



THE CITY OF SAN DIEGO
REPORT TO THE CITY COUNCIL

DATE ISSUED: APRIL 17, 2008 REPORT NO: 08-064
ATTENTION: Ad Hoc Fire Prevention and Recovery Committee
AGENDA OF April 21, 2008
SUBJECT: Update of Draft Very High Fire Hazard Severity Zone Map

SUMMARY:

THIS IS AN INFORMATIONAL REPORT ONLY. NO ACTION IS REQUIRED ON THE PART OF THE COMMITTEE OR THE CITY COUNCIL.

BACKGROUND:

In 2004 following the Cedar Fire, San Diego conducted a fire risk assessment utilizing spatial analysis tools and the City's Geographical Information System (GIS) and developed a Fire Severity Map for the City. The National Fire Protection Association (NFPA) 1144 Standard for Reducing Structure Ignition Hazards from Wildland Fire, the Wildland/Urban Interface Danger Rating System as well as the International Wildland/Urban Interface Code were used to identify risk factors and to assign risk values. The rating system used five factors from NFPA's standard: density of vegetation; slope severity; five minute fire department response time; road class/proximity, and proximity to fire hydrants. Using the software-based GIS tools, including ESRI's ArcGIS Spatial Analyst Extension, a relative risk was assigned to features described by data which was then combined to create a cumulative dataset identifying wildland fire risk across the City. The resulting dataset or map assigns a relative risk value for all locations in the City.

DISCUSSION:

The California Government Code, Section 51175, requires local agencies to designate by ordinance very high fire hazard severity zones in its jurisdiction. Buildings that are located in a very high fire hazard severity zone will be required to comply with the 2007 California Building Code, Chapter 7A, "Materials and Construction Methods for Exterior Wildfire Exposure," on a prospective basis. The broad objective of the Wildland/Urban Interface Fire Area Building Standards is to establish minimum standards for materials and material assemblies and provide a reasonable level of exterior wildfire exposure protection for buildings in Wildland/Urban interface areas. The building standards in Chapter 7A apply to all new buildings, additions to existing buildings and to exterior alterations to existing buildings.

CAL FIRE through the State Fire Marshal's Office has published draft Fire Hazard Severity Maps for Local Responsibility Areas throughout California. Local jurisdictions statewide, including the City of San Diego, validated the map with reflective fuels on the ground, correcting minor model errors and updating areas where development has occurred and is not reflected in the State's vegetation layer. The study indicated that the State designated very high fire hazard severity zones were for the most part consistent with zones identified by the City of San Diego in 2004 as very high fire severity zones. There were, however, a few areas that the State identified as high but the City of San Diego considered very high. Additionally there were large areas in the City that were not zoned by CAL FIRE because they did not meet the State's modeling criteria. For example, CAL FIRE's model uses a minimum grid of 20 acres of wildland vegetation; thus anything less than that would be considered unzoned. In these unzoned areas, the City used its 2004 Fire Severity map which had been updated and validated and included CAL FIRE's vegetation cover and fire behavior/fuel spread model to determine the appropriate classification.

Once this review and edit process was complete, San Diego's geo-database was uploaded to CAL FIRE for review against their model criteria. CAL FIRE has tentatively accepted all of San Diego's local edits and produced a draft map. San Diego is currently working with CAL FIRE to finalize the draft map. CAL FIRE estimates they will formally transmit the final draft map and cover letter to the City of San Diego the first week of May 2008. Local jurisdictions pursuant to Government Code Sections 51178.5 and 51179 have 30 days from receipt to make the map available for public review and 120 days to adopt the map by local ordinance.



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Very High Fire Hazard Severity Zones in San Diego

DRAFT

Fire Hazard Severity Zones

-  Federal-Military Lands
-  VHFHSZ
-  San Diego City Limit

