# Business Requirements for

# Interagency Fire Restrictions Web Site

Project Manager: Jim Edmonds

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.

**Support**

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 and Roles**

Administrator:

Manages assigning users to roles, verifying user requirements are met, and interfaces with the users. Jim Edmonds and Dale Guenther will initially be assigned as Administrators

Public Role:

* 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).
* Access is open, no security or restrictions. This is a public web page.
* Only those polygons with restrictions are displayed. This will greatly speed drawing time.
* 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.
* Public can view current fire restrictions map and associated pages, including pdfs.

Fire Restriction Manager:

Manager 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, three classes of user: Manager, Restrictions Coordinator, and Media Coordinator. There will be one or more of each of these 3 roles for each coordination area.

Restrictions web site will not restrict specific users to a specific area. Each manager may change any restriction in any area. The system will track who makes changes and when. (Jim, DO we want to restrict Managers to each area? I hesitate due to complexity)

ROLES AND WORKFLOWS

 Manager

* Access is only through eAuthentication. Users are granted access only by Administrator in NWPortal, assigning a Manager role.
* Admin can modify data in all 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.
* Jim Question: do we allow a manager to also be a RC and MC for those areas that do not have all 3? Do we really need all 3?

 Restrictions Coordinator (RC)

* Access is only through eAuthentication. Users are granted access only by Administrator in NWPortal, assigning a Manager 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)

* Access is only through eAuthentication. Users are granted access only by Administrator in NWPortal, assigning a Manager 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.

Jim, create a matrix table with roles on the left, and functions on the top, with an X at each point they can do something.