



GREAT BASIN FIRE SCIENCE DELIVERY

A JFSP Knowledge Exchange Consortium



Webinar Brief for Resource Managers

Great Basin Fire Science Delivery | 1664 N. Virginia St./MS 0186, Reno, NV 89557 | 775-784-1107 | emb@cabnr.unr.edu

An Overview of the Land Treatment Digital Library

To Be Presented on 24 April 2013 by David Pilliod, Research Ecologist, USGS Forest and Rangeland Ecosystem Science Center

Project Summary:

The Land Treatment Digital Library (LTDL) was created by the U.S. Geological Survey to catalog legacy land treatment information on Bureau of Land Management lands in the western United States. The LTDL can be used by managers and scientists for:

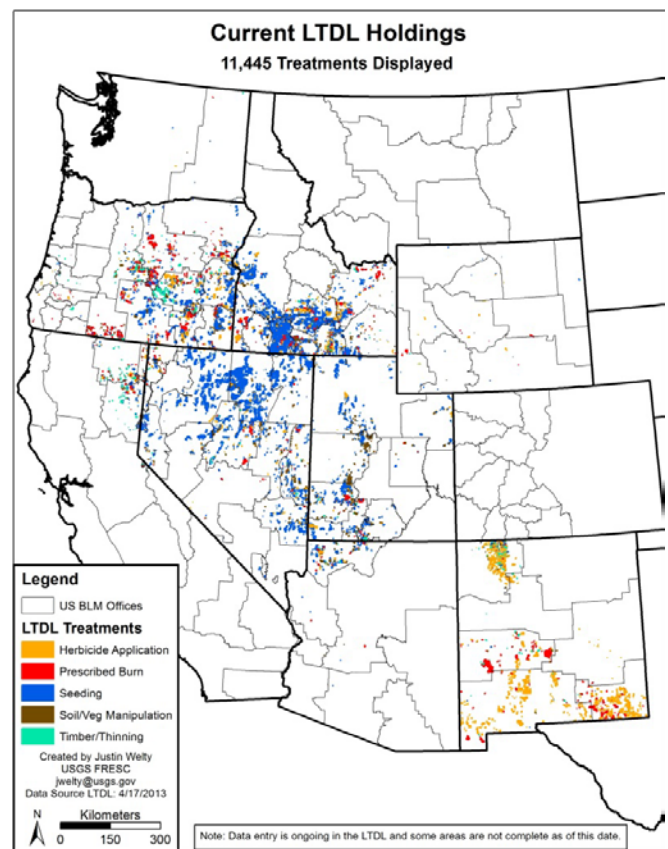
- Compiling information for data-calls
- Producing maps
- Generating reports
- Conducting analyses at varying spatial and temporal scales

The LTDL currently houses 21,515 treatments from BLM lands across 9 states. Data for California, Colorado, Montana, and Wyoming are still being collected. Data entry for all states is ongoing.

Abstract:

The Land Treatment Digital Library (LTDL) was created by the U.S. Geological Survey to catalog information about land treatments in the western United States. Federal land

managers plan and implement hundreds of projects each year with the goal of manipulating vegetation and soils. Common examples include removing plant biomass to reduce hazardous fuels, applying herbicide to control invasive species, improving forage for livestock and wildlife, and seeding burned areas to reduce soil erosion and recover native plant communities. Until now, most treatment data were stored at local offices on individual computers or in filing



cabinets making it difficult to compile data across large spatial extents. Databases that did exist often contained insufficient information for making complex or spatial queries that were needed to answer data calls or conduct analyses for resource planning and management. The LTDL was designed to incorporate all aspects of land treatment information, including documentation, photos, tabular data, and spatial data. This design allows all data on a land treatment to be housed in a single location for quick and easy access. The data and metadata are highly organized with standardized naming and storage conventions. The flexible design of the LTDL allows it to function on a single computer or multiple users can enter data at once across a network. Land treatment data entered into this platform can be submitted to the USGS for inclusion in a centralized, master database and displayed as part of an internet tool that allows users to query and map land treatments across the western United States.

Most Relevant References:

Website:

<http://greatbasin.wr.usgs.gov/ltdl/Default.aspx>

Publications:

Pilliod, D.S. 2009. Land treatment digital library—A dynamic system to enter, store, retrieve, and analyze Federal land treatment data: U.S. Geological Survey Fact Sheet 2009-3095, 2 p.

Publications Using Data from the Land Treatment Digital Library:

Knutson, K.C., D.A. Pyke, T.A. Wirth, D.S. Pilliod, M.L. Brooks and J.C. Chambers. 2009. A Chronosequence Feasibility Assessment of Emergency Fire Rehabilitation Records within the Intermountain Western United States - Final report to the Joint Fire Science Program - Project 08-S-08: U.S. Geological Survey Open-File Report 2009-1099, p. 20.

Finn, S.P., K. Kitchell, L. Baer, D.R. Bedford, M.L. Brooks, A.L. Flint, L.E. Flint, J.R. Matchett, A. Mathie, D.M. Miller, D.S. Pilliod, A. Torregrosa, and A. Woodward. 2010. Great Basin Integrated Landscape Monitoring Pilot Summary Report: U.S. Geological Survey Open-File Report, p. 50.

Gray, E.C., Muir, P.S. 2013. Does *Kochia prostrata* spread from seeded site? An evaluation from southwestern Idaho. *Rangeland Ecology and Management* 66: 191-203.

Sankey, J.B., Wallace, C.S.A., Ravi, S. 2013. Phenology-based remote sensing of post-burn disturbance windows in rangelands. *Ecological Indicators* 30:35-44.