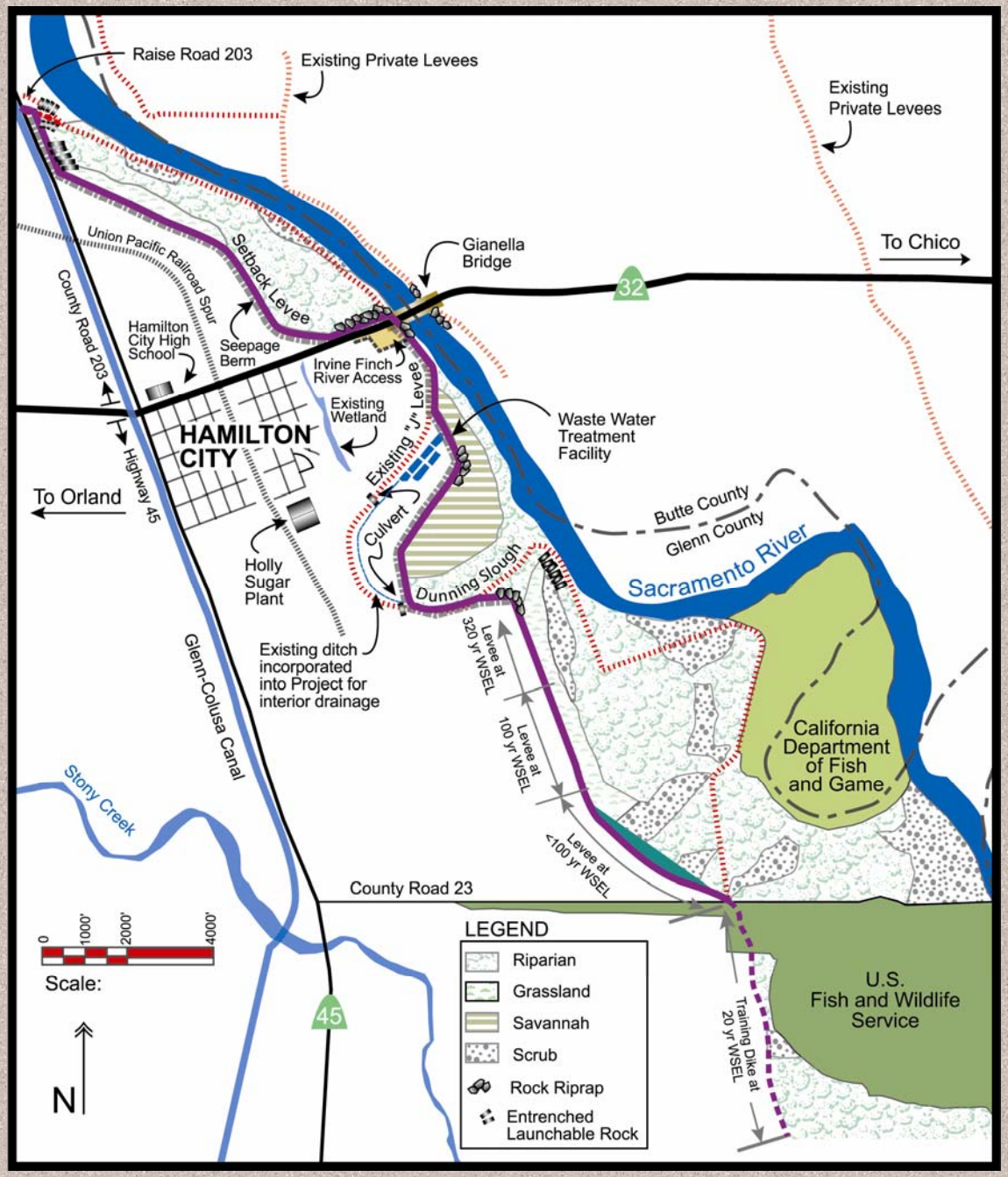


Summary of Objectives

- **Flooding**
  - **Reduce Flood Risk**
  - **Reduce Flood Damages**
- **Ecosystem**
  - **Improve Quantity and Quality of Habitat**
  - **Restore River Function**
- **Partnership**
  - **Form successful partnership between the community of Hamilton City, agriculture, and the environment**

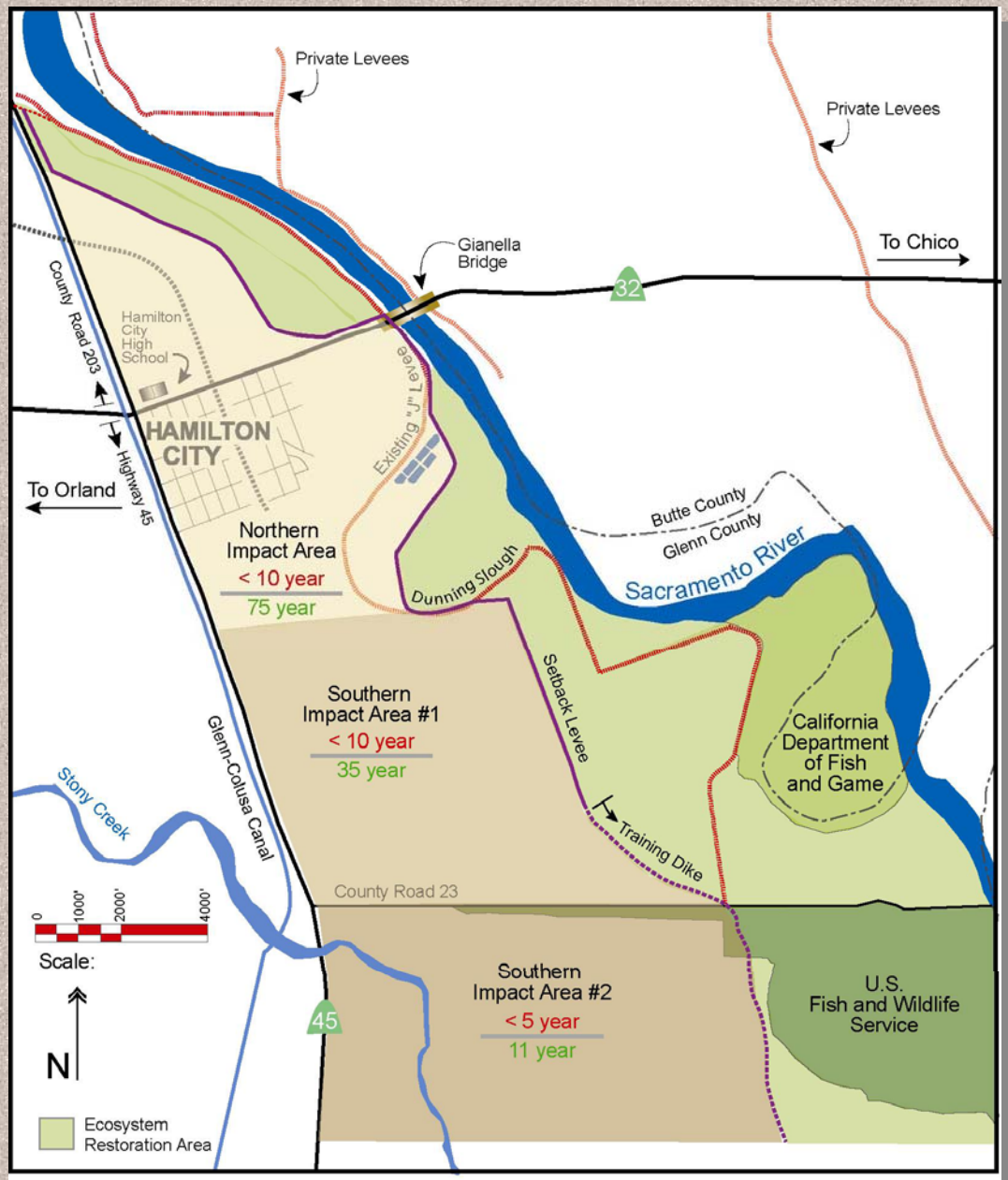
Recommended Plan

- Construct 6.8 miles of setback levee and training dike
- Remove "J" Levee
- Provides up to 90% chance of passing a 75-yr event
- Restore 1,500 acres of native habitat
- Reestablishes river and floodplain connectivity



Benefits: Flood Damage Reduction

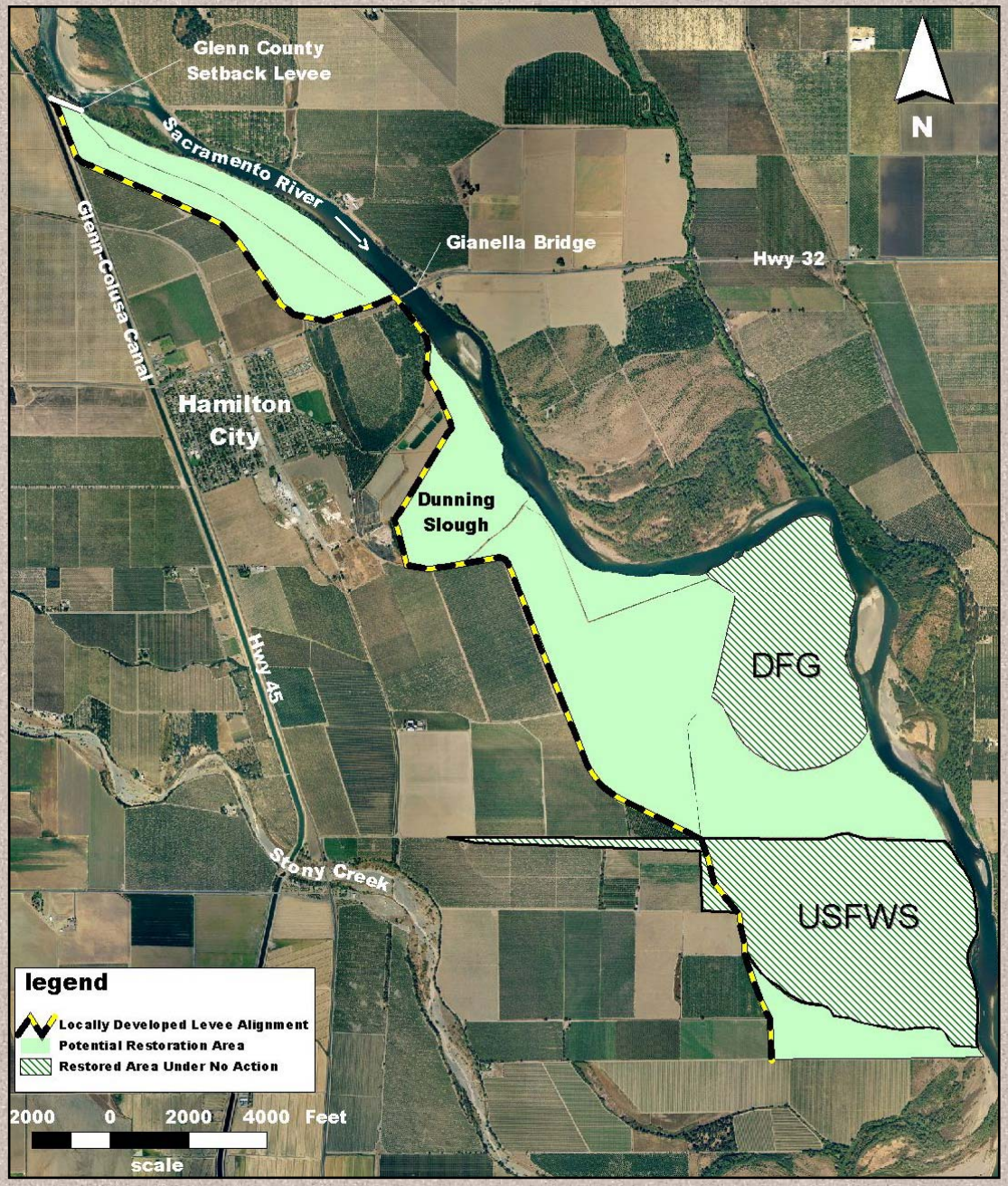
- Increase from 1 in 10 to 1 in 75 chance of flooding any given year.
- Expected reduction of average annual flood damages =$577,000



Hamilton City Flood Risk: Conditional Non-Exceedance Probability
(Measures 90% probability of surviving a specific event)
RED: Without Project
GREEN: With Tentatively Recommended Plan

Benefits: Ecosystem Restoration

- Restore about 1,500 acres of native habitat
  - Riparian – 1,000 acres
  - Grassland – 100 acres
  - Savannah – 150 acres
  - Scrub – 250 acres
- Restore floodplain connectivity



Project First Costs

(October 2003 Price Level)

Project Purpose	Federal	Non-Federal	Total
Ecosystem Restoration	$26,290,000	$14,156,000	$40,446,000
Flood Damage Reduction	$2,769,000	$1,491,000	$4,260,000
Cultural Resource Preservation	$170,000		$170,000
Totals	$29,229,000	$15,647,000	$44,876,000

Non-Federal (State and Locals)	
Total	$15,647,000
Lands, Easements, Right of Ways, Relocations and Disposal/Borrow Areas (LERRD's)	$13,910,000
Cash	$1,737,000

Schedule

Corps' South Pacific Division Engineers Notice	September 2004
Corps' Chief of Engineers Report	December 2004
Cost Sharing Agreements for Design	As early as April 2005
Preconstruction Engineering and Design	As early as April 2005
Initiate Construction	2008
Complete Physical Construction	2011
Complete Plant Establishment Period	2013
Complete Monitoring	2016

Why has this worked?

Communication, Communication, Communication

- Locals and TNC very engaged
- ACE staff accessible and flexible
- Strong partnership and a high level of trust

Building Support and Awareness

SUNDAY • January 12, 2003

ENTERPRISE RECORD

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Chico, Ca

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Hamilton City tells corps its flooding fears

By HEATHER HACKING
Staff Writer

HAMILTON CITY — Glenn County residents worried about the failing J Levee, which protects Hamilton City from flooding by the Sacramento River, came out in force Thursday night to ask questions and voice concerns.

The meeting that drew about 50 was organized by the Army Corps of Engineers, which is taking the lead on plans for future levee protection.

Several plans are being considered and formally considered The feasibility study is being conducted The study cost is $600,000 and is being funded through the corps. Cathy

A bulldozer sits near a new section of the J Levee near Do

the state level.

Mike Billiou, a Glenn County rancher, served as sort of the spokesman for the community, reading from a pre-prepared letter.

He contacted newspapers on the

cost side of the river to residents on the

He said the st

unified that be

Need a levee? Call Glenn County Public Works' team

Levee,
from Page One

8A Monday, June 16, 2003

LEVEE: Numerous benefits considered when determining cost

From 1A

Locally developed alternative

Intermediate levee alternative

Ring levee alternative

MONDAY • June 16, 2003

ENTERPRISE RECORD

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Plans to protect Hamilton City becoming clearer

By HEATHER HACKING
Staff Writer

HAMILTON CITY — Hamilton City residents are getting a better and better idea what a new levee protecting their town might look like.

The pros and cons and price tags were laid out at a meeting last week for six different options to protect the town of 1,800 people from flood and provide habitat along the west side of the Sacramento River.

Eric Thaut, water resource planner for the Army Corps of Engineers, gave the group of farmers and residents an update on the feasibility study currently under way at a cost of $600,000.

The current levee along the river was built about 100 years ago, failed twice in the 1970s and required emergency reinforcement five times since 1983.

Building a new levee project will cost tens of millions of dollars. Because of the way federal funding works, there must be $1 in benefit for each $1 in construction costs. This has made it difficult for small Hamilton City, which doesn't have the infrastructure to justify such a big project.

However, the Nature Conservancy has purchased land along the river, which will be put into habitat restoration when the levee project is put into place.

Thaut said the habitat factor needs to be weighed in, because habitat counts toward the $1-to-$1 cost-to-benefit ratio. If more habitat is weighed in, the more likely the project will reach this threshold.

"There's no way we could do this without the habitat," he said.

The project will also include taking out the habitat.

The project will also include taking out the current J levee.

Just in case

Hamilton City residents were ready if Sacramento River crested at 148 feet

By DANNY BERNARDINI
Staff Writer

HAMILTON CITY — The threat of the Sacramento River flooding, or nothing Sunday Hamilton City shared these fears. A forecasted storm was supposed to push the water levels over the 148-foot mark, which meant the levee that protects the city would be in jeopardy.

The scare prompted workers from the California Department of Water Resources and a few Hamilton City residents to meet in Ehrk's back yard, which hangs over the ever-creeping river bank to the levee, to decide if they would engage in a flood fight.

With a little help from mother nature that pushed the storm north, Hamilton City escaped the predicted violent storm, and by early morning water levels fell

See READY, 8A

Other Key Ingredients

- Combining project purposes (with a strong partnership) = project resources
- The new ACE multiple purpose project policy
- Finding the right, knowledgeable reviewers
- Again, focusing on success and avoiding distraction by process

Bumps in the Road

Continuing challenges

- Policy challenges (both State and Federal)
- Different organizational and cultural approaches to ecosystem restoration
- The ACE process is very confusing to partners
- Difficult to maintain project momentum and staff resources over a long period (1999-2014)

We have made a lot of progress

- Strong partnership
- Stakeholders actively engaged and supportive
- Roughly $10 million in land acquisition will be donated to the non-federal project costs
- Positive press in local and regional papers
- Recently completed Feasibility study/EIR EIS
- Forged bi-partisan political support
  - Authorization language pending in Senate WRDA
  - Funding language pending in House Energy and Water appropriations bill

Hamilton City Flood Damage Reduction and Ecosystem Restoration, California

Electronic copies of the report can be viewed at www.compstudy.org/hamilton.html

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US Army Corps of Engineers Sacramento District