



2002 Western States Wildland Urban Interface Public Access Fire Mitigation Information Kiosk

Mitzy Forbes
November 18, 2002

Team members:

Program Manager: Katherine Timm, Colorado State Forest Service
Program Developer: Mitzy Forbes, Colorado State Forest Service
Graphic Artist & Animator: Chris Rogers

Other participants:

Writers, photographers, and program testers.

Contributing organizations:

Colorado State Forest Service, Bureau of Land Management, American Red Cross, Colorado State University Cooperative Extension, and USDA Forest Service.

In-kind services from participating organizations include staff time to make contacts with local entities to arrange for placement of kiosks; obtain a waiver for rental charges for space to house the kiosks; teach cooperators how to troubleshoot equipment, download demographic information, and operate the printer; identify participants for focus groups; identify and obtain existing video footage and still photos; write, edit and review text; store, maintain, and coordinate reservations and installation of kiosk units; and provide general oversight for program development.

Proposed future partners:

National Park Service, FEMA, Colorado Counties, Inc (CCI), Colorado Municipal League, homeowners associations, Colorado Board of Realtors, Colorado Department of Resource Agencies, Nature Conservancy, Insurance Industry, and Home Depot.

Project purpose:

To provide public accessible information regarding fire prevention and mitigation to individuals and communities.

Audience:

Adult homeowners who reside or own property in Colorado wildland-urban interface areas. Persons interested in residing in wildland-urban interface areas, and homeowner associations are also part of the target audience.

There are approximately 1.6 million people in Colorado wildland-urban interface areas, and more than 778,000 homes. Counties involved include: Jefferson, Douglas, El Paso, Larimer, Teller, Boulder, Costilla, Alamosa, Rio Grande, Conejos, Saguache, Mineral,

Chaffee, Lake, Eagle, Summit, Grand, Archuleta, La Plata, Montezuma, Dolores, San Juan, San Miguel, Montrose, Ouray, Delta, Mesa, Garfield.

Project objectives:

Information about fire prevention and mitigation are provided via interactive multimedia modules delivered on computer kiosks which have been located in public access locations. The kiosks were designed to be used primarily in locations that receive extensive foot traffic such as community centers, airports, libraries, malls, and special events such as the Colorado State Fair and Colorado Garden and Home Show, etc.

Throughout the program pre-instruction quizzes are employed to enhance the effectiveness of the messages. The program captures demographic data regarding participants that are used to determine whether the target audience is reached.

Kiosk enclosure and computer:

The kiosk enclosure is made of aluminum with a forest green powdercoat finish. It has a 23.5" by 33.5" backlit panel for photographic displays. The kiosk enclosure has a touchscreen monitor, dual speakers, fans, and a key-locked rear service door. It is ADA approved and weighs approximately 165 lbs. A custom carrying case with wheels was purchased to facilitate better mobility and protection of the unit while in transit.

The computer is a Pentium III, with 128 MB RAM, 20 GB Hard Drive, a sound card, SVGA video card with 8 MB RAM, mouse, a 48x CD-ROM drive, floppy drive, and 56K modem. A service keyboard is attached to the inside of the unit with velcro. The keyboard is hidden during normal use, and available for updates and maintenance of the program, and to turn the computer on and off. Microsoft Windows 2000 Pro operating system was installed at the factory.

Kiosk Information Systems in Broomfield, Colorado constructed the kiosk enclosure and installed the computer. The cost of the enclosure and computer was \$4870 when purchased through Colorado State University in April 2002, and the cost of the hardened carrying case was \$895.

Media

Custom art work, scanned slides and photographs, and computer animation were used in the development of the program. The photographs were primarily from Colorado State Forest Service archives. The animation was adapted from the Firewise Construction, Design and Materials publication by Peter Slack.

Interactivity

Moderate interactivity was programmed into this project. Questions were posed before introducing important concepts to prepare the learner, promoting better retention of the material.

Program testing and evaluation

Focus groups - Conducted during the Red Cross volunteer training in Craig, Colorado on May 8, 2002. Eight people filled out a questionnaire about their opinions about computer kiosk programs and were solicited suggestions for an effective educational touchscreen

computer kiosk program. The suggestions were taken into consideration during design and development of the program.

Testing - Done by volunteers during program development and before delivering the kiosk to the 2002 Colorado State Fair.

Evaluation - Done on an informal basis by foresters at the 2002 annual Colorado State Forest Service meeting, during American Red Cross volunteer training on November 14, 2002, and by members of the Larkspur Fire Department on November 15, 2002.

Program modules

- Module 1 Intro - 6 screens with a selection for first time or previous user, credits page, 3 demographics questions, 1 knowledge question "Are you familiar with the concept of Defensible Space as it relates to wildland property?", and menu to modules 2-4.
- Module 2 Are You Firewise? - 21 screens with four quizzes.
- Module 3 Firescaping - 22 screens with four quizzes and three before/after comparison illustrations.
- Module 4 FireWise Construction - 17 screens with four quizzes and one comparison animation.

User log

Every touch of the screen is captured by the program and entered into a user log. The user log records the date and time that the program is opened, and sets the user number to one. Information is then collected on the activity of each user, including the time the user started the program, answers to questions, which pages were visited, and when the "exit" button was pushed. If the user does not touch the screen for 60 seconds, a new user is assumed. A verbal warning is given, and if the screen is not touched 10 seconds after the warning plays the program times out, shows the beginning Intro page, and increments the user number by one.

The user log for the 2002 Colorado State Fair recorded 1040 users from August 17, 2002 to September 1, 2002.

Future uses:

The interactive modules will serve as prototypes that can be adapted to address different vegetation types, forest conditions, ownership issues, and treatment prescriptions for other states.

The materials developed for the kiosk will be used to build a web site and, with some modifications, can be transferred to CD-ROM for broad distribution to individuals and organizations. The program will be converted to a Powerpoint presentation, which will be distributed to wildfire professionals and educators.