



## National Interagency Fuels Coordination Group

### NATIONAL INTERAGENCY FIRE CENTER

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**Topic:** LANDFIRE FRCC Mapping Product

**Issue:** LANDFIRE has prepared the initial FRCC mapping product for the western states and asked for review. The review specifically questioned what mapping product should be presented and at what scale would it be presented. This product has potential to significantly influence opinions at all levels within and outside the organizations of the efforts of the hazardous fuels programs based on the explicit visual presentation of Fire Regime Condition Classes.

**Background:** Since the inception of the National Fire Plan in 2001 the hazardous fuels program has been asked to focus efforts and report accomplishment in Fire Regimes I, II and III in Condition Classes 2 and 3. As we move from a stand based reporting in NFPORS to the landscape representation in LANDFIRE we must continue to remind those using the information of the limitations of the data. Most importantly Fire Regime Condition Class does not represent the entire fire risk equation but only a model of the ecological condition of the fire environment. That is, it is simply a map of the departure of the current vegetation from some reference condition, expressed in three very broad categories.

**Key Points:** The scope statement in the LANDFIRE charter: "LANDFIRE is a landscape-scale fire, ecosystem, and fuel assessment mapping project designed to generate comprehensive maps of vegetation, fire and fuel characteristics nationally and identify and develop a set of tools to create and distribute data to users" must always frame any discussion about the products being presented in LANDFIRE. And within that context the summary and reporting of products nationally would include reporting by state and entire bureau/agency ownership. Any characterization or use of the data below that level is the responsibility of the user and several tools are provided as part of the LANDFIRE deliverables.

Inherent limitations of the "LANDFIRE National" data include but are not limited to establishing break points to simplify and clarify data display (i.e. FRCC is mapped in only three categories even though the characterization is done with 100 categories). Data characterization validation reliance is on plot data that is not consistent in quality or quantity in spatial and temporal settings. Remote sensing imagery used in the data characterization process is several years old (much is from Calendar Year 2000 and earlier imagery) and recent disturbance and management activities are not represented nor are the general changes of short cycle ecological systems. Mapping display edge effect is present due to independent map unit development, relative scale of ecological classification and knowledge and skills learned as the process progressed and the limited time available to resolve edge effect issues given the timeframe of the project.

Summarization at the National/State level does not change the relevance of LANDFIRE data that is available to support management decisions at the unit level. The advantages of nationally

consistent seamless information that results in a defensible data set and repeatable methodology precludes any short comings of the LANDFIRE products when used at the local level.

### **Recommendation**

LANDFIRE National datasets should be used for deliverables and reporting characteristics nationally. This has been an evolutionary process from the Course Assessment through the Rapid Assessment and ultimately yielding the LANDFIRE National datasets.

LANDFIRE should use the VDDT model to derive the reference ecological conditions when building the Fire Regime Condition Class products. The VDDT model provides the advantage of being usable at the unit level for reproducing the values presented in the summarized products. LANDSUM is an option but is currently not available for deployment on local systems.

LANDFIRE National products will be reported by National, State and Agency summaries with State products being interim deliverables as LANDFIRE National mapping products are release for an entire state. National and Agency summaries will be released when the 48-contermious states are completed and for Alaska and Hawaii respectively.

Agency personnel from the National, Regional, and Unit levels need to continue involvement in the LANDFIRE process for model development, calibration and product review.

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