



Butte County Watershed Education & Outreach Project

Positive Benefits of our Rural Watersheds

All human activities impact watersheds in one way or another. Everything from the amount of water used to irrigate landscaping, how animals are cared for and our overall management of the land affect the watersheds we live in. In Butte County, there are multiple watersheds, and it is important to be aware of how your actions and activities, whether in your house, on your property or at work, affect the watershed you live in.

Keeping Our Setting Rural

Keeping lands productive in agriculture is good for the environment and the economy. Some agricultural practices can pose a risk to watersheds, but overall watersheds and agriculture are compatible land uses. Butte County seeks to preserve and enhance its agricultural base through various policies enacted through its General Plan and Chapter 35 of the Butte County Code, the Protection of Agricultural Land Ordinance. Many rural properties are under Williamson Act contracts, where property owners agree to preserve agricultural lands in exchange for a reduction in property taxes. The goal is to discourage conversion of farmland to urban uses. Williamson Act contracts limit an owner's ability to use, subdivide or separately sell any land subject to the contract, and require lands to be under active production.

Butte County has a historical agricultural background and produces many crops and commodities. The value of all agricultural production in Butte County in 2008 was nearly \$580 million, an increase of \$73 million over 2007 production. The key 2008 crops in Butte County were rice, almonds, walnuts, dried plums, nursery stock and timber. Timber is not only an important internationally traded commodity, it is one of the renewable resources that can actually protect the health of our watersheds when managed properly. Healthy forests act like a sponge, helping to remove impurities and control runoff. Managed forested watersheds also reduce the threat of catastrophic wildfire and can enhance aquatic species habitat. The timberland acreage in Butte County totals over half a million acres. Livestock is another large contributor to Butte County's agricultural success. Chapter 24-255 of the Butte County Code addresses maintenance of livestock on private parcels within the county in a manner that protects watersheds.



An almond orchard in bloom, including the M&T water tower from which horse races were viewed in the past.

Fire Safety and Erosion Control

Fire safety is an important element to be aware of on rural properties, as fires result in wide-spread damage and devastation to lives, property and wildlife habitat each year. Erosion control is closely related to fire safety, as erosion can occur after fire damages an area.

The risk of fire is influenced by topography, vegetation, the weather, development and human behavior. The Butte Fire Safe Council is an excellent resource for information on fire safety and erosion control. The Council offers evacuation planning tools and maps, guides on firewise landscaping and the Chipper Program to help dispose of materials cleared from around your home. It also has programs to assist property owners with personalized fire safety plans and educate children about fire safety.



Mature mixed conifer stand near the Sly Creek Reservoir area.



Rice Paddy



Local Livestock

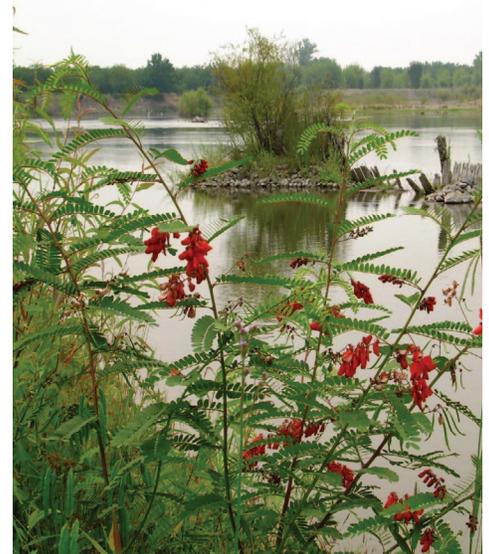
Invasive Plants and Native Vegetation

Invasive species are plants, animals, and microorganisms that are not native to a particular region. The impact of exotic pests varies considerably depending on the species and the area being invaded. In Butte County, the two most commonly mentioned invasive plant species are broom plants and starthistle. When introduced into a watershed, they can disrupt the ecologic balance of native species.

What can you do to remove these invasive plants from your property? Hand removal is generally considered the most effective method. Similar to pulling weeds, the plants should be removed at the root to prevent re-sprouting. It is important to be aware of the seeds dropped by invasive plants, especially broom plants, as the seeds will sprout and the cycle begins over again. Other methods of removal include controlled burning, chemical application and integrated approaches. Be aware, it may take a long time to fully control and remove invasive plants—they are, by their nature, hardy and adaptable.

Prevention is the best way to protect watersheds from invasive species. Be careful in the selection of plants. Using native plants is one of the best ways to assure ecological compatibility with watersheds.

Invasive Plant – Red Sesbania



Pesticide Use

Although pesticides and fertilizers provide benefits in managing pests, they can pose risks to watersheds. Integrated Pest Management (IPM) is a method that uses chemical, biological and mechanical measures to control pests. IPM programs use comprehensive information on the life cycles of pests and their interaction with the environment, in combination with a variety of pest control methods, to manage pests by the most economical means and with the least possible hazard to people, property, and the environment. IPM programs are more crop-specific than general in nature since cropping practices and pest management changes with the commodity.

Pollution Prevention

Pollution can degrade the health of a watershed. Illegal dumping has been a problem in Butte County for numerous years. In 2005, the Public Works Department moved into a position of being proactive with the adoption of Chapter 49, the Unlawful Dumping Ordinance, of the Municipal Code of Butte County. Illegal dumping became a Misdemeanor Offense, and 2006 saw a 78 percent reduction in the number of illegal dumping sites in the County. The program appears to be very successful as each subsequent year has seen dramatic reductions in the number of illegal dump sites.

Pollution of watersheds can occur from things we do on our own property. Property owners must take responsibility for the appropriate storage and weekly disposal of their solid waste. Owners of rental properties are required to contract with a permitted solid waste hauler for weekly pickup and disposal. The Neal Road Sanitary landfill is the County's primary solid waste repository. Consult the Public Works web site listed below for more information about disposal of waste and recycling.

Resources

Municipal Code, Butte County California

<http://library2.municode.com/11433/home.htm?infobase=16065&docaction=whatsnew>

Butte County Department of Public Works

<http://www.buttecounty.net/Public%20Works/Divisions/Solid%20Waste.aspx>

Butte County Public Health

<http://www.buttecounty.net/publichealth/environmental/land.html>

California Department of Forestry and Fire Protection

<http://www.fire.ca.gov/index.php>

The Butte County Fire Safe Council

<http://www.buttefiresafe.org>

State Board of Equalization, Timber Tax Division

<http://www.boe.ca.gov/proptaxes/timbertext.htm>

University of California Statewide Integrated Pest Management Program

<http://www.ipm.ucdavis.edu>

Big Chico Creek Watershed Alliance: Broom Education and Eradication Program

<http://www.bigchicocreek.org/nodes/aboutwatershed/othergroups/broom.htm>

University of California Cooperative Extension for Butte County

<http://cebutte.ucdavis.edu/index.cfm>

University of California, Agriculture and Natural Resources: Soil, Water, and Irrigation - General Publications

<http://ucanr.org/freepubs/freepubsub.cfm?cat=11&subcat=15>

The Butte County Department of Water and Resource Conservation's Watershed Education and Outreach Project is designed to share information on a variety of water-related topics that are important to residents of Butte County. There are multiple interrelated watersheds in Butte and Tehama Counties that are affected by our actions. Watershed protection is important not only for the health of the natural environment, but for all of us, too. Funds for this project have been provided by a grant from the CALFED Watershed Program and administered by the Department of Water Resources. For more information about the Watershed Education and Outreach Project, please visit <http://www.buttecounty.net/waterandresource/>.