

Existing Resource Protection Measures

Resource Protection Measures

This chapter summarizes the regulatory process established to protect natural resources in the Butte Creek Watershed. The laws pertaining to the protection and enhancement of the Butte Creek Watershed, both state and federal, have been identified. Approved restoration “actions” from *the Revised Draft Anadromous Fish Restoration Plan* are listed and other significant restoration projects are summarized. Finally the non-governmental organizations involved in Butte Creek Watershed planning are identified.

Stream Project Permitting in California

Projects adjacent to streams or in a riparian corridor require certain permits from local, State or Federal agencies. The following is a summary of the agencies involved in stream project permitting, as well as agencies active in the Butte Creek Watershed planning area.

Local Agencies

All local government agencies with jurisdictional responsibilities for a streambed projects must review them under the requirements of CEQA. The main purpose of CEQA review is to identify and prevent significant potential environmental impacts from proposed projects.

City or County planning departments may have local ordinances pertaining to creeks and wetlands, and depending on the nature of the project, several other permits/exceptions/may be required as well. City or County Health Departments may be involved in stream or discharge projects if they pose a potential public health hazard.

The Cities of Chico, Paradise, Biggs and Gridley conduct project review through their planning and building departments.

In an effort to minimize environmental impacts of projects adjacent to Butte Creek, the Butte County Department of Development Services, Planning Division often makes suggestions and imposes conditions for projects in the planning review process. In addition to this review, the County has recently revised a “Watershed Protection Overlay Zone,” that makes specific development provisions for projects in the Firhaven Creek, Paradise Reservoir, and Magalia Watersheds.

The Butte County Health Department requires permits for the construction, expansion and/or destruction of all sewage disposal systems. Section 19 of the County Code outlines the specifications for all sewage disposal systems including capacity and location requirements. The Butte County Health Department also requires permits for constructing drinking water wells. The specific drinking water well permit requirements can be found in Section 34 of the County Code.

The Butte County Fish and Game Commission is under supervision of the County Board of Supervisors. The Commission has created a wetland mitigation bank on Butte Creek. Purchase of credits from this mitigation bank can be used for development projects in other parts of the County.

The Butte County Agricultural Commissioner's Office is the local enforcing agency for California State Food and Agriculture Code. The Code was enacted "for the purpose of promoting and protecting the agricultural industry of the State and for the protection of public health, safety and welfare." Under direction of the California Department of Food and Agriculture and the California Department of Pesticide Regulation, the Agricultural Commissioner conducts regulatory service functions required by State law and enforces local agricultural ordinances. Major functions of the Agricultural Commissioner's Office include: pest prevention, pesticide enforcement, service programs, and consumer protection. The Agricultural Commissioner is appointed by the Butte County Supervisors.

The Butte County Air Quality Management District (BCAQMD) is a state mandated local authority charged with reducing stationary sources of air pollution. The BCAQMD also has review guidelines for indirect sources which include commercial and residential development. Through the CEQA process BCAQMD planners comment on the impacts of indirect sources and offer possible mitigations. The BCAQMD is guided by a board of directors composed of the County Supervisors and two city council representatives from the five incorporated cities.

State Agencies

The California Department of Fish and Game (DFG) requires a Streambed Alteration Agreement for projects that will divert or obstruct the natural flow of water, change the bed, channel or bank of any stream, or use any material from a streambed. The SAA is a contract between the applicant and the DFG stating what can be done in the riparian zone and stream course. The DFG is interested in any work that occurs in, on, over, or under the creeks between the streambed sloping upwards to the top of the bank. The DFG is also the state law enforcement agency for the protection of fish and wildlife resources.

The California Department of Forestry and Fire Protection (CDF) is dedicated to the fire protection and stewardship of over 34 million acres of California's privately-owned wildlands. CDF oversees the enforcement of California's forest practice regulations. This includes review of Timber Harvest Plans (THPs) submitted by private landowners and logging companies who want to harvest trees on their property.

The California Reclamation Board cooperates with the U.S. Army Corps of Engineers in controlling flooding along the Sacramento and San Joaquin Rivers and tributaries. The Board has jurisdiction throughout the drainage basin of the Central Valley and governs the Sacramento and San Joaquin Drainage District. Their jurisdictional area extends through 14 counties and 1.7 million acres lying along the most flood prone portions of the two rivers. Approval by the Reclamation Board is required for projects or uses that encroach into rivers and waterways within federal and State authorized flood control projects, or designed floodways adopted by the Board. Board permit must be obtained before you begin any construction work.

The Board exercises jurisdiction over the levee section, the waterward area between project levees, 10-foot landward of the landward levee toe, and within designated floodways adopted by the Board.

The State Water Resources Control Board (SWRCB) administers the state's water quality, water pollution control, and water rights functions under California's Environmental Protection Agency. This state board provides policy and budgetary authority to the nine Regional Water Quality Control Boards, which conduct planning, permitting and enforcement activities. There are three divisions of the State Board, they are: Division of Water Rights, Division of Water Quality, and Regional Water Quality Control Boards.

Any persons or agencies intending to take water from a creek for storage or direct use on nonriparian land must first obtain a Water Rights Permit from the Division of Water Rights. To grant a Water Rights Permit, the Board considers under what conditions water will be taken and used. The goal of the Board is to assure that California's water resources are put to maximum beneficial use and that the best interests of the public are served.

The following permits are issued from the Division of Water Quality:

General Industrial Storm Water Permit, for the discharging of industrial storm water runoff only.

General Construction Activity Storm Water Permit for any construction activity, including clearing, grading, excavation or reconstruction for storm water discharges and that result in the disturbance of at least five acres of total land area.

The following permits are issued from the Regional Water Quality Control Boards:

National Pollution Discharge Elimination System (NPDES) Permit. Issued to the owner or operator of any facility that is currently discharging, or proposing to discharge, waste into any surface waters of the state must meet state waste discharge requirements. For discharges to surface waters, these requirements become a federal National Pollution Discharge Elimination System (NPDES) Permit from the Regional Board.

Federal Clean Water Act (CWA) Section 401 Water Quality Certification. Federal CWA Section 401 requires that every applicant for a U.S. Army Corps of Engineers CWA Section 401 permit or a Rivers and Harbors Act Section 10 must request State certification from the Regional Board that the proposed activity will not violate State and Federal water quality standards. The Regional Board reviews the request for certification and may waive certification, or may recommend either certification or denial of certification to the State Board Executive Director. (Guide to Stream Project Permitting for the State of California (Pamphlet), California Association of Resource Conservation Districts)

In 1997 Governor Wilson issued an Executive Order that established the Cabinet-level Watershed Protection and Restoration Council (WPRC) charged with developing a California Watershed Protection Program. The WPRC's primary responsibility is to provide oversight and coordination to State activities related to watershed protection and enhancement, including the conservation and restoration of anadromous salmonids in the watersheds of California.

The main objective of the WPRC is to develop a watershed protection program, which includes an anadromous salmonid conservation element, that will lead to the promulgation of a 4(d) rule by the National Marine Fisheries Service under the federal Endangered Species Act. This approach enables NMFS to exercise the flexibility under the ESA to assist and support the State in developing and implementing adequate State conservation efforts, rather than establishing a whole new federal overlay of processes and requirements. The State's objective is to have NMFS certify this program as meeting the requirements of the ESA. It further seeks to have the program be a basis for meeting the goals of State and federal water quality laws. (Watershed Protection and Restoration Council: Protecting California's Anadromous Fisheries, State of California, The Working Group of the Watershed Protection and Restoration Council, July 1998)

Federal Agencies

The U.S. Army Corps of Engineers

The regulatory authority of the U.S. Army Corps of Engineers for creek projects is based on Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Section 404 of the Clean Water Act requires Corps authorization for work involving intentional or unintentional placement of fill or discharge of dredged materials into any "waters of the United States". This applies even if there is a chance the winter rains may cause erosion leading to sediment discharges into the "waters." Section 10 of the Rivers and Harbors Act requires Corps authorization for work for structures in or affecting "navigable waters". Corps jurisdiction extends up to the ordinary high water line for non-tidal waters.

U.S. Natural Resources Conservation Service

The NRCS, formerly the Soil Conservation Service, is an agency of the U.S. Department of Agriculture working with private landowners to conserve and protect soil, water, air, plants and animals. NRCS helps land users and communities approach conservation planning and implementation with an understanding of how

natural resources relate to each other, and how land use activities affect natural resources. NRCS, in cooperation with Resource Conservation Districts and other local, state, and federal agencies, provides free technical information and assistance to landowners and land users upon request, to address management concerns for natural resources such as cropland and pastureland, rangeland, woodland, water resources, disturbed areas, and watersheds. NRCS also provides free soil survey information. NRCS is non-regulatory and does not provide any permits, just recommendations. Recently, NRCS was designated as the federal agency responsible for making wetland delineations/determinations on private agricultural lands. However, these delineations are made only when a written request has been submitted by the landowner or another federal agency. (Guide to Stream Project Permitting for the State of California (Pamphlet), California Association of Resource Conservation Districts)

US Fish and Wildlife Service

The USFS manages grazing permits and timber harvests on all national forest land within the Butte Creek Watershed. The current management practices of the USFS can be found in the Lassen National Forest *Land and Resource Management Plan* (LRMP).

Bureau of Land Management

The Bureau of Land Management (BLM) is the permitting agency for recreational mining in the Butte Creek Watershed. A permit is required for mineral collection that involves the use of a dredge, vacuum, pump, any motorized device, rocker box, or sluice box. There are 30 recreational mining sites located in the Butte Creek Canyon. (Instructions for Obtaining a Recreational Mineral Collection Permit, Forks of Butte Creek Special Management Area, US Dept. of Interior, BLM)

Relevant Environmental Laws

Much of the following information comes from *Environmental Laws, Regulations, and Policies Pertaining to the Protection and Enhancement of Natural Resources in the Deer Creek Watershed*, Compiled by the Habitat Restoration Group for the Deer Creek Watershed Action Committee.

Federal Legislation

Rivers and Harbors Act of 1899

The Rivers and Harbors Act of 1899 was originally established to protect interstate commerce in navigable waters. The Rivers and Harbors Act is the basic act for controlling works or activities in navigable waters of the United States. These are waters with sufficient capacity to transport products of the country. The Chief of Engineers and the Secretary of the Army must approve all plans and specifications for the placement of structures or other works, pursuant to Sections 9 and 10 of the Rivers and Harbors Act of 1899.

Under the 1899 Act, the District Engineer must subject a proposed project to a “public interest review” having two aspects. The first includes a review of such factors such as economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, water quality, etc. This evaluation allows for considerable discretion on the part of the COE. The second component of the review is more restrictive and requires that the proposed project be “water dependent” and that no feasible alternative sites exist.

This statute, intended to protect water quality, fish and wildlife, prohibits the discharge of materials into a navigable water without a permit from the U.S. Army, excepting liquid waste flowing from streets or sewers, and discharges from certain dredging activities and from water craft. Discharges derived from agricultural runoff, are not included in the Refuse Act Permit Program. Those dischargers that do not require a permit must show that “applicable water quality standards” can be met, or that discharge can be brought into compliance with these standards within a specific period of time. The pertinent standards are those adopted by the State Water Quality Control Board in its Basin Plan. If a Section 404 permit is also needed, the COE must follow

regulations issues by the EPA as well as its own regulations. Since *Zabel v. Tabb*, the COE has had the authority to not issue a permit based on ecological reasons, even though the activity would not interfere with navigation, flood control, or the production of power.

Section 9 of the Rivers and Harbors Act requires an applicant to obtain a permit to construct a dike or dam in navigable waters of the United States.

Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from the COE. Under Section 10, the Corps regulates projects or construction of structures that could interfere with navigation. Structures that require permits include piers, breakwaters, bulkheads, revetments, power lines, and aids to navigation. Activities that require permits include dredging, stream channelization, excavation, and filling.

Section 13 of the Rivers and Harbors Act provides that the Chief of Engineers and the Secretary of the Army may permit the discharge of refuse or material of any kind into navigable waters if anchorage and navigation will not be adversely affected. Without a permit such a discharge is prohibited.

National Flood Insurance Act of 1968

The National Flood Insurance Act of 1968 instituted the National Flood Insurance Program (NFIP). The Act established parallel responsibilities among Federal, State, and local governments by ensuring the availability of Federal flood insurance while attempting to reduce the exposure to flood hazard risks through regulatory action at local and State levels. Participating communities must adopt and enforce floodplain management regulations governing aspects of development in flood hazard areas such as location, density of development, height of construction above flood elevations, and construction materials. Residents and businesses in participating communities can then purchase Federal flood insurance against flood loss.

Determination of whether or not a specific property is eligible for flood insurance is made through floodplain mapping. Those areas within the 100-year flood boundary are shown as “Special Flood Hazard Areas” SFHA’s on Flood Insurance Rate Maps (FIRM’s) produced by the Federal Emergency Management Agency (FEMA) and are considered automatically eligible. FIRM’s can be amended or revised to either increase or decrease the SFHA’s due to changes such as flood control project or upstream land changes likely to affect the volume and timing of floodwaters.

If a presidentially declared disaster due to flood occurs in a non-participating community, no Federal financial assistance can be provided for the permanent repair or reconstruction on insurable buildings in SFHA’s. However, eligible applicants may receive other forms of disaster assistance that are not related to permanent repair and reconstruction of buildings.

Federal Water Pollution Control Act of 1972

The Clean Water Act (CWA) is the common name for the Federal Water Pollution Control Act. The primary goal of the CWA is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” This CWA outlined a national goal that all discharge of pollutants into navigable waters be eliminated by 1985, and an interim goal to be achieved by 1983: the use of “best available technology economically achievable” to obtain water quality at a level adequate to protect fish, shellfish, wildlife and human recreational activities. The CWA establishes a very broad framework of planning, research, financial assistance, and permit systems to further the national objective and goals. These include creation of a process for reviewing and adopting water quality standards and establishment of regulatory permit processes to control discharges into surface water to reduce pollution of receiving waters.

The SWRCB is responsible for implementing the provisions of the Act, under the supervision of the EPA.

National Environmental Policy Act of 1969 and 1977

The National Environmental Policy Act (NEPA) directs all agencies of the Federal government to address the environmental consequences of their proposed actions. Federal agencies must prepare environmental impact

statements (EIS) on major Federal actions that could significantly affect the quality of the human environment. Major Federal actions may include construction projects, permits, licenses, loans, and other subsidies.

The intent of the EIS is to disclose to the general public and to the agencies undertaking the proposed action or those responsible for resource management, the probable long- and short-term impacts of the proposal as well as consideration of less environmentally damaging alternatives to the recommended course of action. NEPA review must consider direct, indirect, and cumulative effects as well as alternatives to the proposed actions. Federal regulations for preparation of an EIS establish an early opportunity for public involvement as Federal agencies are required to conduct a "scoping" process to identify and outline the issues to be addressed in an EIS. Once a Draft EIS is prepared, it is circulated for comment by the general public and by Federal, State, and local agencies. A Final EIS is issued after submitted comments have been considered by the agency preparing the EIS.

Often an Environmental Assessment (EA) is prepared by a federal agency prior to undertaking a major action. An EA is often the first document prepared and it provides sufficient analysis as to whether an EIS or a "finding of no significant impact" is needed. The EA document process is more streamlined and allows for opportunity for mitigation to be built into the project description. (Jain, et al., 1993).

Watershed Protection and Flood Protection Act of 1985

The Watershed Protection and Flood Prevention Act of 1985, established the Watershed Protection Program through which the Natural Resource Conservation Service (formerly SCS) provides financial and technical assistance to local organizations in planning and implementing watershed projects. The purposes of the Watershed Protection Program include flood prevention, agricultural water management, recreation, municipal, and industrial water supply, and fish and wildlife development.

Eligible organization include Indian tribes, State or local governments, soil or water conservation districts, flood prevention or control districts, nonprofit water users' associations, and similar organizations that can carry out and maintain improvement projects.

The 1990 Farm Bill (i.e., Food, Agriculture, Conservation, and Trade Act of 1990) amended the watershed protection program to allow cost sharing (Federal funding of 50 percent or more) for acquiring perpetual wetlands or floodplain easements for conservation of flood prevention. Other projects can indirectly benefit wetlands.

The Watershed Protection Program applies only to projects located in watersheds of less than 250,000 acres.

Endangered Species Act of 1973, 1978, and 1982

The Endangered Species Act (ESA), first enacted in 1973, prohibits any action that could harm, harass, or further endanger Federally designated endangered or threatened plant or animal species or the associated critical habitat. The purposes of the ESA are, in part, "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered and threatened species..."

This Act establishes a national and international program for the protection of plant and animal species threatened with extinction. The ESA is jointly administered by the Secretaries of the Interior and Commerce, through the U.S. Fish and Wildlife Service (FWS) for terrestrial and freshwater species and the National Marine Fisheries Service (NMFS) for marine species. The Secretaries of Interior and Commerce are authorized to designate (list) those species which are "endangered" or "threatened" with extinction and delineate specific habitat areas deemed critical for their survival and recovery. An endangered species is "any species which is in danger of extinction throughout all or significant portion of its range." The Secretaries are instructed to develop plans outlining the necessary steps required to bring about the recovery and eventual delisting of the species, including acquisition of habitat.

The ESA also specifies that whenever Federal Agencies propose to authorize, carry out, or approve an activity which may adversely affect a listed species and/or its critical habitat, the project proponent must consult with

the appropriate service. Specifically, the ESA requires Federal agencies, in consultation with the FWS and/or NMFS, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of these species. The appropriate service is required to engage in a formal consultation with the Federal agency project proponent, and to issue a “Biological Opinion,” determining project could jeopardize the species or adversely affect coastal habitat. The Biological Opinion must include any mitigation measures necessary to reduce or eliminate impacts to the species. The Federal agency is prohibited from granting a permit if such determination is made.

In some circumstances, Federal agencies conducting activities which may adversely affect a listed species may receive permits, known as “incidental take statements”, from the appropriate service for activities that may incidentally affect the listed species. Similarly, the FWS and NMFS may issue “incidental take permits” to private parties and State and local governments (i.e., individuals, developers, cities, counties) provided that an acceptable Habitat Conservation Plan (HCP) has been developed and submitted to the appropriate service with the appropriate environmental documentation according to the National Environmental Policy Act.

Habitat Conservation Plans (HCPs) aim to protect endangered or threatened species and their habitat by designating appropriate conservation measures for habitat maintenance and enhancement to be used during the process of land development. These plans also identify preserve areas where land is to be protected to mitigate for the loss of habitat elsewhere within the species’ range, and must include funding for the conservation program. The FWS encourages large scale, cooperative HCPs to avoid fragmented, piecemeal conservation efforts, as well as to streamline permit processing for individual project applications.

Anadromous Fish Conservation Act of 1965

The Anadromous Fish Conservation Act of 1965 authorizes the Secretary of the Interior to cooperate with the States in conserving, developing, and enhancing the nation’s Anadromous fish. The Act authorizes research and investigations and construction and maintenance of hatcheries and of structures to improve feeding and spawning conditions, and to facilitate the free migration of fish. These measures are cost-shared with the States and with other non-Federal interests.

Central Valley Project Improvement Act of 1992

The Central Valley Project Improvement Act (CVPIA) of 1992 has the following purposes:

...to protect, restore, and enhance fish, wildlife, and associated habitats in the Central Valley of California;

to address impacts of the Central Valley Project;

to contribute to the State of California’s interim and long-term efforts to protect the San Francisco Bay/Sacramento-San Joaquin Delta Estuary;

to achieve a reasonable balance among competing demands for use of Central Valley Project water, including the requirements of fish and wildlife, agricultural, municipal and industrial, and power contractors.

The CVPIA “amends the authorization of CVP to include fish and wildlife protection, restoration, and mitigation as project purposes having equal priority with irrigation and domestic uses and fish and wildlife enhancements as a purpose equal to power generation. “

The CVPIA directs the Secretary of the Interior to develop and implement “a program which makes all reasonable efforts to ensure that, by the Year 2002, natural production of anadromous fish in Central Valley rivers and streams will be sustainable, on a long-term basis, at levels not less than twice the average levels attained during the levels attained during the period of 1967 to 1991” (section 3406(b)). The program being developed to satisfy this directive is known as the Anadromous Fish Restoration Program (AFRP).

The Anadromous Fish Restoration Plan (Plan) is being developed for the AFRP. (See the actions and evaluations pertaining to the Butte Creek Watershed listed in the Plan in Restoration Projects Section)

Section 3406(b)(16) of the CVPIA directs the Secretary of the Interior to establish, in cooperation with independent entities and the State of California, a comprehensive assessment program to monitor fish and

wildlife resources in the Central Valley to assess the biological results and effectiveness of programs and actions implemented pursuant to Section 3406(b). In compliance, Interior's Fish and Wildlife Service has established a program called the Comprehensive Assessment and Monitoring Program (CAMP).

State Legislation

California Environmental Quality Act of 1970

The California Environmental Quality Act of 1970 (CEQA) declares that it is the policy of the State to “ensure that the long-term protection of the environment... shall be the guiding criterion in public decisions.” These decisions should be “consistent with the provision of a decent home and suitable living conditions for every Californian.” CEQA requires the preparation of a formal document (an Environmental Impact Report [EIR] or Negative Declaration) that presents to decision-makers and to the public the potential environmental impacts of a proposed project. Mitigation measures for each significant impact must be addressed in the environmental document. Projects which come under CEQA review include public, as well as private projects which require approval by a State or local agency. Each State and local agency must adopt procedures to implement CEQA consistent with CEQA and the Guidelines.

California Water Code

The California Water Code contains provisions affecting water quality, appropriations, and water quality. Division 1 of the Water Code establishes the SWRCB. Division 2 provides that the SWRCB shall consider and act upon all applications for permits to appropriate waters. The SWRCB is required to consider water quality factors in granting a water right. Division 3 addresses dams and reservoirs; Division 5 pertains to flood control; Division 6 controls conservation, development, and utilization of the State water resources; Division 7, commonly referred to as the Porter-Cologne Water Quality Control Act. Covers water quality protection and management; and Divisions 11 through 21 provide for the organization, operation, and financing of municipal, County, and local water-oriented agencies.

State Forest Practices Act of 1974

The State Forest Practices Act of 1974 is intended to utilize, restore, and protect the forest resources, recreational opportunities, and aesthetic enjoyment of State timberlands, while providing watershed protection and maintaining fisheries and wildlife. The Act outlines specific resource conservation standards. The Board is required to divide the State into districts, which are subsequently represented by Technical Advisory Committees that advise the Board. The Act establishes a permit process, with penalties for violations of the permit or Act.

Groundwater Management Act of 1992 (AB-3030)

The Groundwater Management Act of 1992 (AB-3030) lists 12 components that may be included in a groundwater management plan. Each component would play some role in evaluating or operating a groundwater basin so that groundwater can be managed to maximize the total water supply while protecting groundwater quality.

The 12 components listed in Section 10753.7 of the Groundwater Management Act (AB-3030) form a basic list of data collection and operation of facilities that may be undertaken by an agency operating under this act. A groundwater management plan may include components relating to all of the following:

- The control of saline intrusion
- Identification and management of wellhead protection areas and recharge areas.
- Regulation of the migration of contaminated groundwater.
- The administration of a well abandonment and well destruction program.

- Mitigation of conditions of overdraft.
- Replenishment of groundwater extracted by water producers.
- Monitoring of groundwater levels and storage.
- Facilitating conjunctive use operations.
- Identification of well construction policies.
- The construction and operation by the District of groundwater contamination cleanup, recharge, storage, conservation, water recycling, and extraction projects.
- The development of relationships with State and Federal regulatory agencies.

The review of land use plans and coordination with land use planning agencies to assess activities which create a reasonable risk of groundwater contamination.

Efficient Water Management Practices Act of 1990 (AB 3616)

California Assembly Bill 3616 became law in 1990 and established an Advisory Committee to promote efficient agricultural management practices in California. The Advisory Committee is developing the means to undertake cooperative efforts to identify and promote such practices. Currently, a Memorandum of Understanding is being drafted which identifies and defines practices to achieve efficient agricultural water management by water suppliers, including 18 specific practices. Members of the Advisory Committee include representatives from agricultural districts, environmental and public interest organizations, the California Department of Water Resources, and the Bureau of Reclamation's Mid-Pacific Regional Water Conservation Office. (Water Conservation in the State of California, Mid-Pacific Region, Web Page: [http://ogee.hydlab.do.usbr.gov/rwc/mp/mp_cal.html])

Decree No. 18917, Superior Court of the State of California (1942- Adjudicated Rights)

On June 22, 1942 the Superior Court of California, in and for Butte County, determined rights in and to the use of the waters of that portion of the Butte Creek and its tributaries situated above the Western Dam, near Nelson, in Butte County, California. This judgement and decree names claimants rights to divert water from specific points along the Butte Creek Stream system.

(Decree No. 19817, Superior Court of the State of California, *In the matter of the determination of the rights of the various claimants to the waters of that portion of Butte Creek and its tributaries situate above the Western Dam near Nelson, in Butte County, California.*)

California Riparian Habitat Conservation Act of 1992

The California Riparian Habitat Conservation Act established the California Riparian Habitat Conservation Program administered through the Wildlife Conservation Board of the State Department of Fish and Game. The purpose and goal of the program is "to protect, preserve, and restore riparian habitats throughout the State by the acquisition of interests and rights in real property and waters to the extent deemed necessary to carry out the purposes of the program."

The preservation and enhancement of riparian habitat shall be a primary concern of the Wildlife Conservation Board and the Department, and of all State agencies whose activities impact riparian habitat. The board, pursuant to this chapter, shall approve projects to acquire, preserve, restore, and enhance riparian habitat throughout the State, and coordinates its activities undertaken pursuant to this program with other resources protection activities of the board and other State agencies.

In order to accomplish the objectives, the Wildlife Conservation Board may authorize the department to do all of the following:

Acquire interests in real property and water rights through gift, purchase, lease, easement, and transfer or exchange of easements, development rights or credits, and other interests in real property.

- Coordinate its activities under the program with any governmental program for surplus real property sales in the State.
- Award grants and loans to local agencies, State agencies, Federal agencies, and nonprofit organizations for the purposes of this program.
- Exercise any authority and comply with requirements contained in Sections 1348 and 1350, as appropriate, to preserve and enhance riparian habitat.

Streambed or Lake Alteration Agreement (Fish and Game Code 1601/603)

Any person, public agency, or public utility proposing an activity that substantially diverts, alters, or obstructs the natural flow of substantially changes the bed, channel, or banks of any river, stream, or lake must give notice to the California Department of Fish and Game (DFG) under Sections 1601 (public project) and 1603 (private project) of the California Fish and Game Code. All waterways of the State, including intermittent streams, are subject to DFGs jurisdiction. Plans of such projects must be submitted to the DFG for evaluation of impacts to aquatic and wildlife resources. Based on their impact evaluation, DFG will propose modifications to the project in order to mitigate the impacts. If agreement on conditions for a lake and streambed alteration agreement can not be reached between DFG and the project proponent, Section 602 provides for binding arbitration by a panel to formulate the agreement. Such projects can not commence until DFG has determined that adverse impacts to the resources will not result or until adequate mitigation measures are incorporated into the project. If DFG does not grant or deny approval of a project within 30 days of notification, the applicant may proceed with the work.

A Lake/Streambed Alteration cannot be used to authorize the take of a State or Federally-listed threatened or endangered species. If a proposed project may result in the take of a threatened or endangered species, the project proponent must consult with the Department and negotiate a separate “Endangered Species Management Agreement” pursuant to FGC Section 2081 prior to negotiating a Streambed Management Agreement. State lead agencies must consult pursuant to FGC Sections 2090 and 2091. For those lake and streambed agreements affecting wetlands, proposed activities must comply with the DFGs 1990 wetland protection guidelines which prefer alternatives that avoid impacts to wetlands.

Fish and Game Code 5650—Water Pollution

The California State Fish and Game Code states that it is unlawful to deposit in, permit to pass into, or place where it can pass into waters of the State of California any of the following:

- any petroleum, acid, coal or oil tar, lampblack, aniline, asphalt, bitumen, or residuary product of petroleum, or carbonaceous material substance.
- any refuse, liquid or solid, from any refinery, gas house, tannery, distillery, chemical works, mill or factory of any kind.
- any sawdust, shavings, slabs, edgings.
- any factory refuse, lime or slag.
- any cocculus indicus.
- any substance or material deleterious to fish, plant life or bird life.

Fish and Game Code 1606- Plans for Timber Harvesting

The California State Fish and Game Code requires that plans for timber harvesting must include the following:

- the volume, type, and equipment to be used in removing or displacing any one or combination of soil, sand, gravel or boulders.
- the volume of water, intended use, and equipment to be used in any water diversion or impoundment, if applicable.
- the equipment to be used in road or bridge construction.
- the type and density of vegetation to be affected and an estimate of the area involved.
- a diagram or sketch of the location of the operation which clearly indicates the stream or other water and access from a named public road. Locked gates shall be indicated. The compass direction must be shown.
- a description of the period of time the operation will be carried out.

State Lands Commission Public Trust Doctrine

In California, sovereign rights and responsibilities of the State which are traditionally associated with real property ownership have been delegated to the State Lands Commission (SLC). The Public Trust Doctrine, as it affects these rights, is designed to protect the rights of the public to use watercourses for commerce, navigation, fisheries, recreation, open space, preservation of ecological units in their natural state, and similar uses for which those lands are uniquely suited. Under this doctrine, title to tidelands and lands under navigable water are held in trust by the State for the benefit of the public. Acquired rights in navigable streams, lakes, and tidelands, are subject to the trust and assert no vested right in a manner harmful to the public trust. The Public Trust Doctrine requires the SWRCB to “balance” the potential value of a proposed or existing diversion with the impact on the trust resources. Fish and wildlife are public trust resources in the custodial care of DFG.

The State Lands Commission has exclusive jurisdiction over all ungranted tidelands and submerged lands owned in the State and the beds of navigable waterways, such as rivers, sloughs, and lakes. The State’s ownership of these lands includes lands lying below the ordinary high-water mark of tidal waterways and below the ordinary low-water mark of non-tidal waterways. The area between the ordinary high- and low water marks on non-tidal waterways is subject to a “public trust easement”. This easement is also under SLC jurisdiction.

Determining the location of the boundary separating private lands from State lands is often a complex and difficult task because of natural changes, such as erosion or accretion, and human changes, such as dredging, filling, and diking.

The SLC reviews projects affecting tidal and non-tidal waterways for consistency with the “public trust doctrine”. This doctrine restricts the kinds of uses for which State lands may be utilized. Permitted uses typically include public uses of waterways for navigation, commerce, fisheries, recreation, and environmental protection. Generally, the SLC analyzes proposed uses of a project and determines whether the proposed use will be consistent with the public trust doctrine and what the proper balance of those uses should be.

The California Endangered Species Act of 1984

The California Endangered Species Act (CESA) recognizes the importance of endangered and threatened fish, wildlife and plant species and their habitats for their ecological, educational, historical, recreational, economic, aesthetic, and scientific values. The Act declares the conservation, protection, and enhancement of these species and their habitats to be of Statewide concern. Codes 2052-2098 are provisions intended to meet the goal of endangered and threatened species protection.

The taking of any endangered, threatened, or rare plant and/or animal species in the State is prohibited by the CESA unless the take is specifically permitted by DFG for scientific education or management purposes. In addition, CESA requires that State agencies not jeopardize the continued existence of any listed species either

through projects undertaken by the agency or as a result of permits or agreements issued by the agency. To effectuate this requirement, State lead agencies are required to adopt feasible alternatives or mitigation measures to minimize adverse impacts. Consultation is optional for non-State lead agencies or project proponents. CESA requires DFG to provide guidelines for informal consultation. The purpose of informal consultation is to identify endangered species concerns to the project proponent or lead agency as early as possible. The CESA also details the procedures for listing the species and protects species which are candidates for listing.

Natural Community Conservation Act of 1991

The Natural Community Conservation Planning Act (NCCPA) is a legislative attempt to minimize increasing conflicts between urban development and endangered, threatened, proposed, candidate, and other sensitive species. The primary goals of the NCCPA are to “conserve long-term viable populations of California’s native animal and plant species and their habitats in areas large enough to ensure their continued existence, “while at the same time allowing for “compatible and appropriate” urban growth and economic development. By attempting to protect multiple species and their habitats in advance of listing, the NCCPA aims to conserve species before risks to their survival reach crisis proportions. In addition, the NCCPA is intended to avoid the difficulties (both from a species protection and an economic standpoint) that raise when a proposed or candidate species is listed after development of the species’ habitat has already begun. The NCCPA does not supersede the requirements of the ESA, CESA or the NPPA, although compliance with the NCCPA may meet some of the requirements of these other endangered species laws.

Establishment of Ecological Reserves

The Establishment of Ecological Reserves (Fish and Game Code Section 1580) declares that the policy of the State is to protect threatened or endangered native plants, wildlife, or aquatic organisms or specialized habitat types, both terrestrial and aquatic, or large heterogeneous natural marine gene pools for the future use of mankind through the establishment of ecological reserves. For the purpose of establishing those ecological reserves, the department, with the approval of the commission, may obtain, accept on behalf of the State, acquire, or control, by purchase, lease, easement, gift, rental, memorandum of understanding, or otherwise, and occupy, develop, maintain, use and administer land, or land and water, or land and water rights, suitable for the purpose of establishing ecological reserves.

Senate Bill 1086

In the State approved Senate Bill 1086 which required a management plan for the Upper Sacramento River and its tributaries. The result of Senate Bill 1086 was the plan *Upper Sacramento River Fisheries and Riparian Habitat Management Plan*, submitted in 1989. The Plan identified several “investigative solutions” and several “corrective solutions.” The corrective solutions included installing fish screen on diversions, improving or adding fish ladders at four dams and at Sutter Bypass locations, and habitat restoration work in lower Butte Creek.

California Department of Fish and Game

DFG, as a trustee agency, reviews projects and comments on potential impacts to fish and wildlife resources in general, and identifies potential impacts to endangered or threatened plant or animal species under the California Endangered Species Act. The Department is required to issue a written finding indicating whether a proposed finding would jeopardize the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of the species. If the Department makes this "jeopardy" finding, it is then required to develop "reasonable and prudent alternatives" to conserve the endangered or threatened species.

In addition to its regulatory responsibility, the DFG has an active role in law enforcement, land management and policy decisions in the Butte Creek Watershed.

Presently there are three DFG wardens working primarily in the upper Butte Creek Watershed. These wardens are based in Oroville, Paradise and Gridley. The wardens are responsible for enforcing California Fish and Game Code including water quality issues and endangered species. Wardens regulate and monitor mining activities, streambed alterations, and diversion activities. Several grants have recently enabled the DFG to expand their law enforcement work in the Butte Creek Watershed.

In recent years DFG has developed programs designed to prevent poaching and polluting through increased public involvement. The Cal Tip Program established a toll free number where the public can call and report Fish and Game violations to DFG wardens. Similarly the Streamwatch program is an outreach effort that provides appropriate Fish and Game contact information.

DFG owns and manages several large properties in the Watershed, including Graylodge Wildlife Area, the Butte Creek Canyon Ecological Reserve, Virgin Valley, Llano Seco, and Butte Creek House. The DFG owns a total of 1,965 acres in the Butte County portion of the Butte Creek Watershed.

US Fish and Wildlife Service

Anadromous Fish Restoration Plan (see Table 11.1)

There are numerous restoration projects planned or underway in the Butte Creek Watershed. Many of the more extensive projects have been identified in the *Revised Draft Anadromous Fish Restoration Plan* (Plan). The Plan is intended as an implementation tool of the Anadromous Fish Restoration Program established by the CVPIA, directed by the Secretary of the Interior. The Plan used the following criteria in determining the reasonableness of each of the restoration actions: consideration of potential adverse economic and social impacts, public sentiment, the magnitude of benefits, the certainty that an action will achieve the projected benefits, and the authority established by existing laws and regulations.

Restoration Projects

McAmis Property

The proposed property for the site of the Butte Creek Ecological Reserve Expansion is currently owned by John McAmis. This 90+ acre parcel with approximately 4,000 feet of creek frontage that is critical riparian corridor adjacent to spawning beds and holding pool in Butte Creek. This property is contiguous with the California Department of Fish and Game Ecological Reserve (285 acres) which extends approximately 2.5 miles downstream.

This area would provide an opportunity for the investigation and development of channel and flood plain management methods to help stabilize the sediment and bedload input from the remains of gravel mining. Restoration of this natural floodplain could have tremendous implication for the enhancement of riparian plant communities that help cool the stream, filter urban runoff, capture large woody debris, and increase the water storage and groundwater recharge capabilities of lower Butte Creek. The net result would be improved habitat for spring run chinook salmon and steelhead trout as well as other native species.

Keeney Project

This project will restore 56 acres of almond orchard between the levees of Butte Creek to shaded riverine aquatic (SRA) and native riparian habitat. The restoration will include the establishment of native riparian species such as cottonwoods, oaks, willows, ash, alders and associated shrubs along nearly one mile of Butte Creek. The successful restoration will benefit fall and spring run chinook salmon, as well as other species by providing shaded riverine aquatic habitat. This shaded riverine habitat will also provide foraging, cover nesting, and roosting habitat for a variety of avian species. To date, the 56-acre parcel has been acquired in fee title, a draft restoration plan has been completed, and the former landowner has agreed to cooperate to remove the orchard and leave the existing irrigation system in place. The Center for Natural Lands Management has purchased the land and will manage the restoration efforts utilizing a nursery stock of native plants from

sources local to the site to be used in the revegetation effort. Permit requirements are being evaluated and dialog with local and regulatory agencies is proceeding.

Butte Creek Siphon and Dam Removal Project

Butte Creek is one of the only four Sacramento tributaries that supports a wild spring run chinook salmon. It is also a secondary source of irrigation water for the WCWD, which serves tens of thousands of acres of rice and some orchard in addition to one wildlife refuge primarily with Feather River water brought into the basin from the Thermalito Afterbay.

The purpose of the Butte Creek Siphon and Dam Removal Project is to enhance fish passage and augment Butte Creek flows while maintaining water deliveries to current WCWD customers. The project includes the removal of four dams: two WCWD dams, McGowan Dam and McPherrin Dam. Alternative water delivery systems will be created to replace the dam delivery system. The facilities and construction associated with removing the dams and constructing the siphon and conveyance systems are summarized as follows:

- Remove two WCWD dams and McGowan and McPherrin Dam
- Construct siphon
- Remove/replace associated Main Canal and Highline Ditch structures
- Extend Highline Ditch (2,400 feet)
- Construct check structure across 1048 West Slough
- Construct pipeline from Highline Ditch to 1048 West Slough (600 feet)
- Construct/enlarge Durnel Ditch (6,250 feet)
- Construct pipelines from Durnel Ditch to Pumps 1048B and 1048E (1,500 feet)
- Enlarge a portion of existing drain on Harris property (3,700 feet)
- Construct canal extension to little Butte Creek (9,000 feet)
- Install check structures at Little Butte Creek, Main Drain, Howard Slough, and Little Dry Creek Overflow confluences with Butte Creek
- Install additional culverts on Little Butte Creek at Rabo and Johnson Crossings

Butte Creek House Restoration Project

Lying at the base of Snow Mountain in the extreme southwestern corner of the Cascade Mountains, Butte Creek House is at the headwaters of Butte Creek. Butte Creek House was acquired by DFG to preserve and enhance the site's wet meadow complex and to benefit associated species in connection with Federal Energy Regulatory Commission (FERC) Project 803, De Sabla-Centerville Hydroelectric Project.

BCH was acquired in November 1986. Funding was jointly provided by PG&E and the Wildlife Conservation Board. Today the 110 acres of wetland meadows has been restored to a condition that closely matches its pre-disturbed state.

Table 11.1**Restoration Projects from Revised Draft Anadromous Fish Restoration Plan 1997**

Action	Involved Parties	Status
Obtain additional instream flows from Parrott-Phelan Diversion.	Diverters, DFG, USFWS, USBR	
Maintain a minimum 40 cfs instream flow below Centerville Diversion Dam.	DFG, PG&E, USFWS, USBR	
Purchase existing water rights from willing sellers.	Diverters, DFG, USFWS, USBR, SWRCB	Ongoing
Build a new high water volume fish ladder at Durham Mutual Dam.	Diverters, DFG, TNC, USFWS, USBR	
Install fish screens on both diversions at Durham Mutual Dam.	Diverters, TNC, USFWS, USBR, NMFS, DFG, CDW	
Remove the Western Canal Dam and construct the Western Canal Siphon.	Western Canal Water District (WCWD), TNC, DFG, USBR, USFWS, CALFED, CUWA	Complete
Remove McPherrin and McGowan dams and provide an alternate source of water as part of the Western Canal removal and siphon construction.	Diverters, WCWD, DFG, USBR, USFWS, CALFED, CUWA	In progress.
As available, acquire water rights as a part of the Western Canal Siphon project.	WCWD, DFG, SWRCB, USBR	
Adjudicate water rights and provide water master service for the entire creek; enforce or initiate legal action on Diverters who are violating water right allocations.	Diverters, DFG, CDWR, SWRCB, USFWS, USBR	No Action
Build a new high water volume fish ladder at Adams Dam.	Diverters, DFG, USFWS, USBR	In progress
Install fish screens on both diversions at Adams Dam.	Diverters, USFWS, USBR, NMFS, VDFG, CDWR	In progress
Build a new high water volume fish ladder at Gorrill Dam.	Diverters, DFG, USFWS, USBR	In progress
Install fish screens on both diversions at Gorrill Dam.	Diverters, USFWS, USBR, NMFS, DFG, CDWR	
Install a fish screen at White Mallard Dam	Diverters, Conservancy, DFG, CDWR, NMFS, USFWS, USBR	
Eliminate chinook salmon stranding at White Mallard Duck Club outfall.	Diverters, Conservancy, DFG, USFWS, USBR	
Rebuild and maintain existing culvert and riser at Drumheller Slough outfall.	Diverters, Conservancy, DFG, USFWS, USBR	
Install screened portable pumps in Butte Creek as an alternative to the Little Dry Creek diversion.	Diverters, Conservancy, DFG, USFWS, USBR	No Action. Deemed unnecessary.
Install a fish screen at White Mallard Dam.	Diverters, USFWS, USBR, NMFS, DFG, CDWR	
Develop land use plans that create buffer zones between the creek and agricultural, urban, and industrial developments; and restore, and protect riparian and spring run chinook salmon summer-holding habitat along Butte Creek.	City and county government agencies, Conservation groups, Conservancy, DFG, USFWS, USBR	
Install fish screens and fish ladder at Parrott-Phelan Diversion Dam.	Diverters, Conservancy, DFG, USFWS, USBR	
Develop a watershed management program	Conservancy, USFWS, USBR, NMFS, DFG, CDWR	In progress. Strategy expected in Fall 1998.
Establish operational criteria for Sanborn Slough Bifurcation.	Diverters, Conservancy, DFG, USFWS, USBR	
Establish operational criteria for East Barrow pit and West Barrow pit.	Diverters, DFG, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report.
Establish operational criteria for Nelson Slough.	Diverters, Conservancy, DFG, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report.

Evaluation Studies from *Revised Draft Anadromous Fish Restoration Plan 1997*

Evaluation	Involved Parties	Status
Develop and evaluate operational criteria and potential modifications to Butte Slough outfall.	Diverters, Conservancy, DFG, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report,
Evaluate alternatives to build a new high water volume fish ladder at East-West Diversion Weir.	Diverters, Conservancy, DFG, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report.
Evaluate operational alternatives and establish operational criteria for Sutter Bypass Weir #2.	Diverters, Conservancy, DFG, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report.
Evaluate operational alternatives and establish operational criteria for Sutter Bypass Weir #1	Diverters, Conservancy, DFG, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report.
Evaluate alternatives to help fish passage, including the installation of a fish screen, at Sanborn Slough Biurfication Structure.	Diverters, Conservancy, DFG, CDWR, NMFS, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report.
Evaluate alternatives to help fish passage, including the installation of fish screens, within Sutter Bypass where necessary.	Diverters, Conservancy, DFG, CDWR, NMFS, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report.
Evaluate the operational alternatives and establish operational criteria for Sutter Bypass Weir #5.	Diverters, Conservancy, DFG, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report.
Evaluate alternatives to help fish passage, including the installation of a high water volume fish ladder, on Sutter Bypass Weir #2.	Conservancy, DFG, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report.
Evaluate alternatives to help fish passage, including the installation of a high water volume fish ladder, on Sutter Bypass Weir #1.	Conservancy, DFG, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report.
Evaluate alternatives to help fish passage, including the installation of a high water volume fish ladder, on Sutter Bypass Weir #5.	Conservancy, DFG, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report..
Evaluate alternatives to help fish passage, including the installation of a high water volume fish ladder, on Sutter Bypass Weir #3.	Conservancy, DFG, USFWS, USBR	See findings, The Lower Butte Creek Project, Final Report.
Evaluate enhancement of fish passage at a natural barrier below Centerville Diversion Dam.	Conservancy, PG&E, DFG, USFWS, USBR	
Evaluate fish passage enhancement at PG&E diversion dams and other barriers above Centerville Diversion Dam.	Conservancy, Spring run chinook Salmon Workgroup, PG&E, DFG, USFWS, USBR	
Evaluate the juvenile life history of spring run chinook salmon.	Conservancy, DFG, USFWS, USBR	Ongoing by DFG
Evaluate juvenile and adult chinook salmon stranding in Sutter Bypass and behind Tisdale, Moulton, and Colusa weirs during periods of receding flows on the upper mainstream Sacramento River.	Conservancy, DFG, USFWS, USBR	No activity

Conservation Organizations

Americorps Watershed Project

Americorps is the new National Service Initiative that employs Americans across the country. In exchange for one or two years of service Americorps members receive an educational award for college or vocational training.

The Americorps Watershed Project combines an integrated, hands-on science curriculum with an innovative implementation model based on school/community collaboration. Kindergarten students adopt a local watershed (In this case the Butte Creek Watershed) and use it as a focal point for their science curriculum through twelfth grade, doing at least three service-learning projects each year. Adult volunteers from a broad range of organizations in the community work closely with the students, lending their expertise in the planning and implementation of the service-learning projects.

A coordinator has been hired for the development of education and service projects in the Butte Creek Watershed. The coordinator has the following roles and responsibilities:

- Coordinate the efforts of schools and communities
- Work with teachers and students in developing service learning curriculum
- Coordinate field trips and demonstrations
- Work with classes on various service and restoration projects
- Assist with evaluation and documentation of projects

Butte Creek Watershed Conservancy

The Butte Creek Watershed Conservancy (Conservancy) is a nonprofit organization that was formed in September 1995 to encourage watershed-wide cooperation and communication between residents, landowners, water users, recreational users, and the local, state, and federal agencies working in it. Interest in the watershed arose because federal agencies expressed various interests in it such as wild and scenic river status, endangered species, flood hazard, water management and others. Much of the original interest arose because of the desire of local residents to restore spring run chinook salmon populations in Butte Creek. Although these fish were once the most abundant race in the Sacramento-San Joaquin system, Butte Creek is one of the last remaining tributaries that supports these fish. Efforts to improve fish passage began in discussions over a decade ago, but due to limited funding, has proceeded slowly.

Recognizing the need to address restoration of salmon populations, as well as other related issues such as land use, recreation, and property rights, on a watershed basis, a group of residents invited resource agency staff and other conservancies to explain the need and benefit of watershed-wide planning. Volunteers formed a steering committee which became the initial board of directors that secured a 501 c (3) non-profit educational status. The mission statement adopted by the Conservancy is: "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." A memorandum of understanding was circulated in order to establish cooperative partners who would work together on the development of a Watershed Management Strategy. To date, more than 25 agencies and organizations have signed on as participants in this effort.

One of the main goals of the Conservancy is public education. In addition to a K-12 program (see Butte Creek Watershed Project), the Conservancy has held an annual "Spring Run chinook Salmon" celebration, and has a booth which is set up at many of the events hosted by other organizations in the area. Conservancy publishes a quarterly newsletter designed to keep the public apprised of the events and issues impacting Butte Creek. The board of directors holds monthly meetings to conduct business and has a number of committees working on specific projects. The annual membership meetings occur on the first Thursday of March every year and

provide information on the past year activities and the future plans. The Conservancy's watershed coordinator attends various meetings, conferences, and hearings for the purpose of staying informed, networking with resource professionals, and relaying information back to others in the Butte Creek Watershed.

Butte Creek Watershed Project (CSU, Chico)

In 1996 the Butte Creek Watershed Conservancy (Conservancy) established a connection with California State University, Chico (CSU Chico Research Foundation, Office of Sponsored Projects) in order to solicit and manage grants to support its efforts. The Conservancy continues to work closely with CSU Chico both with regard to obtaining and managing grants, but also with respect to compiling all of the information that has gone into this report. A group of faculty, staff, and graduate students at CSU Chico, called the Butte Creek Watershed Project (Project), has coordinated the effort needed to gather the vast amount of information on the existing conditions of the Butte Creek Watershed. In preparing this report, the Project has had input from stakeholders groups, a watershed advisory group, and a technical advisory group made up of agency representatives. After the completion of this report, the Project will continue to play an important role in filling in any data gaps and in helping to develop a watershed management strategy for Butte Creek.

The Conservancy and the Project have also worked together to establish a K-12 education program. The primary objective of this program is to make watershed and anadromous fish curriculum available to those schools that lie within the Butte Creek Watershed boundaries, to involve school children in riparian restoration projects, and to involve teachers and their students in public outreach at local watershed related events. The program is made up of 8 core teachers from 8 schools within the Paradise, Chico, and Durham Unified school districts. This group of 8 core teachers will be expanded to 16, making the curriculum available to as many K-12 students as possible.

Butte County Wetland Conservation Bank

The Butte County Wetland Conservation Bank was created by the Butte County Fish and Game Commission for purposes of providing prime habitat as mitigation required by some Fish and Game Code Section 1600-1603 mitigation agreements. It is a cooperative venture designed to help small developers mitigate environmental damage while replenishing riparian habitat and improving the Butte Creek fishery. The Center for Natural Lands Management (CNLM), a nonprofit conservation group, and the Butte County Fish and game Commission worked together to purchase a 56-acre almond orchard on Stanford Lane on Butte Creek. Funds for the land acquisition was paid through the U.S. Fish and Wildlife Service's Anadromous Fish Restoration Project. Ten acres of the site are technically classified as the "mitigation bank" for developers. Builders of projects in other parts of Butte County can buy "credits" towards mitigating the effect of their development. That money will offset the restoration and ongoing management costs of the remaining 46 acres, which are set aside as a "conservation project".

The CNLM will be implementing a management plan in 1998 for this newly acquired land. As the result of concerns by neighboring farmers that an abandoned orchard would result in increased pests in surrounding orchards, the CNLM has removed the almond trees that were present on the site. The CNLM is also working closely with a consultant to develop a wetland restoration plan for the land. Since this site has very little existing riparian vegetation, the restoration of riparian habitat along the creek will be invaluable in terms of providing shade and habitat for steelhead, chinook salmon, migratory waterfowl, and other wildlife.

Butte Environmental Council

The Butte Environmental Council (BEC) is a nonprofit organization that is aimed at environmental education and advocacy.

In addition to its quarterly newsletter and information web page, BEC hosts an annual Endangered Species Faire, in Chico, which serves as a vehicle for public education on environmental issues, including the preservation of riparian habitat and anadromous fishes.

Butte Trail Council

The Butte Trail Council was formed in the mid-1980's when there was talk of building a 200 foot dam and reservoir in the region of the Butte Creek Watershed known as the Forks of the Butte. This is a region where the Sierra Nevada and Cascade Ranges meet and result in a unique assemblage of plants and animals. A group of concerned citizens who felt that this would have too much impact on the resources of the area formed and fought the project. They were able to reduce the project to a 16-foot high diversion, now known as the Forks of Butte Hydroelectric Project. As mitigation the Butte Trails Council proposed funding to be set aside to maintain a trail near the project. The trail is located on BLM land and the Butte Trail Council has worked closely with the BLM and California Conservation Crews over the years to maintain it.

Cherokee Watershed Group

The Cherokee Watershed group is a grassroots organization recently formed to address issues within the Cherokee watershed. The Cherokee watershed is located within the Butte Creek Watershed. The stated mission of the Cherokee watershed is to protect, enhance, and provide for a sustainable watershed without risking its historical, ecological, and economic balance and management for future growth consistent with these goals.

Little Chico Creek Watershed Project

Little Chico Creek is a subwatershed of the Butte Creek Watershed. The Little Chico Creek Watershed Project was organized in order to address specific concerns of the Little Chico Creek Watershed.

Northern California Water Association

The Northern California Water Association (NCWA) was formed in 1992 to provide agricultural water districts, farmers and landowners a united regional voice on California water policy. NCWA seeks to protect the regions' water rights and supplies by working with Congress, the State Legislature, and with State and Federal agencies. NCWA's directors and staff are committed to constructive leadership in the pursuit of solutions to California's water problems. NCWA's stated mission is to promote the economic, social and environmental viability of Northern California by enhancing and preserving the water rights and supplies of members. NCWA today represents approximately 65 agricultural water suppliers and individual farmers who irrigate about 850,000 acres of Northern California farmland.

Parks and Preserves Foundation

The Parks and Preserves Foundation is a 501 (C)(3) nonprofit dedicated to preserving land in Northern California for new parks and nature preserves. The Foundation preserves land in four ways:

Direct Ownership- Parks and Preserves Foundation purchases, inherits, and accept donations of lands for preservation as parks or natural areas.

Conservation Easements- Parks and Preserves assists property owners who would like to place deed restrictions on their properties to limit the future development or destruction of important natural or historic areas. These voluntary deed restrictions are also known as Conservation Easements. Parks and Preserves specializes in the drafting, holding and monitoring of conservation easements.

Cooperation- Parks and Preserves cooperates with a wide variety of organizations and government agencies involved with planning, land acquisition and management of new parks and nature preserves.

Mitigation- Developers are often required to mitigate the impact of their projects by preserving land on-sites or off-site. Parks and Preserves assists in the implementation of mitigation measures.

Protect Our Watershed

Protect Our Watershed (POW) is a grassroots environmental organization located in Paradise and the Upper Ridge near Magalia. The purpose of POW is to educate and disseminate information about all environmentally sensitive projects on or in the area known as “The Ridge.”

POW was formed in the summer of 1990 in response to a threat to the environmental resources surrounding the Magalia Reservoir. Initially the primary emphasis of POW was on logging within the watershed and its effect of logging on the quality of the water in the reservoirs. Since then the scope of concern has been broadened to include all factors affecting water quality including: development, septic systems, fertilizers, and road building.

Sacramento River Preservation Trust

The Sacramento River Preservation Trust is a nonprofit, tax-exempt organization that was formed in 1984 to protect and restore the Sacramento River and its tributaries and to ensure protection of steelhead and chinook salmon populations. The Trust has promoted local involvement in environmental issues and many of its activities have resulted in benefits to the Butte Creek Watershed and its anadromous fish populations. In particular, the Trust has encouraged the screening of agricultural diversions both on the Sacramento River and all of its tributaries.

Spring Run Chinook Salmon Work-Group

The spring run chinook salmon Work Group was founded by a variety of interested individuals including the Pacific Coast Federation of Fishermen’s Association and the Sea Grant Extension Program in October 1992. The purpose of the Work Group was to discuss actions that could be taken to avoid listing the spring run chinook salmon as an endangered species. Funding for this continuing effort has been provided by Sea Grant, DFG Salmon Stamp Program, National Fish and Wildlife Foundation, and the U.C. Cooperative Extension.

The group has a diverse membership that holds 10 to 11 meetings a year. During the course of the Work Group existence, approximately 300 individuals have attended a meeting(s) and receive a monthly newsletter/meeting announcement. At the first meeting of the Work Group, there was consensus on this general goal: “Restore Sacramento River system native spring run chinook salmon runs and their habitat.”

The group developed an action plan and identified options for restoration action. Early in this planning process, the Work Group identified watershed planning for habitat protection and restoration in Butte, Mill, and Deer creek as its highest priority. Meetings in the local area of these convened. It was soon realized that locally based watershed conservancies would be the best lead groups to take on the tasks of watershed planning. As the conservancies began to take the lead, the spring run Work Group shifted its emphasis to expanding the range of spring run salmon into watersheds where it had become scarce or extinct such as Battle and Clear creeks. The Work Group is now primarily focused on providing technical outreach and informational exchange.