



PRESENTS



Funded
by:



WSRCD 08/19/04
<http://wim.shastacollege.edu>

Developed in
cooperation
with:



The **Watershed Information Model (WIM)** was funded to be an *information development and exchange* project. It enables anyone interested in watersheds and watershed activities to access this information through a specific web site housed locally at Shasta College. WIM is designed to be a resource information exchange center, an educational web site containing interactive mapping, and a data collection system linked to real-time updates.



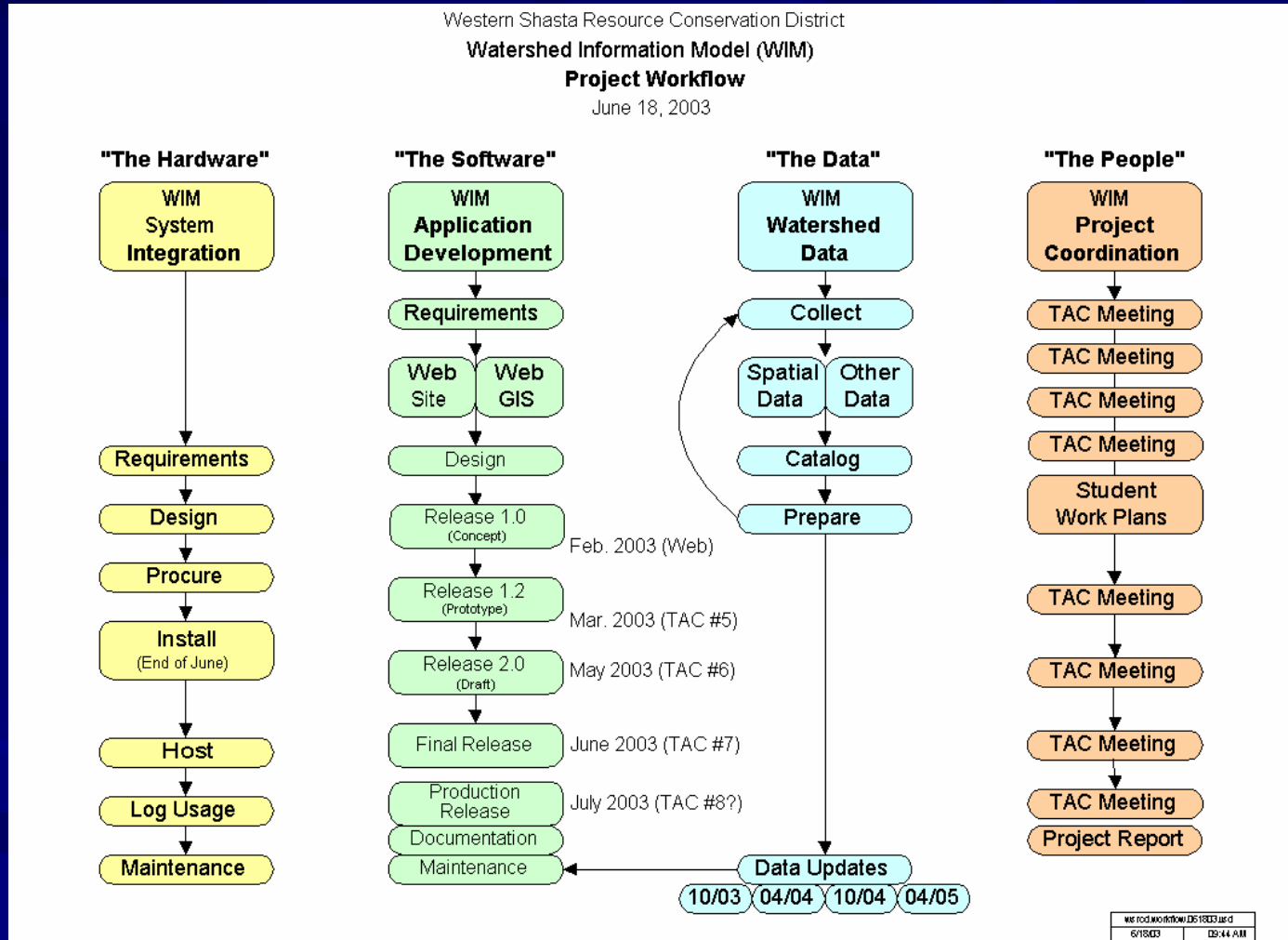
Technical Advisory Committee: Key to the success of WIM...

- Cow Creek Watershed Management Group
- Battle Creek Watershed Conservancy
- Shasta West Watershed Group
- Bear Creek Watershed Group
- Cottonwood Creek Watershed Group
- Lower Clear Creek CRMP/Upper Clear Creek-FG Watershed Management Group (WSRCD)
- Shasta College (SINR, IST)
- Whiskeytown Environmental School (Shasta Co Office of Education/NPS)
- McConnell Foundation
- City of Redding
- CA Department of Water Resources (DWR)
- CA Department of Fish and Game (DFG)
- CA Department of Forestry and Fire Protection
- US Fish and Wildlife Service
- USDA Natural Resources Conservation Service
- USDI Bureau of Reclamation
- USDI Bureau of Land Management
- USDI National Park Service

Initial Objectives of the site:

- Dynamic web page with links
- Data catalog of GIS files with metadata, GIS datasets, documents and photographs
- Ability to view and interact with GIS data using a simple browser interface (ArcIMS®)
- Real-time data updates
- Education support
- Ability to view static pictures
- Data from a variety of sources (agencies, watershed groups, other GIS-users)
- Collaborative environment to exchange, integrate and analyze data
- Complete in 16 months

Developer's Project Workflow (June, 2003) : Four Components



Defining the Audience: Who are “The People”?

■ *Primary*

- Local Community Groups including watershed groups, fire safe councils, local chapters of community organizations
- Local Education (environment-themed) including Whiskeytown Environmental School, Turtle Bay Exploration Park, Shasta College Science & Natural Resources

■ *Secondary*

- Special Interest Groups such as Sierra Club, Nature Conservancy, CA Farm Bureau
- Private Landowners such as SPI, small farmers
- Government including special districts, local, state and federal
- The general public

The Home Page w/ WIM Area Map: choosing the geographic extent

WIM - The Watershed Information Model - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://wim.shastacollege.edu/>

Welcome to WIM

the Watershed Information Model

[Home](#) [Watersheds](#) [Interactive Maps](#) [Data Catalog](#) [Did You Know?](#) [Partners](#) [Newsletter](#) [Site Index](#)

What is the Watershed Information Model?

Located in Northern California, the 4 million acre WIM study area is a collaborative partnership addressing management challenges, and research opportunities in 18 different watersheds.

The mission of WIM is to allow anyone with an interest in watershed management access to the best science education on local natural resources, quickly and efficiently. There is increasing value in linking scientific research and education within our educational system and institutions of higher learning to promote an understanding of the processes and products of the scientific enterprise by citizens, and enrich the educational experience at all levels of instruction. This project is about information development and exchange.

WESTERN SHASTA RESOURCE CONSERVATION DISTRICT

CALIFORNIA BAY-DELTA AUTHORITY

Shasta College
Joining with the Economic

DEPARTMENT OF WATER RESOURCES

VESTRA

catalog.aspx

Internet

“The Data” Quest

Now that we have a ‘study area’, how do we determine available data: GIS datasets, documents, photographs, other media?

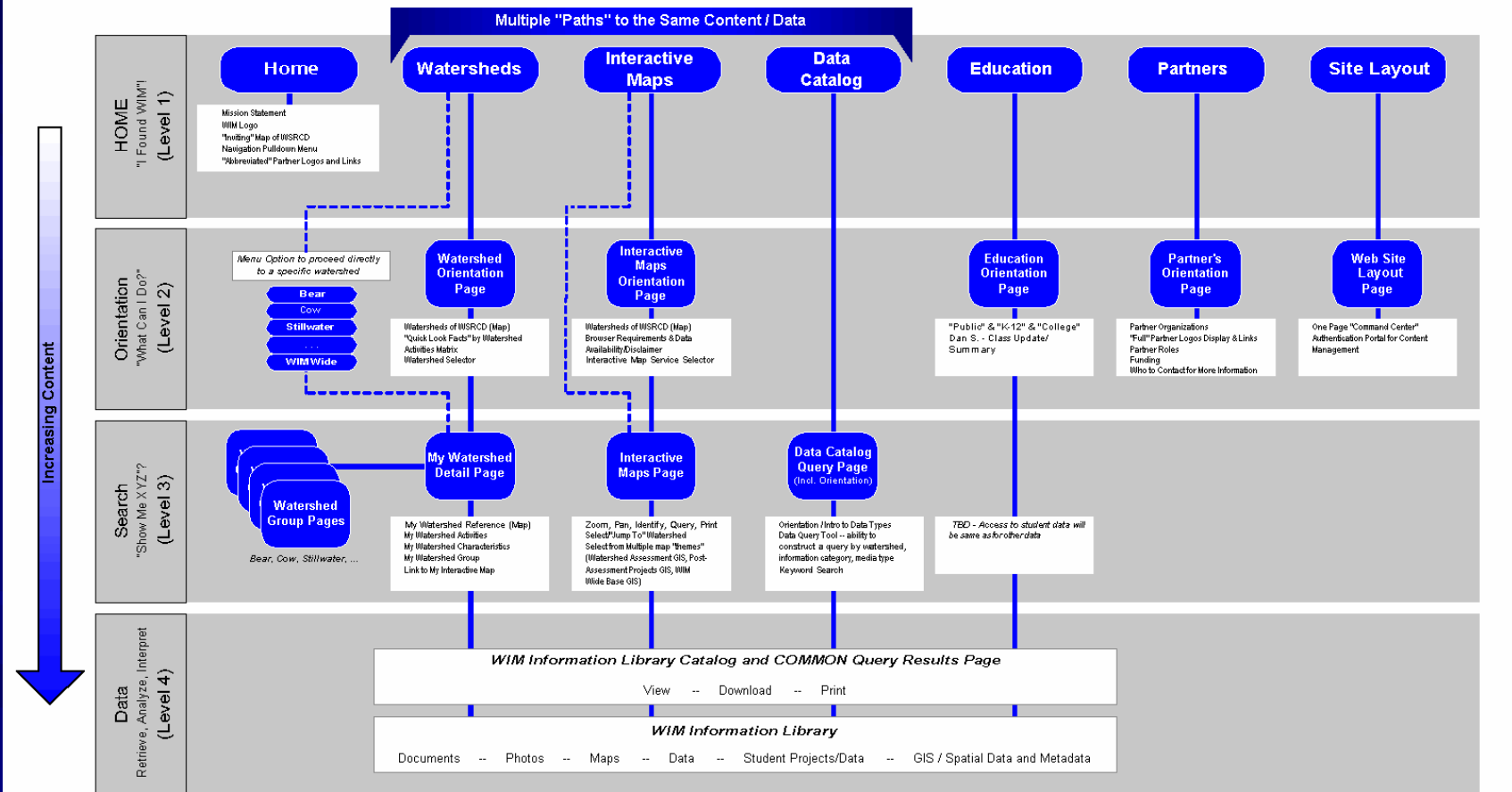
- Locate in-house data: RCD, partners, TAC members
- Research data providers to get an idea about available data: by watershed, county, region, etc.
- Acquire the data in various formats
- All documents to .pdf, all photos to .jpg
- GIS datasets: metadata, clipping, creating, etc.

The resources and information exist. The tough part is getting our hands on them...

Drilling down to the Data...

Western Shasta Resource Conservation District
Watershed Information Model (WIM)
High Level Site Layout

Version 2 | March 7, 2003



Website Features

- *Watershed Information Pages*: Area Map, Select from list or Watersheds Map.
- *Watershed Activities Matrix*: Links to Existing information in the Data Catalog.
- *Data Catalog*: THE source for local watershed information → 700+ records.
- *Did You Know?*: Whiskeytown Environmental School data, Discovering the Hydrologic Cycle, Water in CA, Glossary & Links.
- *Partners*: Principal, Contributors, Watershed Groups
- *Newsletter*
- ***INTERACTIVE MAPS***

Activities Matrix: What is happening in the watersheds??

Link to the resources in the Data Catalog

WIM Watershed Activities Matrix

The following matrix describes what is being done in each watershed in terms of reports/studies, and restoration projects. In each report or restoration project is complete or underway, follow the link in the matrix to search the WIM DataCatalog for available information pertaining to the activity.

Watershed	Reports						Restoration Projects				
	Watershed Assessment/ Analysis	Watershed Management Plan	Fuels Management Plan	Erosion Inventory	Noxious Weed Inventory	Water Quality/ Quantity	Fisheries	Fuels Reduction	Wildlife	Erosion Control	Noxious Weed Eradication
Anderson Creek											
Battle Creek	Complete	Complete					Ongoing	Ongoing			Ongoing
Bear Creek	In Progress		Complete					Ongoing			
Churn Creek	Applied For								Applied For	Applied For	
Cottonwood Creek	Complete	Funded	Complete				Ongoing	Ongoing			
Cow Creek	Complete	In Progress	Complete			In Progress	Ongoing	Ongoing			
Keswick Basin			Applied For								
Lower Clear Creek	Complete	Complete	Complete	Complete	In Progress		Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
McCloud River	Partial										
Pit River - Big Bend											Ongoing
Pit River - Burney											
Pit River - McArthur	In Progress										
Shasta West	In Progress		Complete	In Progress			Ongoing	Ongoing		Ongoing	
Squaw Creek	Complete										
Stillwater Creek	Applied For				In Progress						Ongoing
Sulphur Creek	Complete						Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Upper Clear Creek	Complete		Complete	In Progress				Ongoing		Ongoing	
Upper Sacramento River			In Progress				Ongoing		Ongoing		

Data Catalog: Completed Search

catalog - Microsoft Internet Explorer

Address <http://wim.shastacollege.edu/catalog.aspx>

the Watershed Information Model Watershed Data Catalog

Home Watersheds Interactive Maps Data Catalog Did You Know? Partners Newsletter Site Index

The **Data Catalog** is a library of resources related to the watersheds in the WIM study area. You can search the library for documents, photos, GIS data, and interactive map services. Use the menus below to help narrow your search to certain watershed activities, and formats. If you are searching for, and downloading GIS datasets, be sure to download our custom [WIM metadata stylesheet](#) for use in [ESRI's ArcCatalog](#).

To select multiple items from a single menu hold down the **Ctrl** key while clicking on the items you want to select

Filter Watersheds Churn Creek Cottonwood Creek Cow Creek

Filter Activity Water Quality/Quantity Watershed Assessment/Analysis Watershed Management Plan

Filter Format Document GIS Data Map Service

Keywords

Execute Search >

Search Results

61 Records Found. Page 1 of 3 * underlined column headers are sortable

<u>Details</u>	<u>File Name</u>	<u>Format</u>	<u>Watershed</u>	<u>Activity</u>	<u>Date Added</u>	<u>Size</u>	<u>Options</u>
Details	Cow Creek Final Watershed Assessment.pdf	Document	Cow Creek	Watershed Assessment/Analysis	04-24-2003	25 Mb	
Details	Millditch11.jpg	Photograph	Cow Creek	Watershed Assessment/Analysis	07-09-2004	88 kb	
Details	wim_cow_assess	Map Service	Cow Creek	Watershed Assessment/Analysis	04-24-2003	n/a	
Details	CentralValleyProjectImprovementAct.pdf	Document	Cow Creek	Watershed Assessment/Analysis	05-05-2003	11 Mb	
Details	AfterThoughtWaterQuality.pdf	Document	Cow Creek	Watershed Assessment/Analysis	05-05-2003	1 Mb	
Details	BuckhornLake.pdf	Document	Cow Creek	Watershed Assessment/Analysis	05-05-2003	798 kb	

Make your own query to search the Catalog

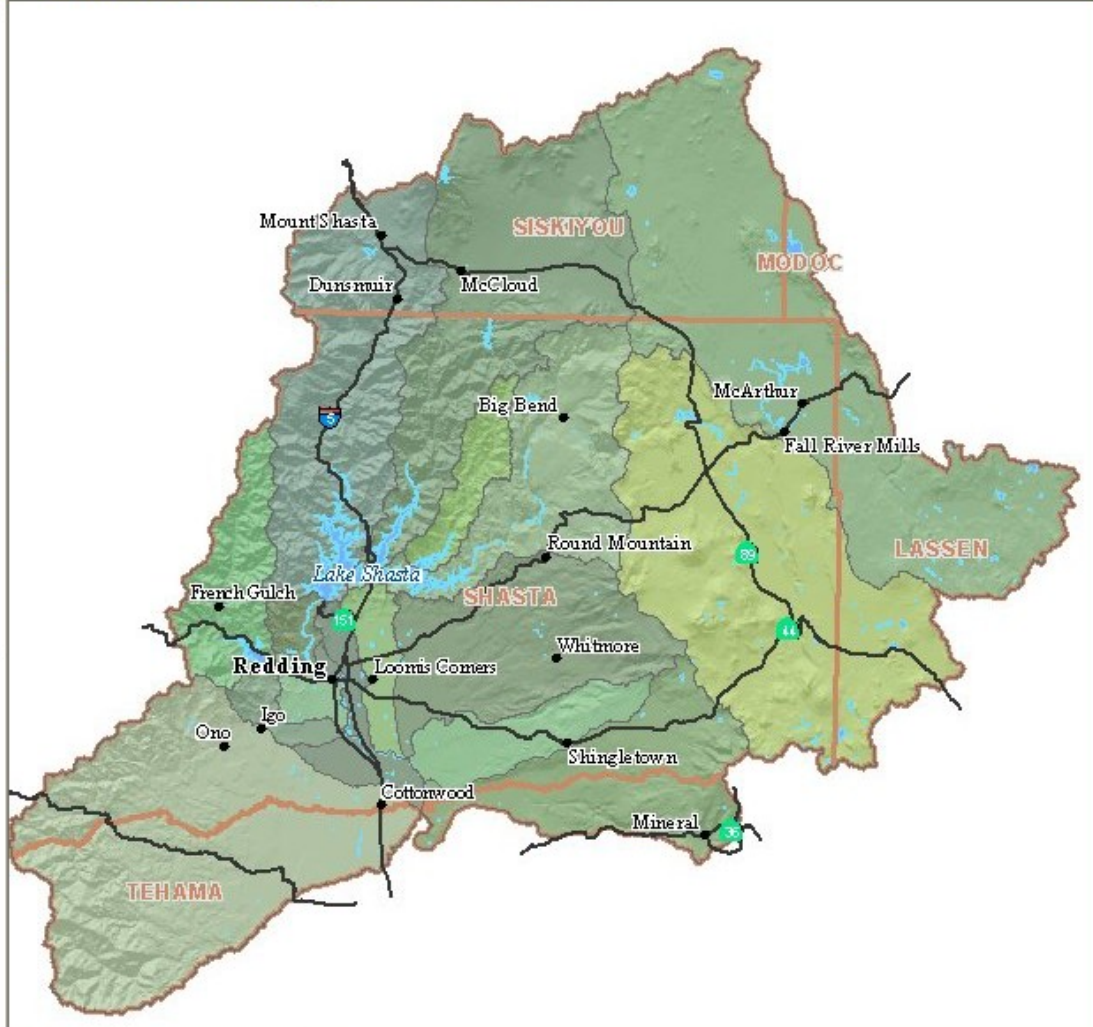
Interactive Map Features



the Watershed Information Model Interactive Maps

.:Print this map .:Get Help .:Search the Data Catalog

- Zoom In
- Zoom Out
- Zoom Full
- Pan
- Identify
- Hyperlink
- Overview Map



Map Layer List | **Map Legend** | **Find a Place**

- Reference
- Hydrology
- DWR Sacramento River
- Vegetation & Fire History
- Terrestrial
 - Wildlife Habitat Relationships, HSU
 - Wildlife Habitat Relationships, FRAPP
 - Soils
 - Lassen Soils
- Landuse & Demographics
- Ownership
- Base Data
 - WIM Watersheds
 - DOQQs
 - 7 1/2 Minute Quadrangles
 - WIM Relief

Your choice on what to view!

Refresh the Map

Active Tool: Pan
Active Layer: Cities/Towns

Map Services: ----- Map Services -----

Jump to a watershed: ----- Watersheds -----

Custom Additions

- WIMadmin Data Administrator Tools
 - Add new Documents & Photos
 - Modify existing entries in the Data Catalog
 - Update the Activity Matrix
 - *NOT* GIS Map Services or other GIS datasets
 - **Ever-expanding Catalog**
- WIM Metadata Stylesheet
 - Designed to help the non-GIS user
 - User friendly and simplified

Administrative Tools



the **Watershed Information Model**
Administration



[WIM Admin](#)

[Add New Content](#)

[Manage Existing Content](#)

[Modify Activity Matrix](#)

[Logout](#)

[Add New Content](#)

Upload (transfer and register) new documents or photographs to the WIM Library

[Manage Existing Content](#)

Change description of existing files; Replace, archive or delete existing files

[Modify Activity Matrix](#)

Update the Activity Matrix (Add, remove or change entries)

Version 1.1 | March 11, 2004

Status of WIM



- Launched precisely one year from contract approval (August 8, 2003), **4 months ahead of proposed schedule**. We're into YEAR 2!
- Semi-annual updates (May 2004, October 2004, April 2005).
- Continued support and input from Technical Advisory Committee.
- Interest in adapting the Model to new areas.
- WebLog Expert Lite v.3.0 log file reports to track visitors, page views, activity by day, downloaded files, etc.

Results and Successes

- 1) Diverse TAC representation from local agency personnel, watershed groups and educators; therefore increasing collaboration and understanding.
- 2) Developed as a *Model* to adapt to new areas with minimal alteration.
- 3) Easily accessible to anyone with a browser and a Web connection.
- 4) WIM provides multiple resources for local watersheds to local people.
- 5) WIM is dynamic with a growing Data Catalog.
- 6) The WIM Interactive Maps allow the site visitor to choose the data they wish to view: precipitation, land use, soils, etc.
- 7) WIM is supported by an organization with a successful track record for integrating the needs of agencies and the needs of watershed stakeholders and landowners.
- 8) WIM Project Coordinator has presented the WIM model to most active watershed groups in the WIM study area.
- 9) Agency personnel in the area have located documents from other agencies, reinforcing the need for a central data source such as WIM.

The Watersheds Introduction Page

The Watersheds - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://wim.shastacollege.edu/watershed_intro.aspx#actMatrix

the Watershed Information Model
The Watersheds

Home Watersheds Interactive Maps Data Catalog Did You Know? Partners Newsletter Site Index

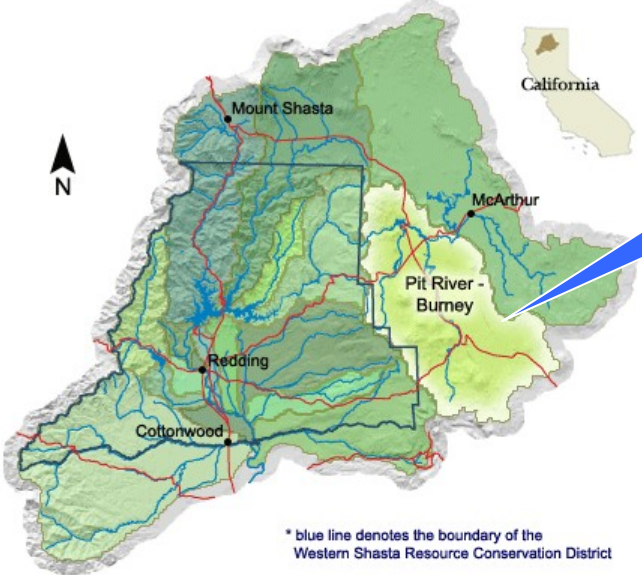
The entire area in which water drains across, under, and through, on its way to a particular body of water is called a watershed. The **Watershed Information Model** covers over 4 million acres and 18 different watersheds in the heart of Northern California. Each watershed is unique due to its size, shape, ownership, and types of vegetation.

Use the "clickable" map, or select a watershed from the list to begin exploring each of these diverse watersheds in detail.

Also on this page:
[Watershed Activities Matrix](#)

Pick a watershed from the list below or click on the map

- Anderson Creek
- Battle Creek
- Bear Creek
- Churn Creek
- Cottonwood Creek
- Cow Creek
- Keswick Basin
- Lower Clear Creek
- McCloud River
- Pit River - Big Bend
- **Pit River - Burney**
- Pit River - McArthur
- Shasta West
- Squaw Creek
- Stillwater Creek
- Sulphur Creek
- Upper Clear Creek
- Upper Sacramento River



* blue line denotes the boundary of the Western Shasta Resource Conservation District

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<http://wim.shastacollege.edu/watersheds.aspx?ws=11>

Internet

WSRCD 08/19/04

<http://wim.shastacollege.edu>

Moving Forward with the current WIM...

- Data gaps, additional data sources
- Content Update Strategy developed
- Future funding
- Exhibit workstations (Turtle Bay, ??)
- New resources for educators, students, watershed group projects



Establishing a Watershed Information Model in a new area...

- GIS Data Preparations
- Non-GIS Data Preparations (Documents, Photos)
- Initial Data Content Load into the WIM Library
- Map Service creation
- Map Service XML “Supplemental file”
- New Watershed rollover images
- Website “Look and Feel”, Static Content
- Accommodate New Watersheds

Viewing the site...

<http://wim.shastacollege.edu>

