Eastern Great Basin Coordination Center

7-Day Significant Fire Potential Product

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This document outlines Eastern Great Basin Coordination Center's (EGBCC) operational **7-Day Significant Fire Potential Model and Product** as well as the weather monitoring infrastructure designed to support it.

Overview and Purpose

The outcome of the **7 Day Significant Fire Potential Model** is the daily projected significant fire potential for sub-units of Eastern Great Basin called Predictive Services Areas for the next 7 days.

The overall purpose of this product is to identify where and when nationally shared resources will most likely be required for suppression efforts for the next 7 days in order to help regional fire managers make informed resource movement decisions. Uses of this product by local level fire managers include: help determine daily staffing decisions, support severity funding requests, and help make local resource movement decisions. For best use of this product it is important to understand how the product was designed and what it represents. This product is derived by estimating the daily large fire probability for each PSA by assessing the following:

1. Daily probability of occurrence of a new large fire and/or,
2. Daily potential for significant growth on an existing fire.

Significant Fire Event – An event measured by the occurrence of fire(s) that requires mobilization of additional resources from outside the fire event area.

Significant Fire Potential - The likelihood a wild land fire event will require mobilization of additional resources from outside the area in which the fire situation originates.

Weather and Fuels Monitoring Infrastructure

In order to facilitate the assessment of **significant fire potential** with some degree of spatial resolution we have broken up the region into a subset of smaller forecast areas. In addition, we have established a manageable sub-network of "key" weather and NFDRS reporting stations. These Remote Automated Weather Stations (RAWS) will be used for monitoring both weather and fuel conditions in the determination of significant fire potential.

The smaller forecast areas were determined by defining geographic areas with similar climate, topography, fire occurrence and fuel type. These forecast areas are called **Predictive Services Areas (PSAs**). Key RAWS within each PSA were chosen based on how well they correlated with the other RAWS in the PSA. RAWS whose minimum relative humidities trended up or down well together were used as the key RAWS for that PSA. A map of the PSAs within EGB is included as Appendix A. The list of key RAWS for each PSA is included as part of Appendix B.

Significant Fire Potential Model

Projections of the daily probability of a **Significant Fire Event** for the next 7 days are generated each morning by 1000 MDT during the fire season (May – October) at EGBCC.

Definitions

Significant Fire Event -For the purposes of the model a Significant Fire Event has been defined in terms of the occurrence of a **Large Fire**. The rationale for this is that the occurrence of a **Large Fire** represents a scenario where outside resources will be needed, costs escalate and regional and national resource managers get involved.

Fire Day – Any day that at least one fire, of any size, was reported to have **started**.

Large Fire – A fire of such size that meets or exceeds the 95th percentile of daily largest fires for all fire days during months and years used in the data set for each PSA.

Large Fire Day – Any day that at least one fire was reported to have started that **eventually became** a Large Fire.

Example:

For **PSA EB01** – The largest fire size on 95% of all **Fire Days** that occurred during the months of July – September for the years 1993-2004 was less than 300 acres. Only 5 percent of all **Fire Days** had a 300 acre or larger fire during the specified time frame. Therefore, a **Large Fire** is defined as 300 acres for this PSA.

This criteria results in a Large Fire size unique to each PSA, ranging from as small as 30 acres in northeast Utah, to 2000 acres in southwest Idaho. Large fire sizes are defined for each PSA as part of Appendix B.

Fuel Dryness Level (DL)

We have chosen to use projected NFDRS fuel moisture values to help predict large fire potential. Our research has shown that a matrix of the historical NFDRS Energy Release Component for fuel model G **(ERC-G)** versus the 100-hr fuel moisture **(100Hr)** relates relatively well to large fire occurrence. A matrix of these NFDRS components has been developed for each PSA, as measured by the key RAWS. **ERC-G** values run across the top of the matrix and **100Hr** values run down the left column. The numbers within the matrix show how many **Large Fire Days** occurred for each combination of **ERC-G** and **100Hr** during the specified time period. For each combination of **ERC-G** and **100Hr**, the empirical probability of breaking a Large Fire, given an ignition, has been calculated and included as Appendix B. The matrices were created to establish breakpoints of the **ERC-G** and **100Hr** values for use within the model. This range of probabilities has been broken into three groups called **Dryness Levels**, represented as 1 of 3 possible colors defined below.

Dryness Level	Large Fire Potential Description	Ave. % probability of breaking a large fire
Green (Moist)	Indicates a DL which historically has resulted in a very low probability of large fires.	1-3%
Yellow (Dry)	Indicates a transitional dryness situation that will not typically result in large fires unless accompanied by a Significant Weather Trigger.	5-7%
Brown (Very Dry)	Indicates a DL which results in a much higher than normal probability of large fires when accompanied by a Significant Weather Trigger. A low to moderate probability for large fire exits in the absence of a trigger.	12-15%
Red (High Risk)	Indicates an especially high probability of large fires. Occurs when the DL is either brown or yellow and is accompanied with a significant weather trigger. DL will appear red with a symbol designating the specific weather trigger.	20-25%

How the model works:

Raw grid point data from weather models is run through regression equations to generate temperature and relative humidity forecasts for each of the key RAWS for the next 7 days. These forecasts are then used in conjunction with the observed ERC and 100Hr values from the previous afternoon to forecast the daily average ERC-G and 100Hr for each PSA for the next 7 days. The ERC-G and 100Hr are then run through the fuel dryness matrices to create the initial Dryness Level forecast.

After running the model and adjusting the output, the meteorologist will also forecast and add **High Risk Days** to the Dryness Level chart indicating any especially high probability days of breaking a large fire due to **significant weather triggers** such as high winds or dry lightning. Short written weather, fuels and resource discussions are added to the Dryness Level chart to produce the complete **7 Day Significant Fire Potential** product. An example of the product is included as Appendix C.

Actual model output forecasts of temperature, relative humidity, ERC-G and 100Hr for each PSA are available on the EGB Predictive Services website.

Within Eastern Great Basin the following **significant weather triggers** are criteria for a **High Risk Day**:

1.  Represents critically dry and windy conditions. While this condition does not start fires, it often produces a favorable environment for new starts or existing fires to become large.
2.  An expected combination of dry fuels and a lightning trigger. This is NOT simply a lightning forecast, but a forecast of lightning conducive to large fire activity.

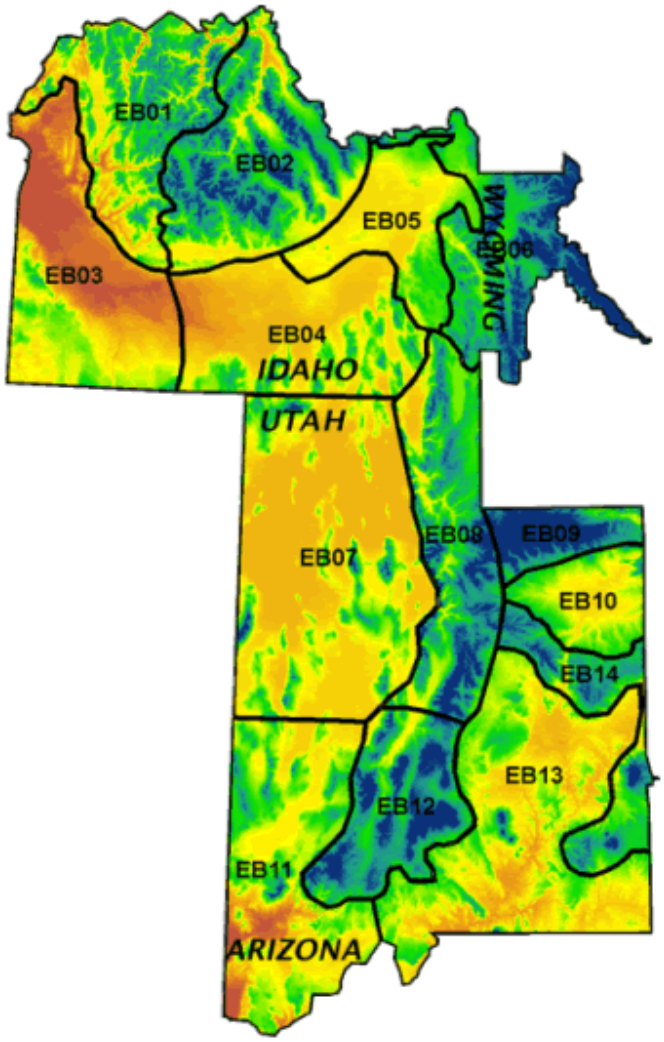
Summary of "7 Day Significant Fire Potential" Product:

The **7 Day Significant Fire Potential** product is a snapshot of the predicted potential of breaking a **Large Fire** across the Eastern Great Basin for the next 7 days. Smaller geographic areas, called **PSA**'s were developed to more precisely forecast Large Fire potential. Dryness Levels are used to represent ranges of probabilities of a Large Fire and are shown on the chart with the DL's displayed as different colors.

Appendices

Appendix A - Predictive Services Areas (PSA):

Eastern Great Basin Geographic Area has been divided into 14 PSA's. These divisions have been made based on similarities within each PSA of the following parameters: fire occurrence, fuel type, elevation, geography, and climate. Below is a topographic map of Eastern Great Basin showing these 14 PSA's.



PSA Names:

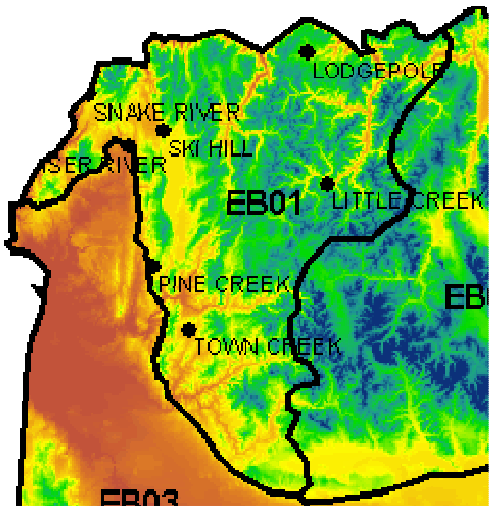
EB01 – West Central Idaho Mountains
EB02 – East Central Idaho Mountains
EB03 – Southwest Idaho and Lower Snake River Plain
EB04 – South Central Idaho
EB05 – Upper Snake River Plain
EB06 – Western Wyoming and Eastern Idaho Mountains
EB07 – Northwest Utah Deserts
EB08 – North Central Utah Mountains
EB09 – Northeast Uinta Mountains
EB10 – Uintah Basin
EB11 – Southwest Utah Deserts and Arizona Strip
EB12 – South Central Utah Mountains
EB13 – Southeast Utah Deserts
EB14 – Southeast Utah Mountains and Bookcliffs

The following pages describe each PSA including the Fuel Moisture Matrices used to define the respective PSAs Dryness Levels.

Appendix B – EGB PSA's

PSA EB01 – West Central Idaho Mountains

RAWS Name	WIMS ID
Ski Hill	101223
Pine Creek	101222
Town Creek	101708
Little Creek	101805
Logdepole	101044
Snake	101109
Weiser River	101108



Large Fire Size for EB01: **2000 acres**
Months used for analysis: **July - September**
Years used for analysis: **1993-2004**

Federal Lands within EB01:
Boise National Forest
Payette National Forest
Salmon – Challis National Forest
BLM Boise District

EB01 "Large Fire Day" Matrix:

F100 \ ERC G	<40	40	45	50	55	60	65	70	75	80	85	90+
3												
4											2	2
5										5	1	2
6							3	6	5	4	1	
7					1	1	1	1	2			
8					1	1	1	1				
9						1	1	2				
10												
11	1					1						
12												

	POD	PROB
	47%	17%
	38%	7%
	15%	2%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

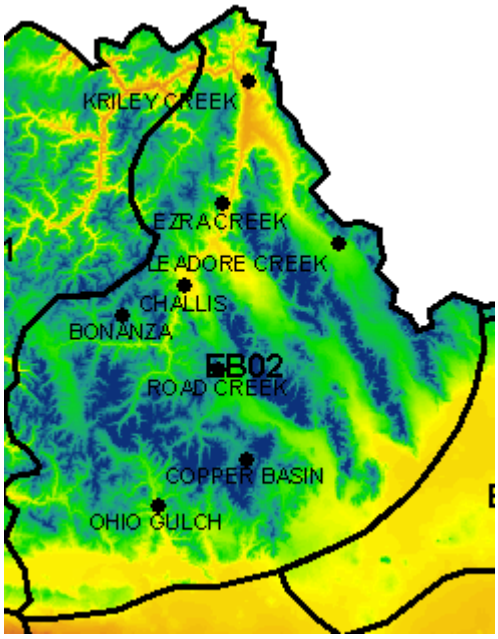
E.g. 60% of all large fires occurred when the ERC was above 70 and the 100 Hr FM was below 6. (Falling within the brown box)

PROB = the probability that any start will turn into a large fire on a brown, yellow, or green day.

E.g. 17% of all fires that occurred when the ERC was above 70 and the 100 Hr FM was below 6 became large.

PSA EB02 – East Central Idaho Mountains

RAWS Name	WIMS ID
Bonanza	101801
Challis	101817
Copper Basin	101804
Ezra Creek	101314
Kriley Creek	101312
Leadore Creek	101312
Road Creek	101816
Ohio Gulch	102906



Large Fire Size for EB02: **700 acres**
Months used for analysis: **July - September**
Years used for analysis: **1993-2004**

Federal Lands within EB02:
Salmon – Challis National Forest
Sawtooth National Forest
Targhee National Forest
BLM Salmon District
Craters of the Moon National Monument

EB02 "Large Fire Day" Matrix:

F100 \ ERC	40	45	50	55	60	G 65	70	75	80	85	90+
4										2	1
5									1	2	1
6						1	2	1	1	1	
7							2	1	1		
8							2				
9						2	1	1			
10				1							
11											
12											
13		1									

	POD	PROB
	48%	9%
	44%	7%
	8%	1%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

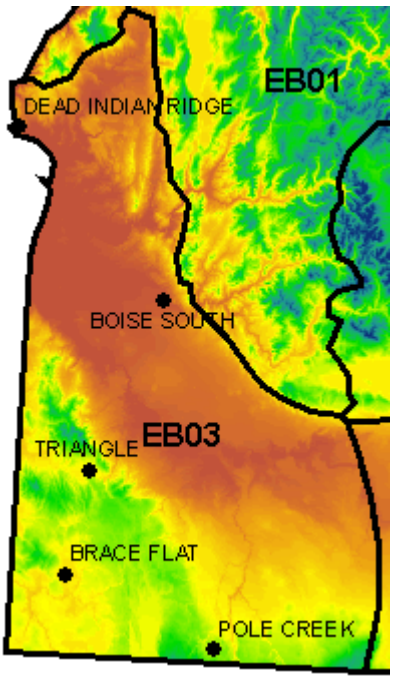
E.g. 72% of all large fires occurred when the ERC was at or above 70 and the 100 Hr FM was at or below 8. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

E.g. 9% of all fires that occurred when the ERC was at or above 70 and the 100 Hr FM was at or below 8 became large.

PSA EB03 – Southwest Idaho and Upper Snake River Plain

RAWS Name	WIMS ID
Dead Indian Ridge	101402
Triangle	103208
Brace Flat	103207
Pole Creek	103210
Boise South	102601



Large Fire Size for EB03: **4300 acres**
Months used for analysis: **June - September**
Years used for analysis: **1993-2004**

Federal Lands within EB03:
BLM Boise District
BIA Duck Valley Reservation

EB03 "Large Fire Day" Matrix:

F100 \ ERC G	40	45	50	55	60	65	70	75	80	85	90+
4											1
5									5	4	2
6							1		4	3	
7			1		1					1	
8			1			1	1		1		
9					1	1					
10							2				
11		1									
12											
13			1								

	POD	PROB
	58%	8%
	30%	3%
	12%	4%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

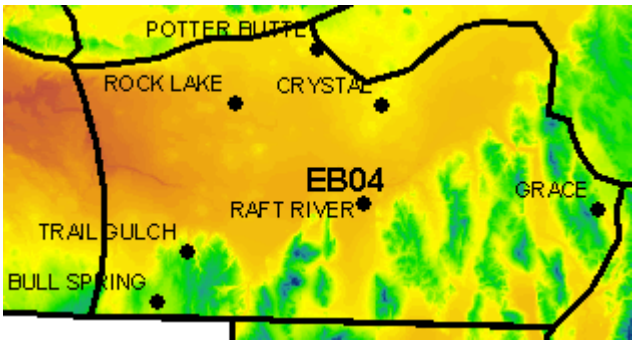
E.g. 58% of all large fires occurred when the ERC was at or above 80 and the 100 Hr FM was at or below 6. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

E.g. 8% of all fires that occurred when the ERC was at or above 80 and the 100 Hr FM was at or below 6 became large.

PSA EB04 – South Central Idaho

RAWS Name	WIMS ID
Rock Lake	103403
Potter Butte	102907
Crystal	103703
Bull Spring	104006
Grace	103902
Raft River	104104
Trail Gulch	104004



Large Fire Size for EB04: **4600 acres**
Months used for analysis: **June - September**
Years used for analysis: **1993-2004**

Federal Lands within EB04:
BLM Twin Falls District
BLM Idaho Falls District
Sawtooth National Forest
Caribou-Targhee National Forest
BIA Fort Hall Agency
City of Rocks National Reserve

EB04 "Large Fire Day" Matrix:

F100 \ ERC G	40	45	50	55	60	65	70	75	80	85	90+
4									1	1	3
5							1	1	5	2	2
6							2	1	9		
7						2	1	2	1		
8				1			1	2			
9					1		1				
10						1					
11											
12											
13											

	POD	PROB
	68%	8%
	29%	4%
	2%	1%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

E.g. 78% of all large fires occurred when the ERC was at or above 70 and the 100 Hr FM was at or below 6. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

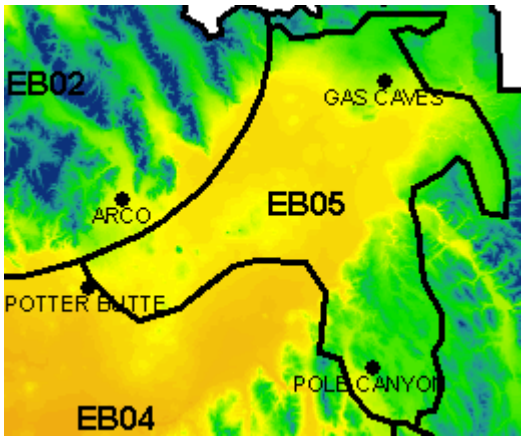
E.g. 8% of all fires that occurred when the ERC was at or above 70 and the 100 Hr FM was at or below 6 became large.

PSA EB05 – Upper Snake River Plain

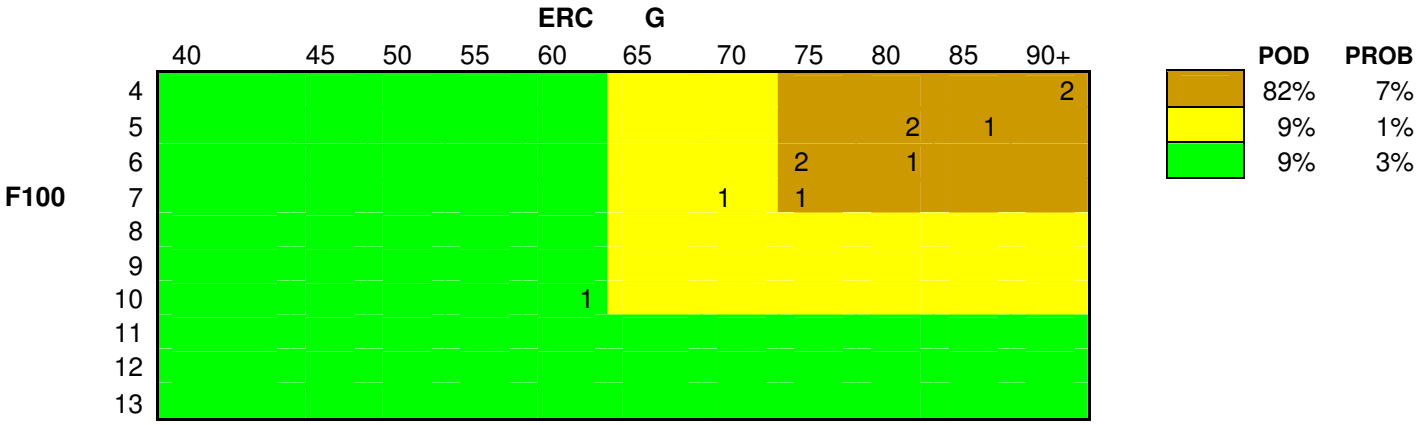
RAWS Name	WIMS ID
Pole Canyon	103903
Gas Caves	102106
Arco	101905
Potter Butte	102907

Large Fire Size for EB05: **2700 acres**
Months used for analysis: **June - September**
Years used for analysis: **1993-2004**

Federal Lands within EB05:
BLM Idaho Falls District
BIA Fort Hall Agency



EB05 "Large Fire Day" Matrix:



POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

E.g. 82% of all large fires occurred when the ERC was at or above 75 and the 100 Hr FM was at or below 7. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

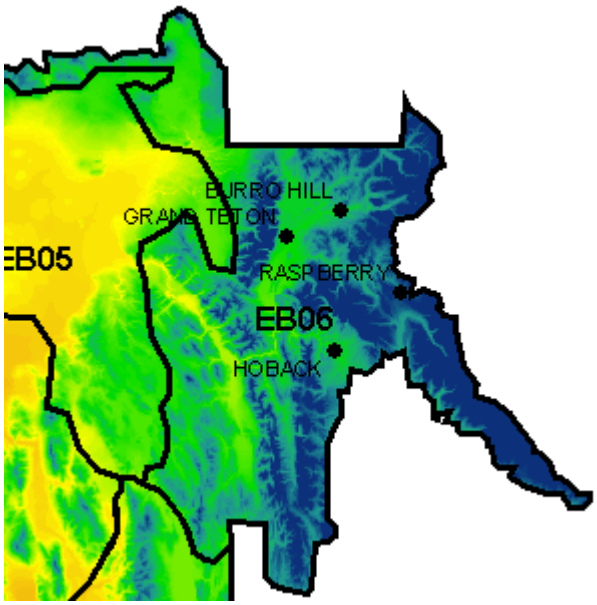
E.g. 7% of all fires that occurred when the ERC was at or above 75 and the 100 Hr FM was at or below 7 became large.

PSA EB06 – Western Wyoming and Eastern Idaho Mountains

RAWS Name	WIMS ID
Hoback	481302
Raspberry	481307
Grand Teton	480708
Burro Hill	480707

Large Fire Size for EB06: **750 acres**
Months used for analysis: **July - September**
Years used for analysis: **1993-2004**

Federal Lands within EB06:
Grand - Teton National Park
Bridger – Teton National Forest
Caribou – Targhee National Forest



EB06 "Large Fire Day" Matrix:

F100 \ ERC	<35	35	40	45	50	55	60	65	70	75	80+
6									1		
7								2			
8								1			
9							3	2			
10				1	1	1	1	1			
11							1				
12											
13				1							
14			1								
15											

	POD	PROB
	35%	8%
	41%	5%
	24%	2%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

E.g. 35% of all large fires occurred when the ERC was at or above 65 and the 100 Hr FM was at or below 9. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

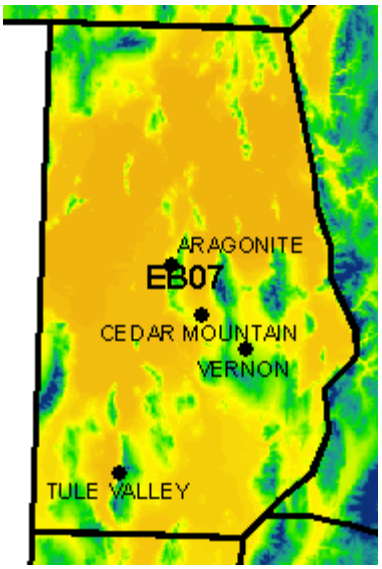
E.g. 8% of all fires that occurred when the ERC was at or above 65 and the 100 Hr FM was at or below 9 became large.

PSA EB07 – Northwest Utah

RAWS Name	WIMS ID
Cedar Mountain	420901
Vernon	420908
Tule Valley	421806
Aragonite	420911

Large Fire Size for EB07: **5000 acres**
Months used for analysis: **June - September**
Years used for analysis: **1993-2004**

Federal Lands within EB07:
BLM Salt Lake District
BLM Richfield District
Sawtooth National Forest
Wasatch National Forest
Uinta National Forest
Fishlake National Forest



EB07 "Large Fire Day" Matrix:

F100 \ ERC	<60	60	65	70	75	80	85	90	95	100	105+
<3											
3									1	4	1
4					1	1	5	2	3		
5	1			1		1	1	5	5		
6	1			3	2	2	1	1			
7					1	2	2				
8		1			1	1					
9											
10											
11											
12											

	POD	PROB
	42%	8%
	44%	6%
	14%	3%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

E.g. 54% of all large fires occurred when the ERC was at or above 85 and the 100 Hr FM was at or below 5. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

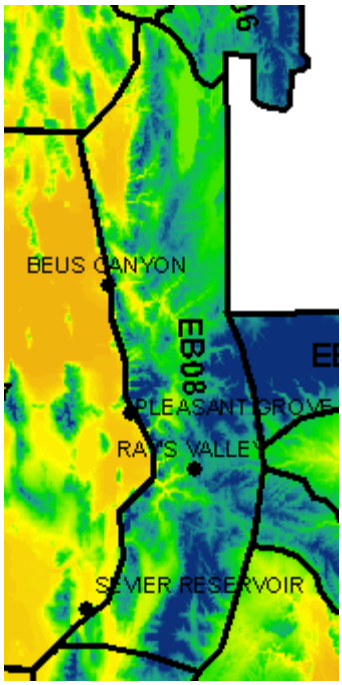
E.g. 7% of all fires that occurred when the ERC was at or above 85 and the 100 Hr FM was at or below 5 became large.

PSA EB08 – North Central Utah Mountains

RAWS Name	WIMS ID
Rays Valley	421103
Pleasant Grove	421101
Seveir Reservoir	421501
Bues Canyon	420403

Large Fire Size for EB08: **300 acres**
Months used for analysis: **June - September**
Years used for analysis: **1993-2004**

Federal Lands within EB08:
Wasatch –Cache National Forest
Uinta National Forest
Manit-La Sal National Forest



EB08 "Large Fire Day" Matrix:

F100	ERC 50	55	60	65	70	G 75	80	85	90	95+
3									1	1
4								2	7	3
5					1		1	5	3	
6				2	1	2	5	4	1	
7				1	3	2	1	1		
8				1		2				
9				1		1				
10										
11			1	1						
12										

	POD	PROB
	50%	12%
	37%	5%
	13%	2%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

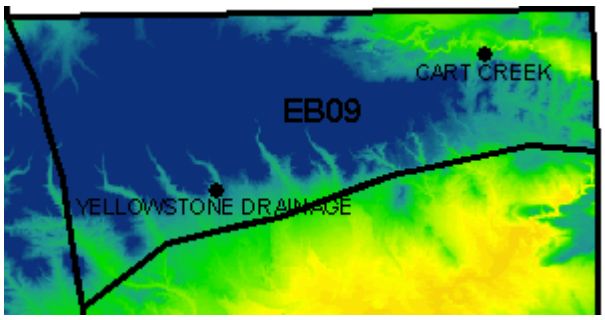
E.g. 61% of all large fires occurred when the ERC was at or above 80 and the 100 Hr FM was at or below 6. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

E.g. 10% of all fires that occurred when the ERC was at or above 80 and the 100 Hr FM was at or below 6 became large.

PSA EB09 – Northeast Uinta Mountains

RAWS Name	WIMS ID
Yellowstone	421301
Cart Creek	420805



Large Fire Size for EB09: **150 acres**
Months used for analysis: **June - September**
Years used for analysis: **1993-2004**

Federal Lands within EB09:
Ashley National Forest
Wasatch – Cache National Forest

EB09 "Large Fire Day" Matrix:

F10 \ ERC G	45	50	55	60	65	70	75	80	85	90	95+
1											1
2								1		2	
3		1			1	2					
4			1	1	1	1		1			
5							1				
6											
7						1					
8											
9				1							
10											

	POD	PROB
	31%	7%
	44%	5%
	25%	4%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

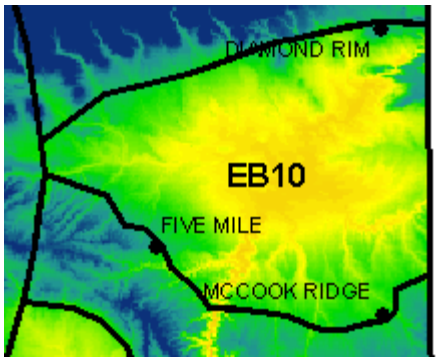
E.g. 50% of all large fires occurred when the ERC was at or above 70 and the 10 Hr FM was at or below 4. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.
E.g. 7% of all fires that occurred when the ERC was at or above 70 and the 10 Hr FM was at or below 4 became large.

PSA EB10 – Uinta Basin

RAWS Name	WIMS ID
McCook	420805
Diamond	421408
Five Mile	421304

Large Fire Size for EB10: **100 acres**
Months used for analysis: **June - September**
Years used for analysis: **1993-2004**



Federal Lands within EB10:
BLM Vernal District
BIA Uintah and Ouray Agency
Dinosaur National Monument

EB10 "Large Fire Day" Matrix:

F10 \ ERC (G)	<50	50	55	60	65	70	75	80	85	90	95+
1											
2									1		1
3						4	1	1	2	1	
4								2	1	1	
5								1			
6							1				
7	1		1		1						
8											
9	1										
10											

	POD	PROB
	48%	7%
	33%	6%
	19%	2%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

E.g. 71% of all large fires occurred when the ERC was at or above 70 and the 10 Hr FM was at or below 4. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

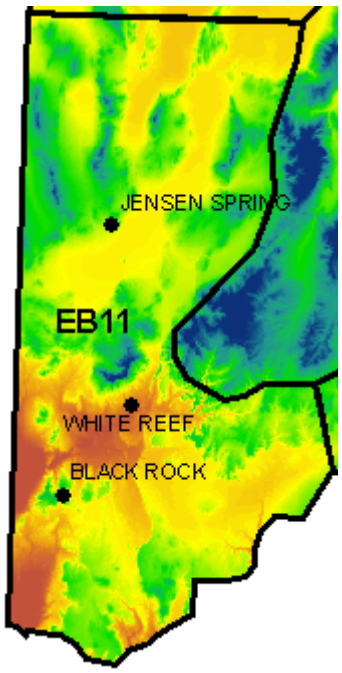
E.g. 7% of all fires that occurred when the ERC was at or above 70 and the 10 Hr FM was at or below 4 became large.

PSA EB11– Southwest Utah Deserts and Arizona Strip

RAWS Name	WIMS ID
Jensen Spring	422502
White Reef	422805
Blackrock	020114
Enterprise	422803

Large Fire Size for EB11: **2000 acres**
Months used for analysis: **May - August**
Years used for analysis: **1993-2004**

Federal Lands within EB11:
BLM Cedar City District
BLM Richfield District
Dixie National Forest
Kaibab National Forest
Zion National Park
Lake Mead National Recreation Area



EB11 "Large Fire Day" Matrix:

F100 \ ERC	<60	60	65	70	75	80	85	90	95	100	105	110+
2												
3								4	1	2	1	1
4						2		4	3	1	1	
5					2		1	1	1			
6			1	2	2	1	2	1				
7					2		2					
8			1		1	1						
9	1	1	1									
10												
11												

	POD	PROB
	45%	6%
	34%	5%
	16%	3%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

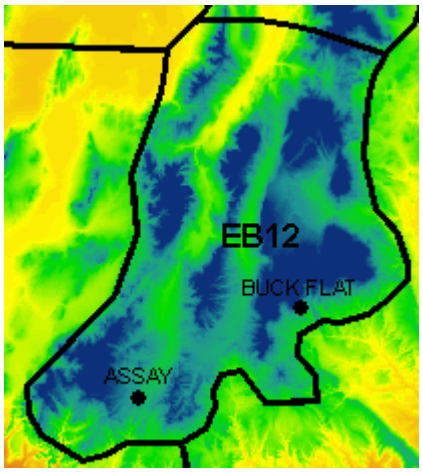
E.g. 45% of all large fires occurred when the ERC was at or above 90 and the 100 Hr FM was at or below 5. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

E.g. 6% of all fires that occurred when the ERC was at or above 90 and the 100 Hr FM was at or below 5 became large.

PSA EB12– South Central Utah Mountains

RAWS Name	WIMS ID
Assay Bench	422604
Buck Flat	422606



Large Fire Size for EB12: **300 acres**
Months used for analysis: **May - August**
Years used for analysis: **1993-2004**

Federal Lands within EB12:
Dixie National Forest
Fishlake National Forest
BIA Southern Paiute Agency
BLM Cedar City District
BLM Richfield District
Cedar Breaks National Monument
Bryce Canyon National Park
Capitol Reef National Park

EB12 "Large Fire Day" Matrix:

F100 \ ERC	<50	50	55	60	65	70	75	80	85	90	95	100+
<3												1
3							1			1	1	1
4								2		4	1	
5							3	2	2	2		
6					1			1	2	1		
7							1	1				
8		1				1	1					
9		1			1							
10				1								
11			1									
12	1	1										

	POD	PROB
	35%	8%
	43%	6%
	22%	3%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

E.g. 57% of all large fires occurred when the ERC was at or above 75 and the 100 Hr FM was at or below 5. (Falling within the brown box)

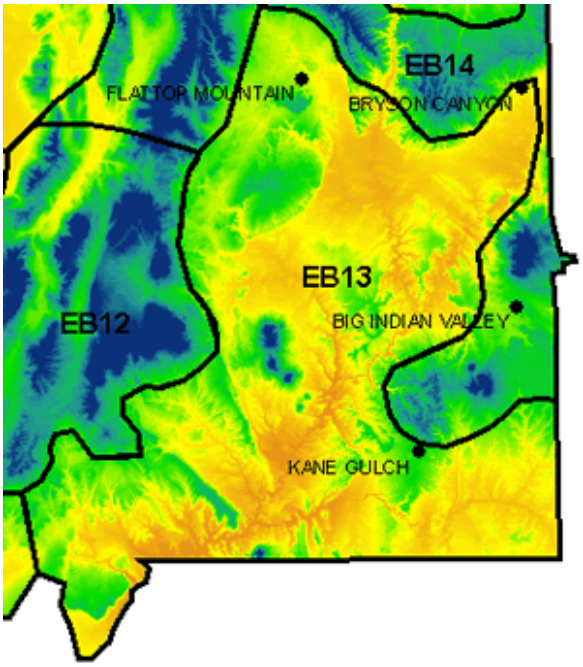
PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

E.g. 9% of all fires that occurred when the ERC was at or above 75 and the 100 Hr FM was at or below 5 became large.

PSA EB13– Southeast Utah Deserts

RAWS Name	WIMS ID
Big Indian	422711
Bryson Ridge	422102
Flattop Mtn	422002
Kane Gulch	422712

Large Fire Size for EB13: **300 acres**
Months used for analysis: **May - August**
Years used for analysis: **1993-2004**



Federal Lands within EB13:
BLM Moab District
BLM Richfield District
BLM Cedar City District
Manti – La Sal National Forest
Kaibab National Forest
Glen Canyon National Recreation Area
Capitol Reef National Park
Canyonland National Park
Arches National Park

EB13 "Large Fire Day" Matrix:

F100 \ ERC	60	65	70	75	80	85	90	95	100	105	110+
2											
3							1	2	2	3	1
4							1	3	2		1
5			1		1	2		2			
6			1	1			1	2			
7						1	1				
8			1		2	1					
9					1						
10				1							
11											

	POD	PROB
	46%	12%
	29%	5%
	26%	3%

POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

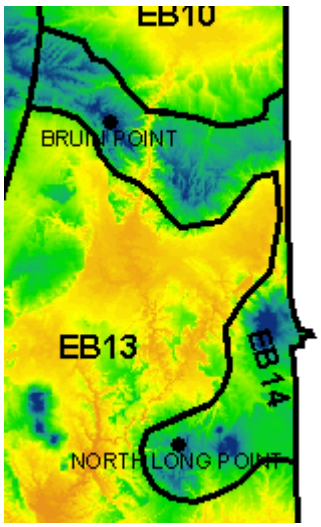
E.g. 51% of all large fires occurred when the ERC was at or above 90 and the 100 Hr FM was at or below 5. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

E.g. 9% of all fires that occurred when the ERC was at or above 90 and the 100 Hr FM was at or below 5 became large.

PSA EB14– Southeast Utah Mountains and Bookcliffs

RAWS Name	WIMS ID
North Long Point	422710
Bruin Point	421702
Little Delores (Colorado)	052410



Large Fire Size for EB14: **200 acres**
Months used for analysis: **May - August**
Years used for analysis: **1993-2004**

Federal Lands within EB14:
Manti – La Sal National Forest
BLM Moab District
BLM Vernal District
BIA Uintah and Ouray Agency
Ashley National Forest

EB14 "Large Fire Day" Matrix:

F100 \ ERC G	<45	45	50	55	60	65	70	75	80	85	90	95+
<4							1			1		3
4										2		2
5								2	2			
6										1		
7							1	3	2	1		
8				1		2	1					
9							1					
10												
11						1						
12												
13												
13+												

	POD	PROB
	37%	14%
	48%	7%
	15%	2%

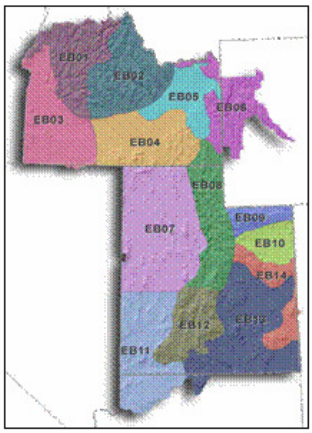
POD = the percentage of all large fires that occurred on a brown, yellow, or green day.

E.g. 78% of all large fires occurred when the ERC was at or above 70 and the 100 Hr FM was at or below 7. (Falling within the brown box)

PROB = the probability that a fire will turn into a large fire on a brown, yellow, or green day.

E.g. 10% of all fires that occurred when the ERC was at or above 70 and the 100 Hr FM was at or below 7 became large.

Appendix C – 7 Day Significant Fire Potential Product



Eastern Great Basin 7 Day Significant Fire Potential

Issued: Thursday, Jun 12, 2008 **Next Update Thu 13 June 2008**

Predictive Service Areas	Ytd Jun 11	Thu Jun 12	Fri Jun 13	Sat Jun 14	Sun Jun 15	Mon Jun 16	Tue Jun 17	Wed Jun 18
EB01 - West Central ID Mtns								
EB02 - East Central ID Mtns								
EB03 - SW ID								
EB04 - South Central ID								
EB05 - Upper Snake River Plain								
EB06 - Western WY								
EB07 - NW UT Deserts								
EB08 - North Central UT Mtns								
EB09 - NE Uinta Mtns								
EB10 - Uintah Basin								
EB11 - SW UT Deserts & AZ Strip								
EB12 - South Central UT Mtns								
EB13 - SE UT Deserts								
EB14 - SE UT Mtns								

Legend:

Fuel Dryness

- **Moist** - Little no risk for large fires.
- **Dry** - Low risk of large fires in the absence of a "High Risk" event.
- **Very Dry** - Low/Moderate risk of large fires in the absence of a "High Risk" event.
- **Data Unavailable.**

High Risk Events

Critical Burn Environment

- **H** **Hot & Dry** - Temperatures much above seasonal normals with humidity 10% or less.
- **W** **Windy** - Wind gusts 25 mph or greater.

Ignition Trigger

- **Lightning** - LALs of 3 or higher.

High Risk Days

- At least a 20% chance of a "Large Fire" due to a combination of either "Dry" or "Very Dry" Fuel Dryness and an **Ignition Trigger**. High Risk Days will include the symbol indicating the type of event.
- At least a 20% chance of a new "Large Fire" or significant growth on existing fires due to

Weather Synopsis:
The upper level trough that has affected the area the past few days will move off to the east today allowing a ridge of high pressure to build across the south. Warm, dry conditions will develop basin wide through the weekend with temperatures finally reaching above normal by Sunday/Monday. Another low pressure will move across the north midweek bringing cooler temperatures to the north and increased southwest winds on Tuesday/Wednesday.

Fire Potential Discussion:
Fire potential will be on the increase this weekend as the warm and dry air mass will hasten the curing of fine fuels basin wide, however; no significant weather triggers are expected through the