

# BIG CHICO CREEK WATERSHED ALLIANCE

Input for County Integrated Water Resources Plan

## **I Description of Organization**

Contact Person: Susan Strachan, Chair  
P.O. Box 461  
Chico, CA 95928  
(530) 894-1308 Website: [www.bigchicocreek.org](http://www.bigchicocreek.org)

Year Established: 1993

Background History: The Big Chico Creek Watershed Alliance began as the Big Chico Creek Task Force, a subcommittee of the Bidwell Parks and Playground Commission in 1993, in response to declining anadromous fish runs. The first effort of the Task Force was to work with a local ranch to relocate its irrigation pumps from Big Chico Creek to the Sacramento River as the pumps had interfered with salmon migration. The Alliance became an independent watershed group in 1996, and after incorporating as a public benefit corporation, formed a Board of Directors in 2003. Membership on the Board is open to any person holding a stake in the Big Chico Creek watershed. Of the 15 seats, five are reserved for landowners in the Big Chico, Sycamore, Lindo, Mud and Rock Creek subwatersheds. The Alliance Board of Directors meets on the second Monday of each month in a Chico City Hall conference room.

Description of Watershed: Big Chico Creek drains the western slope of the Sierra Nevada from an elevation of 5400' to the Sacramento River.

Typical Land Use: Urban, agriculture, ecological reserve

Watercourses: The watershed includes four tributaries: Rock Creek, Mud Creek, Sycamore Creek, and Lindo Channel.

Mission Statement: The mission of the Big Chico Creek Watershed Alliance is to protect and enhance the ecological integrity and economic vitality of the Big Chico Creek watershed through cooperative efforts. In partnership with landowners, interested citizens, government agencies and private enterprise, the Alliance works to foster education, understanding, sustainable land management, and ecosystem and water quality restoration and conservation.

Additional Description: The watershed includes a wide diversity of habitats, from coniferous forests to blue oak woodlands to open grasslands. Prime orchard land is located in the Rock Creek and Mud Creek subwatersheds. Chico is Big Chico Creek's

largest urbanized areas with the growing communities of Cohasset and Forest Ranch located in the upper watershed. The watershed also includes the Big Chico Creek Ecological Reserve, a 3450 acre located along 4.5 miles of the mainstem. The Reserve drains into Bidwell Park which is owned by the City of Chico and protects 3618 acres and 12 miles of stream channel.

## **II Past Plans & Projects**

The Alliance has developed partnership projects with the City of Chico, Butte County Resource Conservation District, Streaminders, California State University, Chico and the adjacent watershed groups in Butte County.

Other completed projects to date include:

- Citizen monitoring in conjunction with the USGS National Water Monitoring Day and Earth Science Week
- Big Chico Creek Watershed Project (Existing Conditions Report, 2000)
- Purchase of Big Chico Creek Ecological Reserve, partnering with California State University, Chico and the River Network
- Joint efforts with the City of Chico to remove the invasive species *Arundo donax* (giant reed) from sites along Big Chico Creek and Lindo Channel without the use of herbicides
- Training volunteers in aquatic bioassessment
- Restoration projects with Streaminders in Bidwell Park
- Co-sponsoring of the annual Creeks of Chico Conferences
- Sponsorship of local presentations by world-renowned experts in watershed management and restoration

## **III Current Projects**

With funding from the California Bay Delta Authority Watershed Program, the Alliance is implementing a Citizen Monitoring program for urban runoff in conjunction with broader effort to manage water quality in Chico's urban streams. The project includes public education by the Butte Environmental Council and a water quality study of the Best Management Practices used by the City to reduce runoff peak flows. Citizen volunteers are also monitoring the upper watershed through a Sierra Nevada Alliance grant. The Sierra Nevada Alliance is also funding a joint project with the Big Chico Creek Ecological Reserve to construct a unimproved road rehabilitation demonstration project. Through funding from the Department of Conservation and the California Bay Delta Authority and together with the other watershed groups in Butte County, the Alliance is working with the Butte County Resource Conservation District to develop Memorandums of Understanding, conduct joint workshops and planning documents, assist with disseminating information on farm water quality, and develop fundraising capacity.

#### **IV Specific Interests/Role in Local Water Resource Planning**

Special interests of the Alliance include the following:

- a) support with facilitation of stakeholders regarding development of sub-inventory unit basin management objectives (BMOs)
- b) participation in the development of policies to promote infiltration of stormwater in new development
- c) support of watershed based water quality monitoring that integrates urban and agricultural monitoring
- d) develop understanding of relationship of aquifer recharge and surface streams (surface versus groundwater)
- e) public education (use watershed groups to outreach to stakeholders)
- f) design standards to manage storm water to support aquifer recharge, reduce pollution and minimize downstream flooding

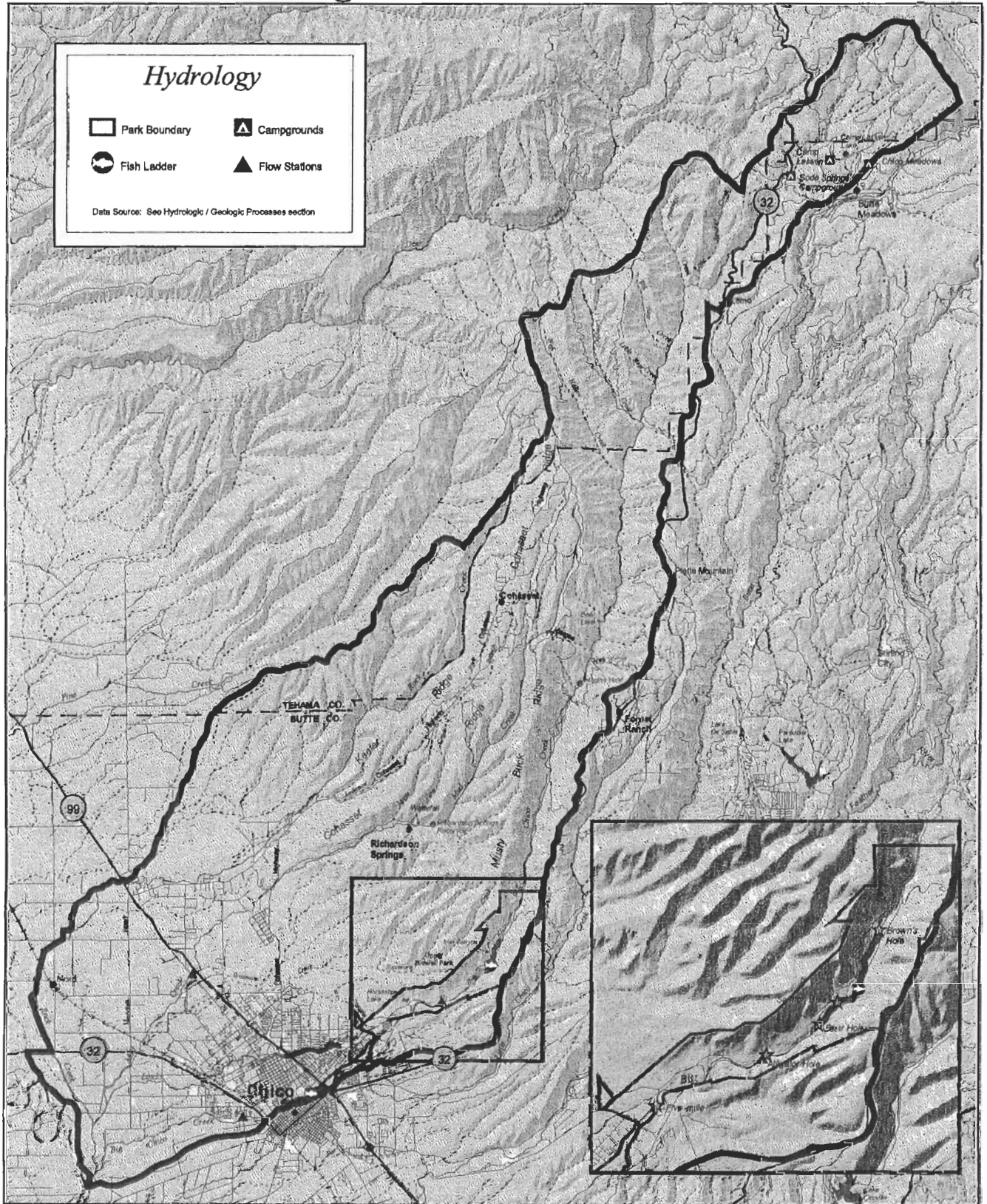
#### **V Maps**

Refer to the attached map of the Big Chico Creek Watershed excerpted from the Big Chico Creek Watershed Project, Existing Conditions Report (2000).

#### **VI Contact Information**

For additional information contact the Butte County Department of Water and Resource Conservation at (530) 538-4343.

# Big Chico Creek Watershed



*Hydrology*

Park Boundary	Campgrounds
Fish Ladder	Flow Stations

Data Source: See Hydrologic / Geologic Processes section

- |                                 |          |             |                    |
|---------------------------------|----------|-------------|--------------------|
| Highway, Interstate, Major Road | Railroad | Major River | Watershed Boundary |
| Road                            | Trail    | Minor River | County Line        |

1:192000

0 1 2 3 4 Miles

Prepared February 14, 2000

# BUTTE CREEK WATERSHED CONSERVANCY

Input for County Integrated Water Resources Plan

## I Description of Organization

Contact Person: Will Johnson, Coordinator  
P.O. Box 1611  
Chico, CA 95927  
(530) 893-5399      Web Site: <http://buttecreekwatershed.org>

Year Established: 1996 (established as a 501(c)3 organization in 11/96)

Background History: The Butte Creek Watershed Conservancy was formed to encourage the preservation and proper management of the Butte Creek Watershed, emphasizing cooperation between landowners, water users, recreational users, conservation groups, and local, state, and federal agencies. The Conservancy was created as a landowner-driven group, and a 12-member Board of Directors directs its policies. Current Board members include community leaders in agriculture, timber, cattle grazing, local industry, and conservation.

The Conservancy's formative MOU established a voluntary and cooperative agreement among 24 signatories to work together in a watershed planning process. It is the Conservancy's belief that stakeholders working cooperatively have the greatest potential for streamlining resource management and minimizing conflict between landowners, water users, government agencies, and conservation groups.

Description of Watershed: Butte Creek originates in the Jonesville Basin in Lassen National Forest at an elevation of 7,087 feet. Upper Butte Creek is characterized by forest, meadows, and a repeating series of pools and riffles. Butte Creek transitions from Butte Meadows through a steep canyon to a point where it enters the Sacramento Valley floor near Chico. Lower Butte Creek (below Highway 99) is bordered by agricultural lands, several state and federal wildlife areas, and is contained at times by levees. Butte Creek is tributary to the Sacramento River.

Typical Land Use: National forest, recreation, timber, private land (ranching), urban influence (near Chico and Durham), agriculture, wildlife reserves

Watercourses: Contributing flows into Butte Creek, other than natural tributaries in higher elevations, include flows from the West Branch of the Feather River which is diverted by Pacific Gas & Electric (PGE) for power generation via the Toadtown/Hendricks Canal at the DeSabra powerhouse.

Mission Statement: The Butte Creek Watershed Conservancy was established to protect, restore, and enhance the cultural, economic, and ecological heritage of the Butte Creek Watershed through cooperative landowner action.

## **II Past Plans and Projects**

In 1996 the Conservancy enlisted the services of the California State University-Chico, Department of Geography and Planning, to apply for State, Federal and private grants for the development of a Watershed Management Strategy. Through the generosity of the US Fish & Wildlife Service, CalFED, National Fish & Wildlife Foundation, Bureau of Reclamation, and the Metropolitan Water District, the Conservancy set in the motion the creation of the Butte Creek Watershed Management Strategy which was completed in 1999. A copy of the Butte Creek Watershed Management Strategy Report, which describes Existing Conditions, is on file at the County Department of Water & Resource Conservation.

## **III Current Projects**

Current programs and projects include the Floodplain Management Plan (FMP) which will list specific recommendations addressing flood, emergency preparedness and means of mitigating the current deficiencies in regard to flood control. Additionally the FMP will provide modeling tools for prediction of inundation and a template style management procedure to be used at other locations/watersheds.

Another current endeavor is the Flood Insurance Cost Reduction program (FICR). The FICR focuses on individual properties within the watershed and may be extended to all residents of the county, affected by inclusion in a designated flood zone. The FMP seeks to address communities and the FICR seeks to address individuals. This program is in its first phase (data gathering and testing of premises) and will be 4 to 5 months in development (implementation is anticipated by fall 2004). This program is not funded by grants but is entirely grass roots driven.

## **IV Specific Interests/Role in Local Water Resource Planning**

Special interests of the Conservancy include:

- a) development of resource base funding that would allow for annual operations and administrative expenses (of the Conservancy)
- b) continued inclusion and participation in local planning with regard to water use, water quality, and regional conservation/management efforts
- c) continued participation with other watershed groups in our area to foster cooperation and mutual commitment

- d) continue efforts to develop projects and applications that are backed by a well defined need, sound science, and that are most cost effective
- e) continue efforts to monitor the existing fishery, population growth in the canyon, and recreation demands in the watershed
- f) continue interest in determining infrastructure needs of the watershed to accommodate pressures from recreation, population, etc.. (i.e. number of game wardens, roads, etc..)
- g) fuel load and timber management
- h) road design, construction and maintenance
- i) groundwater recharge
- j) water quality and quantity
- k) Urban run-off and flooding
- l) Public education
- m) Continued respect for private property rights within the watershed
- n) Continued respect and protection of public resources within the watershed
- o) Good land stewardship practices, conservation, restoration, and sound resource management

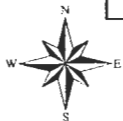
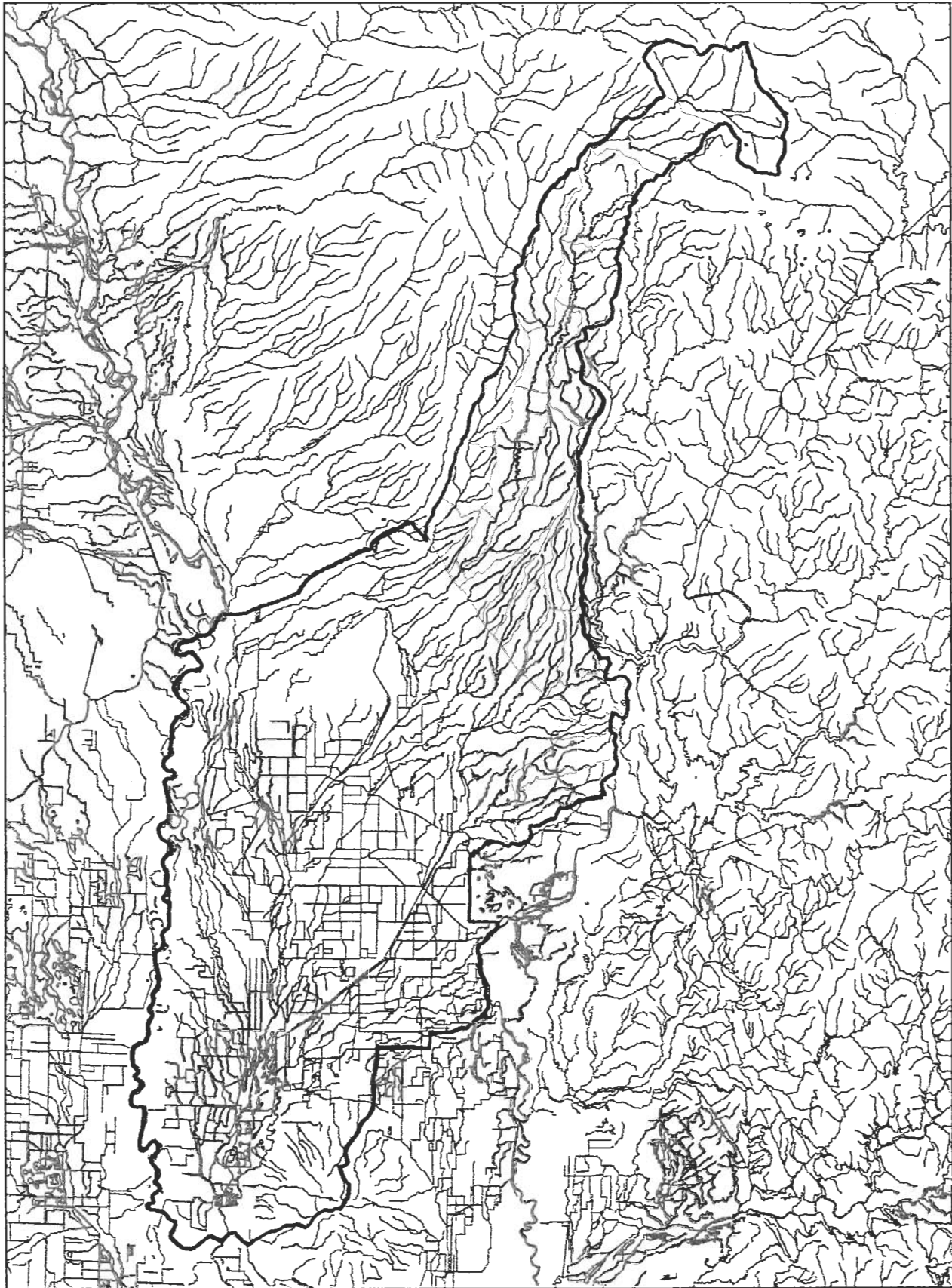
## **V Maps**

Refer to the attached map of the Butte Creek Watershed.

## **VI Contact Information**

For additional information contact the Butte County Department of Water & Resource Conservation at (530) 538-4343.

# Butte Creek Watershed Conservancy



Butte Creek Watershed and Streams

# CHEROKEE WATERSHED ALLIANCE

Input for County Integrated Water Resources Plan

## **I Description of Organization**

Contact Person: Susan St.Germaine-Morger, Watershed Coordinator  
Durham, CA

Year Established: 1996

Background History: The original Cherokee Watershed Alliance Resource Management Program (CRMP) group consisted roughly of neighbors from Nelson Road in the southern portion of the watershed, the foothills to the east, to Western Canal Water District's borders on the west, and the intersection of Hwy 99 and 149 to the north. After the Drought Water Bank in 1994, local concerned residents observed that patterns of development or resource utilization was a threat to the quiet enjoyment of this rural environment.

Local property owners (stakeholders) organized themselves to establish a voice to improve communication on projects that are likely to impact watershed stakeholders.

Description of Watershed: Foothill (Paradise vicinity) and valley

Typical Land Use: Ranching, agriculture (rice, orchard), urban (Paradise), rural parcels

Watercourses: Cherokee Canal, Dry Creek, Gold Creek, Cottonwood Creek

Mission Statement: To protect the natural resources and environment, local water resources, and economic opportunity of the region.

## **II Past Plans & Projects**

The current Department of Water Resources (DWR) grant is to build the initial capacity of the Alliance.

## **III Current Projects**

The Cherokee Watershed Alliance is presently conducting a water quality investigation through California State University-Chico (CSUC) and citizen monitoring efforts. The

project is funded by grants from the State DWR and the Regional Water Quality Control Board, and shall remain in effect through the summer 2005. Sampling events are conducted on a monthly basis in local drainages and analyzed for field parameters (pH, electroconductivity, temperature), trace metals, nutrients, minerals, fecal coliform, and other general water quality constituents.

The project also includes various outreach programs including a public workshop that addresses groundwater recharge areas located within the watershed.

#### **IV Specific Interests/Role in Local Water Resource Planning**

As a product of capacity building associated with the citizen monitoring grant, a member of the Alliance could help facilitate the Basin Management Objective (BMO) sub-inventory unit for the Cherokee Watershed. Other interests of the Alliance regarding water resource planning concerns include:

- a) groundwater reliability and water supply evaluations for new water users (may include water use efficiency, recycling, irrigation methods)
- b) flood control strategies (capacity, management of flow volumes and quality)
- c) land use zoning that may affect water supplies, watershed drainage
- d) development of baseline water quality data (i.e. also monitor environmental effects from historic mining activities)
- e) economic impacts and long term consequences of water supply and infrastructure developments
- f) citizen involvement and capacity building with other entities
- g) public education
- h) septic problems

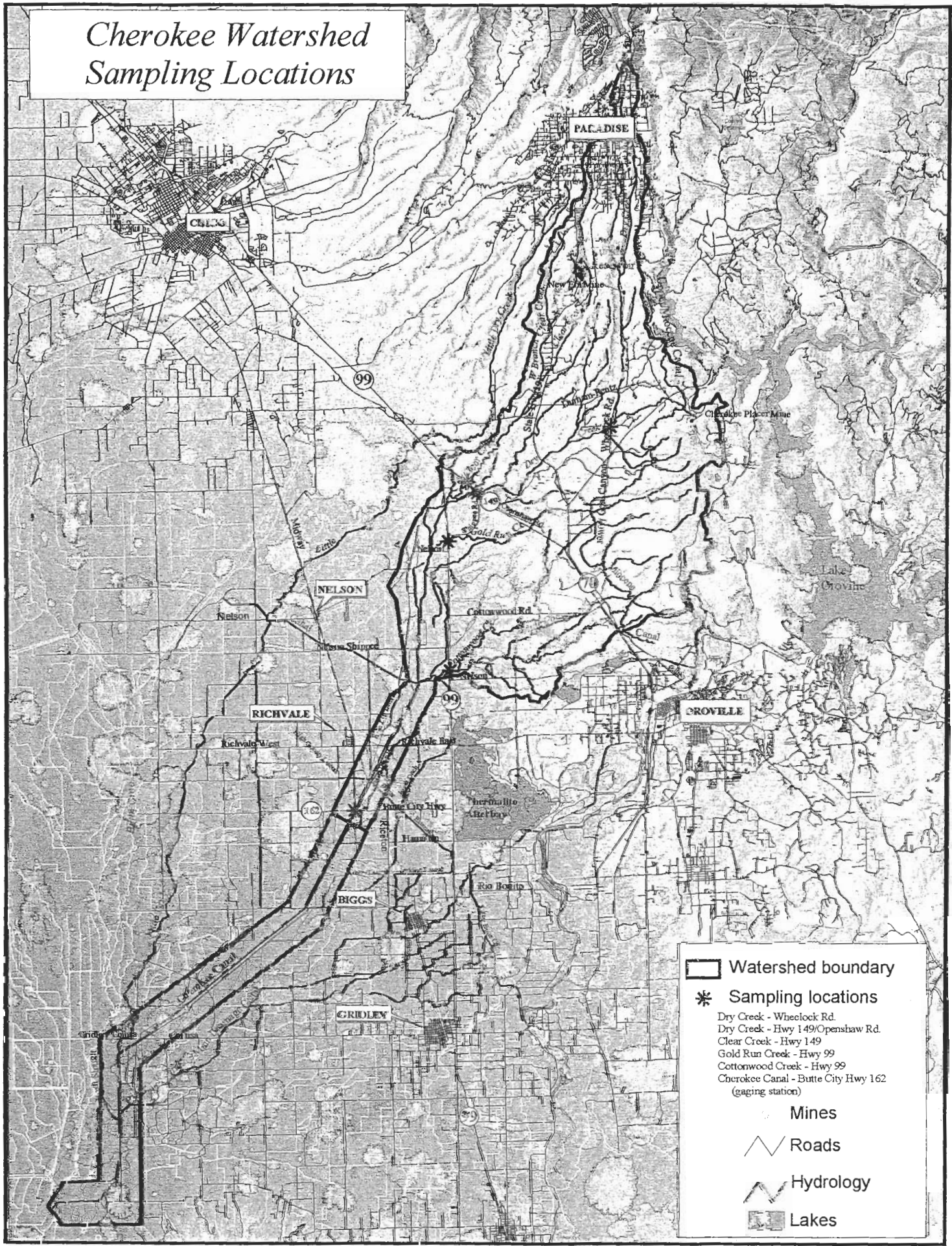
#### **V Maps**

Refer to the attached map of the Cherokee Watershed boundary (excerpted from the Cherokee Water Quality Monitoring Report and Quality Assurance Project Plan).

#### **VI Contact Information**

For additional information contact the Butte County Department of Water & Resource Conservation at (530) 538-4343.

# Cherokee Watershed Sampling Locations



 Watershed boundary  
 Sampling locations  
 Dry Creek - Wheelock Rd.  
 Dry Creek - Hwy 149/Openshaw Rd.  
 Clear Creek - Hwy 149  
 Gold Run Creek - Hwy 99  
 Cottonwood Creek - Hwy 99  
 Cherokee Canal - Butte City Hwy 162  
 (gaging station)  
 Mines  
 Roads  
 Hydrology  
 Lakes