

# C I M I S

California Irrigation Management Information System



State of California

The Resources Agency

Department of Water Resources

# A L E R T

# ***What is CIMIS?***

The California Irrigation Management Information System (CIMIS) is operated by the Department of Water Resources. CIMIS is an integrated network of more than 85 computerized weather stations located in various geographical areas of the State. Weather data is collected daily from each weather station and automatically transmitted to a central computer located in Sacramento. The weather data is analyzed for accuracy and then stored in the CIMIS database to provide local weather information on demand—24 hours a day. Today, the CIMIS computer in Sacramento gets an average of 60 calls a day—or about 22,000 a year.

## ***How does CIMIS work?***

Although CIMIS weather data can be used for a wide range of agricultural and municipal purposes, its primary use is to provide information to irrigators to improve water management through efficient irrigation practices.

Based on the weather data, the central computer in Sacramento estimates the amount of water evaporated from the soil and the amount used by irrigated grass at each weather station site. This combined value for grass at each site is called "reference evapotranspiration" or "ET<sub>o</sub>."

Changes in ET<sub>o</sub> can be used as a guide to changes in crop, golf course or landscape water use. Using a factor(s) and ET<sub>o</sub>, water used by a given crop or landscape can be estimated. These conversion factors are called "crop coefficients" or "(K<sub>c</sub>)."

Many irrigators, irrigation consultants and municipal water managers use CIMIS ET<sub>o</sub> rates to determine the amount of water used by specific crops. Individual crop coefficients enable irrigation planners to accurately monitor crop water use and schedule water applications according to *when* the plant needs it and *how much* is required for optimum growth.

# *What is CIMIS Alert?*

CIMIS Alert is a program for California water agencies, conservation districts and other interested public agencies to promote efficient irrigation management by water users.

The program enables public agencies to provide daily telephone recordings of local evapotranspiration (ET<sub>o</sub>) weather data to water users. Furthermore, specific crop water use in inches or gallons/tree can be calculated by irrigation experts and recorded for public access. This information will enable irrigators to manage water use more effectively for higher profits.

Sponsored by the Department of Water Resources, CIMIS Alert is designed to help public agencies provide a useful, cost-effective service to water users. It is a proven tool to help acquaint water users with concepts of irrigation scheduling and improved water management.

# *How to Implement CIMIS Alert*

CIMIS Alert is designed to promote improved water management throughout California. This checklist suggests steps for implementing the program in local areas.

- Step 1—Fill out and return the "CIMIS Alert Request Form" enclosed in this packet.***

You will receive a CIMIS user identification, password and toll-free access telephone number within two weeks after returning your request form.

- Step 2—Use the appropriate equipment to participate in the "CIMIS Alert" program.***

To get CIMIS evapotranspiration (ETo) data for your area, you will need a personal computer and a telephone modem. To alert water users in your local area about daily ETo use, a telephone recording device allows easy 24-hour telephone access. (See "CIMIS Alert Equipment List" in this packet.)

- Step 3—Publicize that your agency will be participating in the "CIMIS Alert" program.***

We encourage you to publicize CIMIS Alert in ways that will inform your water users about its availability and use. Local news media, your own agency newsletter and water bills are some of the ways to inform water users about your involvement in CIMIS Alert.

- Step 4—Provide local ETo data each weekday.***

Once you're ready to go, it will take one staff person only about 10 minutes each day to retrieve local ETo data from the CIMIS database in Sacramento and record a suitable CIMIS Alert message on a telephone answering device (which should include the daily ETo values for each of the last seven days). To evaluate the effectiveness of the CIMIS Alert program, record the number of calls received during the previous 24 hours. Of course, we encourage you to provide any other recorded telephone information that would be of service to your water users.

# ***CIMIS Alert Equipment List***

CIMIS Alert is designed to require minimal staff time and expense, yet provide a meaningful program to promote efficient irrigation management practices.

In many cases, you probably already have most—if not all—of the equipment necessary to access and retrieve weather data from the CIMIS database in Sacramento. If you have any questions about how to make your equipment work, call 800/922-4647.

The equipment listed below is necessary to participate in the CIMIS Alert program.

***Personal Computer***—Virtually any personal computer with a compatible telephone modem can quickly and easily access the CIMIS database (i.e., Macintosh and IBM compatibles).

***Telephone Modem***—Either an internal modem (modem card placed directly in an expansion slot of the computer) or an external modem will connect your computer via telephone to the CIMIS database in Sacramento.

***Telecommunications Software***—Nearly any telecommunications software compatible with your computer and modem will let you access the CIMIS database. The software lets you command your computer's modem to access and retrieve CIMIS weather data from Sacramento.

***Telephone Answering Machine***—The telephone answering machine used with CIMIS Alert must be able to record a 30-second or longer message. Although optional, if it can also record the total number of calls received from water users, you will be able to monitor the use and amount of interest in CIMIS Alert.

***CIMIS Alert Telephone Access Number***—Although a regular "office" telephone access number may be used, it is suggested that a "dedicated" or "single" telephone number be assigned for the CIMIS Alert program. This will reduce staff time by not having personnel answer calls. It will also help to develop more accurate statistics concerning response to CIMIS Alert.

# *Need help with CIMIS?*

For more information and assistance contact any of the following staff at these Department of Water Resources' offices:

▶ ***DWR Headquarters***

Simon Eching  
David Moellenberndt  
Sacramento  
800/922-4647

▶ ***Northern District***

Eugene Pixley  
Red Bluff  
916/529-7392

▶ ***Central District***

Mark Rivera  
Sacramento  
916/227-7603

▶ ***San Joaquin District***

Kent Frame  
Fresno  
209/445-5428

▶ ***Southern District***

Sergio Fierro  
Glendale  
818/543-4601, extension 297

If you are unable to reach any of the above staff, contact either of the following people at DWR Headquarters—Division of Planning and Local Assistance:

▶ ***Water Conservation Office***

Ed Craddock, Chief  
Sacramento  
916/327-1655

▶ ***Agricultural Water Conservation Section***

Baryohay Davidoff, Chief  
Sacramento  
916/327-1788

# *Agencies Already Providing Recorded CIMIS Data*

Many water and irrigation districts access the CIMIS computer to retrieve ETo information for their agricultural and landscape irrigators. Some of these districts are listed below. Your agency, too, can provide recorded CIMIS data for your water users and join the effort to improve water management to increase agricultural crop yield and quality and maintain beautiful urban landscapes.

- ▶ Alameda County Water District
- ▶ Citrus Heights Water District
- ▶ Coachella Valley Water District
- ▶ Contra Costa Water District
- ▶ East Bay Municipal Utilities District
- ▶ Marin Municipal Water District
- ▶ Mojave Desert Resource Conservation District
- ▶ Monterey County Water Resources Agency
- ▶ Monterey Resource Conservation District
- ▶ North Marin Water District
- ▶ San Benito County Water District
- ▶ Solano Irrigation District
- ▶ U.C. Cooperative Extension, Fresno
- ▶ U.C. Cooperative Extension, San Diego
- ▶ U.C. Cooperative Extension, Santa Maria
- ▶ Ventura County Resource Conservation District
- ▶ Western Municipal Water District

# CIMIS Alert Request Form

Fill out this form to get a free user identification, password, toll-free telephone number, and instructions to access the CIMIS database in Sacramento. Please allow about 2 weeks to process your request. Thank you!

1. Organization name: \_\_\_\_\_
2. Address: \_\_\_\_\_  
\_\_\_\_\_
3. Telephone: \_\_\_\_\_
4. Contact person: \_\_\_\_\_
5. Types of services provided by your agency:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. Locations served by your agency: \_\_\_\_\_  
\_\_\_\_\_
7. Approximate number of potential water users accessing CIMIS Alert in your region:  
Agricultural \_\_\_\_\_ Municipal \_\_\_\_\_ Other \_\_\_\_\_
8. Briefly note other water management programs that target your water users:  
\_\_\_\_\_  
\_\_\_\_\_
9. In order to access and disseminate CIMIS Alert information, please check whether or not your agency has the following equipment:  

Personal computer?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Type: _____
Telephone modem?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Type: _____
Telecom. software?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Type: _____
Answering device?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
10. If you have any questions about this form, please call 800/922-4647. Send completed forms to:  
CIMIS Program  
Department of Water Resources  
Division of Planning and Local Assistance  
1020—9th Street, 3rd Floor  
Sacramento, CA 95814

November 1997

**FOR DEPARTMENT OF WATER RESOURCES USE**

DATE RECEIVED _____	REVIEWED BY _____
USER IDENTIFICATION _____	CIMIS PASSWORD _____
COMMENTS _____	
NOTIFICATION _____	