

Project PI	JFSP #	Title	Meteorology	Fire Info	Fuels	Total Consumption	Time Rate Consumption	Emissions	Plume Rise	Smoke Dispersion	Analysis Year(s)	Notes
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PAST JFSP PROJECTS WITH POTENTIAL DATA OF INTEREST TO SEMIP

PROJECTS IDENTIFIED AS SEMIP PRIORITIES

Roger D. Ottmar	98-1-1-05*	Photo Series for Major Natural Fuel Types of the United States, Phase II			D						1998-2002	Inventory, Mapping; Underlying data valuable fuels info; 10 ecotypes
Roger D. Ottmar	98-1-1-06*	Application of a Fuel Characterization System for Major Fuel Types of the Contiguous United States and Alaska			D						1998-2005	Inventory, Mapping; FCCS expanded fuels db
Keene	98-1-1-07	Mapping Fuels Using Remote Sensing and Biophysical Modeling			D							Mapped fuels
Sandberg / Ferguson	98-1-4-14*	Assessing Values of Air Quality and Visibility at Risk from Wildland Fire								D		Air quality db; Planning and Risk
Patricia L. Andrews	98-1-8-02*	Fire Modeling for Fuel and Smoke Assessment	I	I	I	O		O		O	1999-2001	FARSITE, BEHAVE expansion through smoke dispersion; Fire Behavior
Elizabeth D. Reinhardt	98-1-8-03*	A National Fire Effects Prediction Model	I	I	I	O	O	O	O?	O?	1998-2000	FOFEM revision; Fire Effects and Fire Ecology
WeiMin Hao	98-1-9-01*	Smoke Produced from Residual Combustion			D	D,O					1998-2004	CONUS; Consumption from residual phase; Pre- and post- burn plots; Air Quality, Smoke Management, Climate, Weather
Douglas G. Fox	98-1-9-03*	Technically Advanced Smoke Evaluation Tools (TASET): Needs Assessment and Feasibility Investigation						C?		C?	1999-2000	Needs assessment for smoke tools; CONUS; Possible smoke dispersion comparison analysis; Air Quality, Smoke Management, Climate, Weather
David V. Sandberg	98-1-9-05*	Implementation of an Improved Emission Production Model		I	I	O	O	O	O		1998-2003	Fixes to EPM; Air Quality, Smoke Management, Climate, Weather
Roger D. Ottmar	98-1-9-06*	Modification and Validation of Fuel Consumption Models for Shrub and Forested Lands in the Southwest, Pacific Northwest, Rockies, Midwest, Southeast and Alaska		I	I	C,O	C,O	C?,O?			1998-2005	Improve CONSUME 3.0; Validate CONSUME 2, FOFEM, BURNUP; Fire Behavior
Colin C. Hardy	98-5-02*	Development of Course Scale Spatial Data for Wildland Fire and Fuels Management			D,C						1998-1998	"Hardy et al" update to NFRS fuels; Inventory, Mapping
Philip N. Omi	99-1-3-10*	Incorporation of Wildland Fuels Information into Scale Land Use and Planning Processes			D						1999-2002	Aggregated literature fuels info; Planning and Risk
Ohmann	01-1-4-09*	A Novel Approach to Regional Fuel Mapping: Linking Inventory Plots with Satellite Imagery and GIS Databases Using the Gradient Nearest Neighbor Method			D,O							Remote Sensing + plots; Integrated fuels model/map; Washington, Oregon, California
Zhu	01-1-4-12*	Evaluate Sensitivities of Burn-Severity Mapping Algorithms for Different Ecosystems and Fire Histories in the United States		D,O,V								NBR remote sensing burn scar algorithm validation
William C. Malm	03-1-5-01*	Fire Effects on Regional Air Quality Including Visibility	D,I	D,I		O		O	O	O,D,V	2002-2005	NEI type emissions inventory; IMPROVE site data; Air Quality, Smoke Management, Climate, Weather
WeiMin Hao	01-1-5-03*	Automated Forecasting of Smoke Dispersion and Air Quality Using NASA Terra and Aqua Satellite Data	D,I	D,I		O	O	O	O	O	2001-2005	Burn scar fire info data; consumption/emissions/dispersion model; Air Quality, Smoke Management, Climate, Weather
Andrzej Bytnerowicz	01-1-5-06*	Improving Model Estimates of Smoke Contributions to Regional Haze Using Low-cost Sampler Systems								D	2001-2003	Monitoring networks; California; Speciated ground concentrations; Air Quality, Smoke Management, Climate, Weather
Roger D. Ottmar	01-1-7-02*	Photo Series for Major Natural Fuel Types of the United States, Phase III			D						2001-2005	Fuels db; 12 fuelbed types; Representative variability; Inventory, Mapping
Michael McCoy	01-3-3-30*	Including Fire Effects Information in a Manual of California Vegetation.		D	D							California; Synthesis of fire and vegetation data; Fire Effects and Fire Ecology
Penelope Morgan	03-1-1-07*	Climate Drivers of Fire and Fuel in the Northern Rockies: Past, Present, and Future	D	D							2003-2006	Northern Rockies; Climate and fire; Digitized fire atlas from 11 National Forests; Air Quality, Smoke Management, Climate, Weather
Matt Jolly	03-1-1-08*	Modeling Vegetation Phenology for the Assessment of Present and Future Fire Hazard Potential			D						2003-2006	MODIS based greenup of fuels; Planning and Risk
Clinton S. Wright	03-1-3-06*	Fuel Consumption and Flammability Thresholds in Shrub-Dominated Ecosystems			D?	D					2003-2007	Shrub consumption in improved CONSUME; Fire Behavior
Roger D. Ottmar	03-1-3-08*	Forest Floor Consumption and Smoke Characterization in Boreal Forested Fuelbed Types of Alaska			D	D					2003-2006	Alaska; Duff/litter improved consumption in CONSUME; Air Quality, Smoke Management, Climate, Weather
Robert Solomon	03-1-3-09*	An Automated System for Evaluating BlueSky Predictions of Smoke Impacts on Community Health and Ecosystems				O	O	O	O	D,O,V		AirNow in-situ ground monitors; Validation of smoke; Fire Effects and Fire Ecology
Penelope Morgan	03-2-1-02*	Assessing the Causes, Consequences and Spatial Variability of Burn Severity: A Rapid Response Proposal		D	D	D					2003-2007	Wildfires; 5 fires; Collected fire, fuels, consumption, and remote sensed data; Includes post-burn plots; Fire Behavior
Wei Min Hao	04-1-1-04*	Real Time Monitoring of the Three Dimensional Distribution of Smoke Aerosol Levels from Prescribed Fires and Wildfires							D	D	2004-2008	LIDAR smoke measurements; Air Quality, Smoke Management, Climate, Weather
Roger D. Ottmar	04-2-1-49*	Litter and Duff Bulk Densities in the Southern United States.			D						2004-2006	South; Duff and organic fuels; Inventory, Mapping
Robert A. Mickler	04-2-1-80*	Development and Demonstration of Smoke Plume, Fire Emissions, and Pre-and Post-Prescribed Fire Fuel Models on North Carolina Coastal Plain Forest Ecosystems.	O	D	D	O		O	O	D,O,V	2004-2007	North Carolina; Rx fire; Fuels, consumption, ground smoke monitoring; Model met; Air Quality, Smoke Management, Climate, Weather

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Scott Stephens	04-2-1-84*	Translating SPLSTs From a Theoretical to a Real World Landscape: The Implications of Fuel Management Strategies for Sagehen Creek Basin, Tahoe National Forest.		D			D				2004-2007	California; Tuned version of FARSITE for Sierras/Tahoe; Decision Support
Clinton S. Wright	04-4-1-02*	Digital Photo Series			D						2004-2007	Collected photo series data; Inventory, Mapping
Chris S. Renschler	04-4-1-12*	Geo-Spatial Wildland Management Tool		D							2004-2007	GeoWEPP spatial erosion tool; Likely has spatial fire data; Science and Technology Applications
Carl Fiedler	04-4-1-21*	A Web-Based Information System for Estimating Fuel Characteristics, Fire-Hazard, and Treatment Effectiveness and costs in Montana and New Mexico.			D	O	O?	O?			2004-2007	Montana; New Mexico; FIA fuels plots linked to FCCs to fire effects; Decision Support
Eva C. Karau	05-1-1-12*	Burn Severity Mapping Using Simulation Modeling and Satellite Imagery		D,O,V		D					2005-2008	Burn scar remote sensing; FIREHARM fire effects model and validation of simulated scars; Remote Sensing
William M. Jolly	05-4-2-18*	A Synthesis of Live Fuel Moisture and Wildland Fire, and Development of a National Historical Live Fuel Moisture Database.			D	D					2005-2007	Synthesis of fuel moisture; Decision Support
Geoff G. Wang	05-4-3-06*	Modify FOFEM for use in the Coastal Plain Region of the Southeastern US.			D	D, O	O	O			2005-2007	Southeast Coastal Plains; Improved FOFEM; Likely fuels, consumption data to calibrate; Science and Technology Applications
Elizabeth D. Reinhardt	05-4-3-10*	FuelCalc: A Tool for Calculating Wildland Fuel Quantities and Qualities and Supporting Fuel Management Decisions.			O, D?						2005-2009	FuelCalc fuels tool to create fuelbeds; Decision Support
Shepard M. Zedaker	06-3-3-06*	Expansion of the Southern Variant of the Fire and Fuels Extension for the Forest Vegetation Simulator			D,O						2006-2008	FVS development; Requires extensive fuels and fire data for south to build; Decision Support
Alexander Evans	07-3-2-02*	Inventory and evaluation of case studies to produce a guide to effective biomass removal strategies			D	D						Collected Rx treatment data; Fuel Treatments
Talat M. Odman	08-1-6-04*	Evaluation of Smoke Models and Sensitivity Analysis for Determining their Emission Related Uncertainties		I	I	O	O	O	O	O,C,V		Actively working with SEMIP
Yongqiang Liu	08-1-6-06*	Evaluation and Improvement of Smoke Plume Rise Modeling		I	I	O	O	O	O	O,V		Actively working with SEMIP
ADDITIONAL PROJECTS OF INTEREST												
Nicholas L. Crookston	98-1-7-02	Adaptation of the Fuels and Fire Extension to the Forest Vegetation Simulator to meet the Objectives of the Joint Fire Science Program		O	O						1998-2001	FVS - economic model bridge development; Most useful here: FVS - FARSITE connection; Decision Support
Jim Russell	98-1-8-01	Development, Sensitivity Testing and Retrospective Application of the Fire Effects Tradeoff Model		O	O	O					1999-2001	Fire Effects Tradeoff Model v4; Fire Effects and Fire Ecology
David R. Weise	98-1-8-06	A Risk Based Comparison of Potential Fuel Treatment Trade-off Models			C						1998-2004	SIMPPLLE/MAGIS, VDDT/TELSA and FETM fuel treatment model comparison, Planning and Risk
Nicholas L. Crookston	99-1-1-04	Development and Delivery of the Fire and Fuels Extension to the Forest Vegetation Simulator for Use by Stakeholders of the Joint Fire Science Program			D,O						1999-2002	Fire and Fuels Extension (FFE) to the FVS; Decision Support
Thomas W. Swetnam	99-1-3-08	Monument Canyon Research Natural Area, Santa Fe National Forest		D							2000-2002	New Mexico; Fire data; Fuel Treatments
Peter Z. Fule	99-1-3-11	Multi-Century Fire Modeling Over Landscape Gradients			D						1999-2001	Multi-century FARSITE; Grand Canyon Fuels db for initialization; Planning and Risk
Joe H. Scott	99-1-3-12	Quantification of Canopy Fuels in Conifer Forests			D,C						1999-2001	Comparison of canopy fuels; Inventory, Mapping
Peter B. Landres	99-1-3-16	Wildland Fuels Management: Evaluating and Planning Risks and Benefits			D?						1999-2004	Possible collected fuels; Planning and Risk
Matthew G. Rollins	99-1-3-28	Spatial and Temporal Analysis of Lightning and Fire Occurrence in Rocky Mountain Wilderness Areas	D	D							1999-2001	New Mexico; Idaho/Montana; Fire occurrence data + met conditions; Air Quality, Smoke Management, Climate, Weather
Kevin C. Ryan	99-1-3-29	Southern Utah Fuels Management Demonstration Project	D	D	D?,C?	D?,C?					1999-2002	Utah; Comparison of FARSITE, NEXUS, FOFEM, FFE-FVS, LANDSUM; Fuels, fire weather, other collected data; Inventory, Mapping
Martinson	99-1-4-01	Effect of Fuel Treatments on Wildfire Severity				D?						Severity data; Rapid response; Fire Effects and Fire Ecology
Kenneth W. Outcalt	99-1-4-02	The Value of Fuel Management in Reducing Wildfire Damage to Overstory Trees				D						South; Consumption/mortality data; Rapid Response; Fire Effects and Fire Ecology
Chambers	00-1-1-03	Changing Fire Regimes, Increased Fuel Loads, and Invasive Species: Effects on Sagebrush Steppe and Pinyon-Juniper Ecosystems			D	D?						Pinyon juniper and Wyoming big sagebrush; collected fuels data; fuels evolution model
Bret W. Butler	00-1-1-06	Development and Implementation of a System for Prediction of Fire-Induced Shrub and Tree Mortality				O					2000-2004	Coupled stem, duff, surface fire model
Jan W. Van Wagtenonk	00-1-3-01	The Use of Landsat 7 (ETM+) and AVIRIS Data to Map Fuel Characteristic Classes in Western Ecosystems			D							Fuels plots; Shrub fuels; Great Plains; connection w/remote sensing

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Flemming	00-1-3-05	Testing an Approach to Improving Fire Fuel Mapping by Mapping and Modeling Vegetation Structure and Types based on Combined Field Data			D,O							Remote Sensing technique to combine data for fuels mapping
Caratti	00-1-3-19	Monitoring Fire Effects at Multiple Scales: Integrating Standardized Field Data Collection with Remote Sensing to Assess Fire Effects		D	D,O							FIREMON standard for fuels and fire effects monitoring; all regions
Jo Ann Fites-Kaufman	00-1-3-21	Validation of Crown Fuel Amount and Configuration Measured by Multispectral Fusion of Remote Sensors			D,O						2000-2005	Sierra Nevada; Mixed Ponderosa and Conifer; Remote Sensing of fuels technique
Stephens	00-2-02	Fire Hazard Reduction in Chaparral Using Diverse Treatments			D	D						Chapparel; Pre- and Post- burn plots; Fuel Treatments
Grabner	00-2-04	Integrating Fuel and Forest Management: Developing Prescriptions for the Central Hardwood Region			D	D						Ozarks; Pre- and Post- burn plots; Fuel Treatments
James Haywood	00-2-06	Conversion of Upland Loblolly Pine-Hardwood Stands to Longleaf Pine			D						2001-2004	Fuel Treatments; Loblolly fuels changes over time
Nightingale	00-2-23	Managing Fuels and Forest Structure in the Southern Boreal Forest on Minnesota's National Forests			D?	D?						Fuel Treatments effects monitoring; potential fuels and consumption data; Minnesota
Jenkins	00-2-25	Demonstration Plots for Comparing Fuel Complexes and Profile Development in Untreated Stands versus Stands Treated for the Management of Spruce Beetle Outbreaks and Implications for Fuels Manipulation			D							Fuels measurements; Spuce-fir; Utah; Fuel Treatments
Swanson	00-2-30	Fire Hazard Reduction in Ponderosa Pine Plantations			D	D						Pre- and post- burn plots; Ponderosa pine; California; Fuel Treatments
Agee	00-2-31	Restoring Mixed Conifer Ecosystems to Pre-Fire Suppression Conditions in Crater Lake National Park			D?	D?						Experimental Rx plots; Possible pre- and post- fuels; Fire Effects and Fire Ecology
Brooks	00-2-32	Fire Effects and Fuels Management in Blackbrush Shrublands of the Mojave Desert			D?							Desert; Grass; Possible fuels data; Fire Effects and Fire Ecology
Zamora	00-2-33	The Lick Creek Demonstration- Forest Renewal Through Partial Harvest and Fire			D	D?						Northwest; Fuel Treatments; Pre- burn fuels; Possible post- burn fuels.
Robert A. Ott	00-2-34	Fuels Treatment Demonstration Sites in the Boreal Forests of Interior Alaska			D	D,O?					2001-2005	Alaska; Spruce; Fuel Treatments; Fuels measurements; possible consumption model
Cook	00-2-35	Evaluation of Three Fuel Management Treatments for Eastern White Pine			D	D						Pine; Wisconsin; Pre- and post- burn fuels measurements; Fuel Treatments
Carleton B. Edminster	00-U-01	Cerro Grande Post-Fire Inventory and Analysis			D?						2000-2003	Inventory, Mapping; Links to another project (non-JFSP) with fuels measurements
Scott Rupp	01-1-1-02	Development of a Computer Model for Management of Fuels, Human-Fire Interactions, and Wildland Fires in the Boreal Forest of Alaska			O	O?					2002-2005	Decision Support model; Alaska; Fuels and fire effects model
Carol Miller	01-1-1-05	Can Wildland Fire Use Restore Historical Fire Regimes in Wilderness and Other Unroaded Lands?			D						2001-2004	Planning and Risk: Collected fuels: 6-8 Parks/Forests; West centric
Matthew G. Rollins	01-1-1-06	Historical Wildland Fire Use: Lessons to be Learned from Twenty-five Years of Wilderness Fire Management			D	D	D?				2002-2007	New Mexico; 25-year fire history Gila; Fuels treatment effects; Planning and Risk
Brownlie	01-1-3-09	Consequences and Correlates of Fire in Wetlands			D	D	D					Florida; Pre- and post- burn plots; Fire Effects and Fire Ecology
J.J. O'Brien	01-1-3-11	Duff Consumption and Southern Pine Mortality			D?	D?	D?					Florida; Pine; Fire Effects and Fire Ecology; Likely fire, fuels, and consumption data required for project
Finney	01-1-3-21	Cumulative Effects of Fuel Management on Landscape-Scale Fire Behavior and Effects			O							Modeled fire behavior based on fuel treatment layout; Fire Effects and Fire Ecology
Gould	01-1-3-37	Landscape Fragmentation and Forest Fuel Accumulation: Effects of Fragment Size, Age, and Climate			O							Fragmented fuels model; Fire Effects and Fire Ecology
Jiquan Chen	01-1-3-43	Fire, Management, and Land Mosaic Interactions: A Generic Spatial Model and Toolkit from Stand to Landscape Scales			D,O	O?					2001-2004	Landscape fuels model; PC-based; Decision Support
Thomas A. Waldrop	01-1-4-02	Fuel Classification for the Southern Appalachian Mountains using Hyperspectral Image Analysis and Landscape Ecosystem Classification			O						2002-2006	Fuels from hyperspectral; Remote Sensing
Gerard F. Schreuder	01-1-4-07	The Use of High-Resolution Remotely Sensed Data in Estimating Crown Fire Behavior Variables			D,O						2002-2006	Remote Sensing; Canopy fuels characteristics from remote sensing model
Kokaly	01-1-4-14	Advanced Remote Sensing Technologies for Monitoring Postburn Vegetation Trends and Conditions			O							Remote Sensing fuels model; Specific connections to FARSITE, BEHAVE, NFRS
Despain	01-1-4-15	Mapping Horizontal and Vertical Distribution of Fuel by Fusing High-Resolution Hyperspectral and Polarimetric Data			O							Remote Sensing; Integrated fuels map; Wyoming
Rechel	01-1-4-23	Quantitative Comparison of Spectral Indices and Transformations with Multi-resolution Remotely Sensed Data Using Ground Measurements: Implications for Fire Severity Modeling			D,V							Remote Sensing; Multi-scale validation of NDVI, other indices against collected plots

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John F. Lehmkuhl	01-1-6-01	Fire and Climate Variability in the Inland Pacific Northwest Integrating Science and Management	D	D							2001-2003	Climate and fire relationships; Assume fire info db; Air Quality, Smoke Management, Climate, Weather
Steven W. Hostetler	01-1-6-05	Climatic Controls of Fire in the Western United States: From Atmospheres to Ecosystems	D	D							2001-2005	Climate and fire relationships; Assume fire info db; Air Quality, Smoke Management, Climate, Weather
Jeanne Hoadley	01-1-6-07	Assessing the Value of Mesoscale Models in Predicting Fire Danger	D								2001-2004	Multiscale analysis of fire danger indices; May have crossover application; Air Quality, Smoke Management, Climate, Weather
Rorig	01-1-6-08	Predicting Lightning Risk	D									Dry lightning index; Northwest; Planning and Risk
Nicholas L. Crookston	01-1-7-07	Fire and Fuels Extension to the Forest Vegetation Simulator: Completion of Calibration for Eastern Forests, Provisions for User Training, and Program Maintenance			D						2002-2005	FFE-FVS expansion to Ozarks; Vegetation db; Decision Support
Donald G. MacGregor	01-1-7-14	Decision Support Methods for Prescribed Fire			D?,O?	D?,O?					2001-2005	Rx planning tool; Possible model or database; Decision Support
Edward Smith	01-3-1-06	Two Demonstration Sites in Northern Arizona for Forest Thinning, Fire Use, and Fire Surrogate Treatments in the Ponderosa Pine Type		D?	D?	D?					2002-2005	Rx fire sites; Possible fire information and fire consumption information; Demonstration Sites
Oliver H. Pattee	01-3-2-03	Prescribed Fires in Mid-Atlantic Coastal Plain Forests		D?	D?	D?						Possible Rx fire data; Fire Effects and Fire Ecology
Robert Murphy	01-3-2-09	Prescribed Fire for Fuel Reduction in Northern Mixed Grass Prairie: Influence on Habitat and Population Dynamics of Indigenous Wildlife		D?								Primarily bird related; Possible fuels db for connection; Fire Effects and Fire Ecology
Amanda G. McAdams	01-3-2-14	Effects of Prescribed Grazing and Burning Treatments on Fire Regimes in Alien Grass-dominated Wildland-Urban Interface Areas, Leeward Hawaii		D							2002-2006	Grass; Hawaii; Fire history db; Fuel Treatments
Charles G. Curtin	01-3-3-20	Experimental Studies of the Role of Fire in Restoring and Maintaining Arid Grasslands		D?							2002-2005	Grass; Southwest; Possible fire history; Demonstration Sites
Thomas J. Bobbe	01B-2-1-01	Field Measurements for the Training and Validation of Burn Severity Maps from Spaceborne, Remotely Sensed Imagery		D								Plots and burn scar fire data; Remote Sensing
Kenneth W. Outcalt	01B-3-1-03	Dormant-Season Prescription Fires to Reduce Hazardous Fuel Loads on the South Carolina Coastal Plain: Establishing a Demonstration Area on a 40+ year study		D	D	D					2002-2006	South Carolina; Rx fire data including fuels, possible consumption; Demonstration Sites
Kenneth W. Outcalt	01B-3-1-04	Long-term Dormant-Season Burning Interval Study in the Palmetto/Galberry Fuel Complex: Establishing an Adjacent Growing-Season Burn Study and Making Both Demonstration Areas		D	D	D					2002-2006	Florida; Pre- and post- burn data; Rx fire; Fuels data; Long-term; Demonstration Sites
Kenneth W. Outcalt	01B-3-1-05	Frequency and Season of Prescription Fires to Reduce Hazardous Fuel Loads on the Lower Piedmont of Georgia: Establishing a Demonstration Area on a 12 year-old Study		D	D?	D?					2002-2006	Georgia; Possible fire, fuels, consumption data; Demonstration Sites
Will Russell	01B-3-3-13	Quantification of Fuel in Baccharis (Coyote Bush) Shrub Types: Assessing Fuel Loading Using Destructive and Non-destructive Methods			D,O,C						2002-2003	Shrub fuels technique; Comparison of different methods; Inventory, Mapping
Patrick H. Brose	01B-3-3-15	Integrating Prescribed Fire into Management of Mixed-oak Forests of the Mid-Atlantic Region: Developing Basic Fire Behavior and Fuels Information for the Silvah System			D						2002-2005	Mixed-oak; Mid-atlantic; Photo series; Inventory, Mapping
Walter G. Thies	01B-3-3-16	Effects of Season and Interval of Prescribed Burns in a Ponderosa Pine Ecosystem			D	D						Oregon; Ponderosa pine; Pre- and post- burn data; Fire Effects and Fire Ecology
Jennifer Gibson	01B-3-3-27	Fuels Management and Non-native Plant Species: An Evaluation of Fire and Fire Surrogate Treatments in Chaparral Plant Community			D	D?						California; Chapparel; Possible pre- and post- burn data; Fuel Treatments
Peter R. Robichaud	01C-2-1-02	Evaluating High Resolution Hyperspectral Images for Determining Postfire Burn Severity		D			D?					Fire severity from Remote Sensing; Hyperspectral imagery; Possible fire growth data.
Jo Ann Fites-Kaufman	01C-2-1-08	Real-Time Evaluation of Effects of Fuel-Treatments and Other Previous Land Management Activities on Fire Behavior During Wildfires: A Rapid Response Proposal		D	D	D						California; Wildfire; Pre- and post- burn data; Rapid response; Remote Sensing
Clayton B. Marlow	01C-3-1-02	Armells Creek Prescribed Fire Demonstration Project			D?						2002-2005	Wyoming; North Dakota; Possible fuels data; Fuel Treatments
William A. Patterson	01C-3-1-05	Managing fuels in Northeastern Barrens			D	D,V	D,V					Pine Barrens; Fuels treatment data; BEHAVE validation / modification.
Henri D. Grissino-Mayer	01C-3-3-09	Fire Regimes and Successional Dynamics of Yellow Pine (Pinus Stands in the Central Appalachian Mountains		D							2002-2006	Climatology of fire occurrence from dendrochronology; Fire Regimes
Fred J. Swanson	01C-3-3-10	Restoration of Dry, Montane Meadows Through Prescribed Fire, Vegetation, and Fuels Management: A Program of Research and Adaptive Management in Western Oregon			D							Oregon; Rx treatments; Fuels inventory pre- and post- burn; Fuel Treatments

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Roberta A. Bartlette	01C-3-3-21	Characterizing Moisture Regimes for Assessing Fuel Availability in North Carolina Vegetation Communities			D						2003-2007	North Carolina; Fuel moisture; Live fuels, duff, organic soils; Fire Behavior
Joe H. Scott	01-S-06	Additional Work for Quantification of Canopy Fuels in Conifer Forests			D						2001-2004	Fuels and stand data; Canopy fuels; Inventory, Mapping
Michael G. Ryan	03-1-1-06	Carbon Cycling at the Landscape Scale: the Effect of Changes in Climate and Fire Frequency on Age Distribution, Stand Structure, and Net Ecosystem Production	D	D	D						2003-2008	Yellowstone; 1988 fires; Climate and fire effects on fuels and stands; Air Quality, Smoke Management, Climate, Weather
Carl N. Skinner	03-1-1-22	Fire-Climate Interactions and Predicting Fire Season Severity in the Mediterranean Climate Areas of California, Southern Oregon, and Western Nevada	D	D							2003-2007	Climate indices and fire; Requires fire occurrence db; Air Quality, Smoke Management, Climate, Weather
Julie Winkler	03-1-1-37	Atmospheric Fire Risk in a Changed Climate	D								2003-2007	Current and future climate CFWI and Haines; Air Quality, Smoke Management, Climate, Weather
Karl F. Zeller	03-1-3-02	Forecasting of Fire Weather and Smoke Using Vegetation-Atmosphere Interactions	D								2003-2006	Improved FORFLUX: RMC MM5; Air Quality, Smoke Management, Climate, Weather
David M. Engle	03-1-4-09	Patch Burning on Grasslands: Effects on Fuels, Fire Behavior, and Fire Spread			D	D					2003-2007	Oklahoma; Grass; Patch burning effects; Fuels and consumption data; Fire Effects and Fire Ecology
Jim D. McIver	03-1-4-21	Designing an Experiment to Evaluate Effects of Fire and Fire Surrogate Treatments in the Sagebrush Biome		D?	D?							Study plan project; Possible connection to future fire and fuels data; Fire Effects and Fire Ecology
Mark A. Finney	03-2-1-04	Modeling Surface Winds in Complex Terrain for Wildland Fire Incident Support	O								2003-2006	HIGH-resolution winds over fire areas for improved fire behavior; Link to FARSITE; Fire Behavior
Merrill R. Kaufmann	03-2-3-08	Pre-Fire Condition, Fire Severity, and Post-Fire Effects in the Hayman Burn, Colorado		D	D	D						Hayman fire; Pre- and post- burn data; Fire Effects and Fire Ecology
Merrill R. Kaufmann	03-2-3-18	Using LIDAR to Identify Sediment and Forest Structure Change in the Hayman Burn, Colorado			D	D						Hayman fire; LIDAR use for fuels changes; Pre- and post- burn data; Remote Sensing
Carl N. Skinner	03-2-3-20	Effects of Altering Stand Structure on Wildfire Severity and Effects in the Black Mountain Experimental Forest, Cascade Range, California		D		D?						California; After action fire severity measurements; Fire Effects and Fire Ecology
Rhonda K. Loh	03-3-3-15	Relationships of an Alien Plant, Fuel Dynamics, Fire Weather, and Unprecedented Wildfires in Hawaiian Rain Forests: Implications for Fire Management at Hawaii Volcanoes National Park	D	D	D	D						Hawaii; Pre- and post- burn fuels; Weather / fire relationships; Fire behavior; Fire Effects and Fire Ecology
Gary Kirpach	03-3-3-46	Stereo Photo Series for Quantifying Natural Fuels in the Prairie Forest and Northwestern Great Plains			D						2003-2006	Prairie; Northwest Great Plains; Fuels data; Inventory, Mapping
James F. Dawson	03-3-3-57	The Effects of Prescribed Fire Season and Fire Surrogates on Crown Fire Adapted Knob Cone Pine Forests			D	D						Pine; Pre- and post- burn data; Fire Effects and Fire Ecology
Alan A. Ager	03-4-1-04	Developing an Analysis and Planning Framework for District-Level Fuels Treatments Projects.			D?							Possible fuels data; ARCFUELS; Planning and Risk
Jane K. Smith	03-4-2-03	Completion of Invasive Plant Knowledge Base Summaries for FEIS (Fire Effects Information System)			D?						2003-2005	Possible link to fuels data in Fire Effects Information System (FEIS); Decision Support
Colin C. Hardy	03-5-01	Demonstration and Integration of Systems for Fire Remote Sensing, Ground Based Fire Measurement, and Fire Modeling	D	D			D				2003-2006	Rapid response measurements of fire behavior, winds; Remote Sensing
Jon E. Keeley	04-1-2-01	Rapid Response to the 2003 Fires in Southern California: Impact of Fuel Age on Fire Behavior and Recovery	D	D	D		D				2004-2007	California; Wildfires; 2003; Spatial spread data; Inventory, Mapping
Peter Z. Fule	04-1-2-04	Fire Use Over a Southwestern Elevational Gradient: Effects of 2003 Fires.	D	D	D	D						Grand Canyon; Collected fire data including pre- and post- fuels; Fire Effects and Fire Ecology
Theresa (Terrie) Jain	04-2-1-116	Influence of Prescribed and Wildfire on Forest Structure and Fire Severity.			D,O						2004-2007	Rx fire effects on fuels; Both model and observed data; Fire Behavior
Thomas A. Spies	04-2-1-14	Effects of Disturbance History, Landscape Pattern, and Weather on Wildfire Severity in Southwestern Oregon: Implications for Management of a Fire-Prone Landscape.		D	D						2004-2007	Oregon; Pre- and post- aerial photography; Fire Behavior
Thomas D. Sisk	04-2-1-27	Multi-Jurisdictional Application of Forest ERA Landscape Decision Support Tools in North-Central New Mexico.			D?						2004-2007	Forest Ecosystem Restoration Analysis GIS tools; Possible fuels and other data; Decision Support
Carl C Trettin	04-2-1-35	Effects of 40 Years of Prescribed Fire on Pine Regeneration and Productivity.			D	D						Pine; Long term Rx fire plot; Fire Effects and Fire Ecology
Narasimhan K. Larkin	04-2-1-71	Quality Assurance of Weather Data and the Probability of Favorable Weather for Prescribed Fire in Alaska	D								2004-2007	Collected weather station data; Air Quality, Smoke Management, Climate, Weather
Ann Camp	04-2-1-96	Refinement and development of fire management decision support models through field assessment of relationships between stand characteristics, fire behavior and burn severity.			D?	D?					2004-2006	Alaska; Flammability focus; Possible fuels and consumption data; Decision Support
Andrew Youngblood	04-5-02	Supplement to the Fire and Fire Surrogate Study: Interdisciplinary and Multi-Site Analysis		D	D							12 study sites; Multi-faced data collection; Fire Effects and Fire Ecology

Project PI	JFSP #	Title	Meteorology	Fire Info	Fuels	Total Consumption	Time Rate Consumption	Emissions	Plume Rise	Smoke Dispersion	Analysis Year(s)	Notes
LETTER CODES: D=DATA (OBS); I & O = MODEL INPUT & OUTPUT; C=COMPARISON TO OTHER MODELS; V=VALIDATION OF MODEL												
Jane K. Smith	04-S-03	Bringing the Fire Effects Information System Up to Date and Improving Service to Land Managers.			D?						2004-2008	FEIS update; Decision Support
Jill Johnstone	05-1-2-06	Managing Fire With Fire in Alaskan Black Spruce Forests: Impacts of Fire Severity on Successional Trajectory and Future Forest Flammability.			D	O, D?, V?						Alaska; pre- fire fuels data; fire severity model; Fire Effects and Fire Ecology
Matthew G. Rollins	05-2-1-101	Predicting Burn Severity in the Gila Wilderness, New Mexico: Meeting Local Need for Assessing the Potential Impact of Fire on Fish and Streams.		D	D	O,D					2005-2008	New Mexico; Wildfire; Burn severity mapping; Pre- fire fuels; High resolution image pre- and post- fire; Inventory, Mapping
Eric E. Knapp	05-2-1-20	Masticated Fuel Beds: Custom Fuel Models, Fire Behavior, and Fire Effects			D						2005-2008	Oregon; Masticated fuels; Fuel Treatments
Cody Wienk	05-2-1-26	Fire and Forest History at Mount Rushmore National Memorial: Application and Deomonstration of Fire Science.		D		D					2005-2007	South Dakota; Pre- and post- fire imagery; Long term fire history from tree rings; Fire Regimes
Philip N. Omi	05-2-1-70	Comparison of Live Fuel Moisture Sampling Methods for Big Sagebrush (<i>Artemisia Tridentata</i> spp.) in Utah.			D	D					2005-2007	Utah; Fuel moisture data; Inventory, Mapping
Wayne D. Shepperd	05-S-03	Development of Best Management Practices for Fuels Treatments in Ponderosa Pine Ecosystems in the Black Hills, SD and Southwestern United States.			O						2005-2008	South Dakota; Uses spatial fuels; Planning and Risk
TOTAL PROJECTS WITH MARKS IN EACH COLUMN			22	53	106	61	14	13	9	12		

NOTES: Working document only. Not official or final opinions on any project. Subject to change. Prepared by Sim Larkin, USFS PNW Research Station, 5/2009 based on JFSP website abstracts. Should not be considered definitive.