# Business Requirements for

# Interagency Fire Restrictions Web Site

OVERVIEW

A web site was developed by Univ. Montana to manage fire restriction information across all agencies and partners across the Northern Rockies (NR). The web site is currently located at [www.firerestrictions.net](http://www.firerestrictions.net).

BASIC SYSTEM OUTLINE

Areas or polygons are pre-defined for each partner. These are fixed and do not change. They are displayed to the public using Google Maps.

Fire restriction managers log in using eAuthentication ID/password (stand alone currently built into the system), selects the area they need to change restriction information, and select the new restriction from a pre-defined set of restrictions, or types the restrictions free-form. This new value is then posted to the Google Map.

* The system is very easy to use for the fire restriction manager and for the public. A SQL database is used to store the information, and Google Maps to display it.
* The partners have agreed to a standard set of fire restrictions. This makes the information much easier for the public to understand. A campfire restriction in one area is exactly the same as another. It makes setting restrictions much easier for the manager, using a standardized set of values.
* The mapping areas or polygons for restrictions are pre-defined. This make a very simple system to maintain, and for the public to determine restriction information.
* Using Google maps provides the simplest of interfaces to the public. They can zoom to the level needed to find their area of interest, and then determine the latest restrictions. Having this interface is critical to the success of the system for public use.
* System will track all changes to the database; who changed what and when.
* Once the system is set up for an area minimal support is needed. New areas will require the same level of facilitation to implement standard management areas and definitions for fire restrictions.

SCOPE

Website to display status of fire restrictions for (~50) predesignated polygons. Allow small (~30) set of distributed users (with eAuthentication) to alter status of fire restrictions appearing on the public site.

USER INTERFACES

 Public UI includes a page with interactive map showing polygons for each predesignated polygon with a mouseover popup showing status of fire restrictions for each (see example firerestrictions-01-public-home.png). Each of the predesignated polygons is painted according to the map key, and links from the map key open pages describing each status level, or "stage" (firerestrictions-02-public-closure.png, firerestrictions-03-public-stageii.png, firerestrictions-04-public-ndextreme.png, firerestrictions-05-public-stagei.png, firerestrictions-06-public-ndveryhigh.png). Links across the top of this page -- Idaho, Montana, North Dakota, South Dakota in the example -- are pulldown menus with links to pages with an area description and a listing of current fire restrictions for each predesignated polygon within these coordination areas (firerestrictions-07-public-coordareainfo.png). In turn, the coordination area page has links to a media page (firerestrictions-08-public-mediainfo.png) and dynamic pdfs for area information (firerestrictions-09-areainfopdf.png) and the press release (firerestrictions-10-pressreleasepdf.png) for that coordination area.

 Admin UI includes pages for managing all content by coordination area, including status of fire restrictions for each predesignated polygon, coordination area information, and the press release (firerestrictions-11-coordinators-userguide.pdf). Access to admin actions is determined by role for three classes of user: admin, restrictions coordinator, and media coordinator. There will be one or more admin user and one or more restrictions coordinator and media coordinator user for each coordination area.

ROLES AND WORKFLOWS

 Admin

Manages assigning users to roles, verifying user requirements are met, and interfaces with the users.

* Admin can modify data in all application fields.
* Admin can create, update, and delete users, including setting role-based permissions for each user.
* Admin can create, update, and delete fire restriction status levels ("stages"). A status level is represented by a stage name and a description of that stage.

 Restrictions Coordinator (RC)

Manages status of restrictions within a Coordination Area.

* Access is only through eAuthentication. Users are granted access only by Administrator in NWPortal, assigning a Restrictions Coordinator role.
* RC can create, update, and remove restrictions associated with predefined polygons within a given coordination area. A restriction includes restriction stage, the management areas affected, information about exemptions, date and time the restriction goes into effect, and date and time updated.
* RC can maintain contact information for self. Contact information includes name, telephone, and email.

 Media Coordinator (MC)

Manages press release for a Coordination Area.

* Access is only through eAuthentication. Users are granted access only by Administrator in NWPortal, assigning a Media Coordinator role.
* MC can maintain a single current and comprehensive press release regarding restrictions within a given coordination area. A press release includes a header and an html body.
* MC can maintain contact information for self. Contact information includes name, telephone, and email.

 Public

This role represents the public user visiting the page. The public user has no login privileges.

* Public can view current fire restrictions map and associated pages, including pdfs.

 MATRIX OF USER ROLES and ACTIONS

 