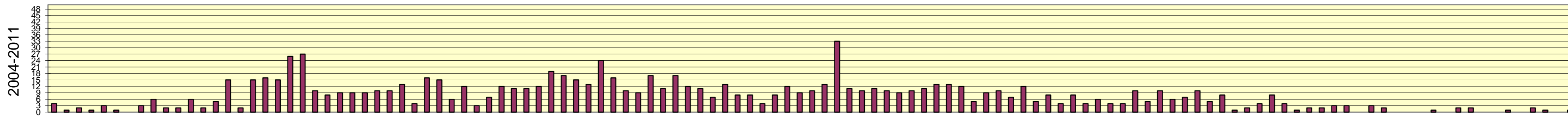


### Seasonal Fire Activity Timelines for PSA NW01 - Large Fire = 100+ acres



Fires	Large fires	Date
4	0	6/15
1	0	6/16
2	0	6/17
1	0	6/18
3	0	6/19
1	0	6/20
3	0	6/21
6	0	6/22
2	0	6/23
2	0	6/24
6	0	6/25
2	0	6/26
5	0	6/27
15	0	6/28
2	0	6/29
15	0	6/30
16	0	7/1
16	0	7/2
15	0	7/3
27	0	7/4
10	0	7/5
8	0	7/6
8	0	7/7
9	0	7/8
9	0	7/9
9	0	7/10
10	0	7/11
10	0	7/12
13	0	7/13
4	0	7/14
16	0	7/15
15	0	7/16
6	0	7/17
12	0	7/18
3	0	7/19
7	0	7/20
12	0	7/21
11	0	7/22
11	0	7/23
12	0	7/24
19	0	7/25
17	0	7/26
15	0	7/27
13	0	7/28
24	0	7/29
16	0	7/30
10	0	7/31
9	0	8/1
17	0	8/2
11	0	8/3
17	0	8/4
12	0	8/5
11	0	8/6
7	0	8/7
13	0	8/8
8	0	8/9
8	0	8/10
4	0	8/11
8	0	8/12
9	0	8/13
10	0	8/14
10	0	8/15
13	0	8/16
33	0	8/17
10	0	8/18
11	0	8/19
11	0	8/20
10	0	8/21
9	0	8/22
10	0	8/23
13	0	8/24
13	0	8/25
12	0	8/26
5	0	8/27
9	0	8/28
10	0	8/29
10	0	8/30
7	0	8/31
12	0	9/1
5	0	9/2
8	0	9/3
4	0	9/4
8	0	9/5
4	0	9/6
6	0	9/7
4	0	9/8
4	0	9/9
10	0	9/10
5	0	9/11
10	0	9/12
6	0	9/13
7	0	9/14
10	0	9/15
5	0	9/16
8	0	9/17
1	0	9/18
2	0	9/19
4	0	9/20
8	0	9/21
4	0	9/22
1	0	9/23
2	0	9/24
2	0	9/25
3	0	9/26
3	0	9/27
3	0	9/28
2	0	9/29
2	0	9/30
1	0	10/1
1	0	10/2
1	0	10/3
1	0	10/4
2	0	10/5
2	0	10/6
2	0	10/7
1	0	10/8
1	0	10/9
1	0	10/10
2	0	10/11
1	0	10/12
1	0	10/13
1	0	10/14
1	0	10/15

Total Fires = 959  
Large Fires = 4

#### Season Ending Estimates Predictive Service Area NW01 (W1): Northwest Washington

Season ending date estimates for Northwest Washington utilized the Predictive Services 7-day Significant Fire Potential Product. Given that the product determines the probability of a significant fire occurring, based on historical dryness levels and historic fire occurrence, the analysis results assume end of season when the product observed "green" (<.5% probability of a significant fire event) for three or more consecutive days, and where periods of green were never separated by more than a single yellow and or brown day (1 to 3% probability of a significant event).

Large fire definition per NWCC predictive services for PSA NW01 is 100 acres or more. The earliest large fire occurred July 17, 2009 and the latest large fire occurred August 31, 2011.

A TERM file was generated using FireFamily Plus v. 4.1. The season was set **May 15 to October 15** for the years **1994-2012** using the same rationale as above produced these results:

- 25% of the seasons end on or before August 12
- 50% of the seasons end on or before August 28
- 75% of the seasons end on or before September 11
- 90% of the seasons end on or before September 23
- 99% of the seasons end on or before October 10

#### FireFamily Plus Term Report

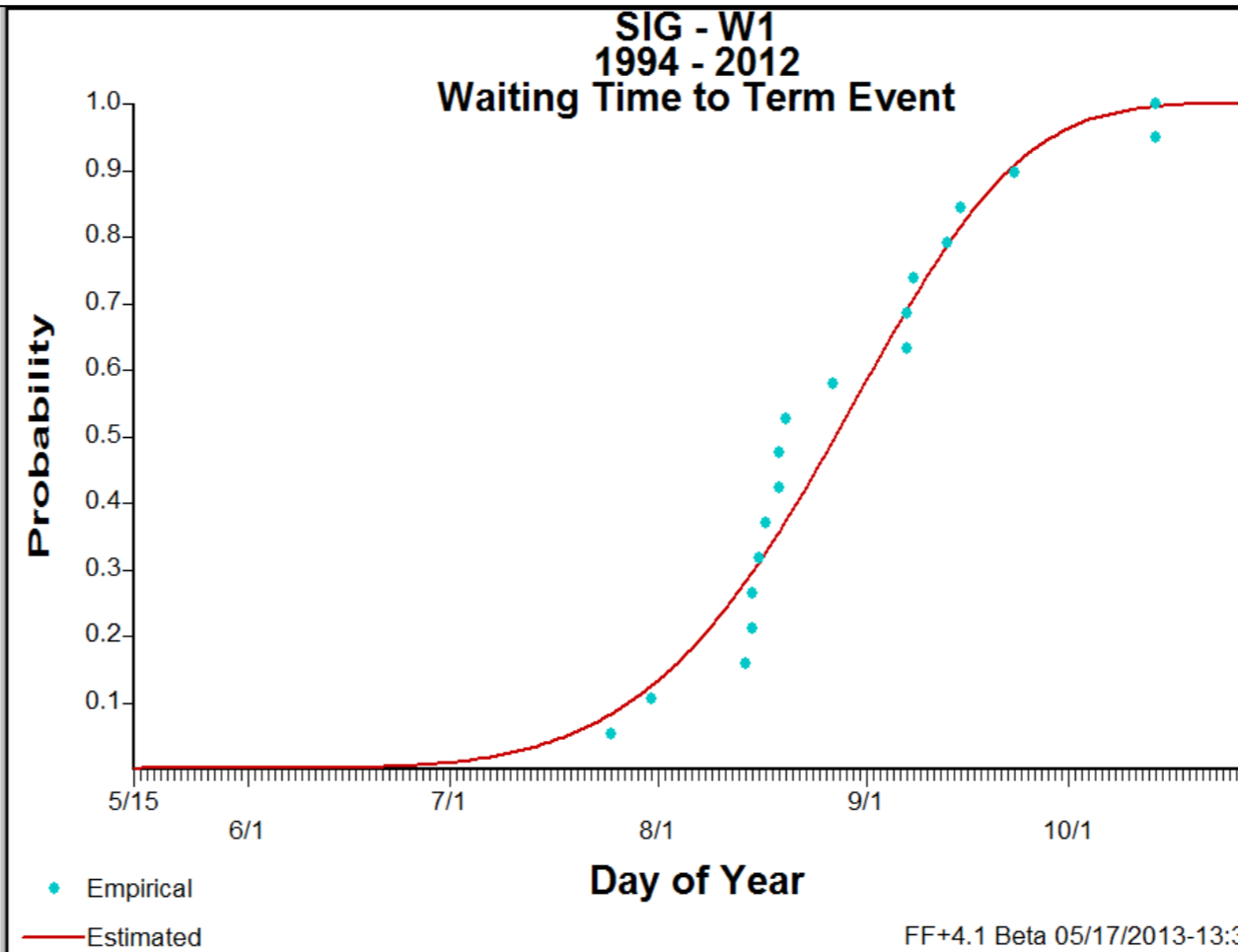
Station: SIG - W1  
Term Name: NW01  
Season Start Day: 5/15  
Data Years: 1994 - 2012  
Alpha: 5.422722  
Beta: 0.008955  
R-Squared: 0.953826

Comment:

Year	Day	#Days	Comment
1994	7/25	71	
1995	8/19	96	
1996	7/30	77	
1997	8/14	91	
1998	9/7	115	
1999	9/23	131	
2000	8/14	92	
2001	8/15	92	
2002	8/19	96	
2003	9/7	115	
2004	8/16	94	
2005	8/16	93	
2006	9/8	116	
2007	9/13	121	
2008	8/19	97	
2009	10/14	152	
2010	8/27	104	
2011	9/15	123	
2012	10/13	152	

Probability	Date
0.25	August 12
0.50	August 28
0.75	September 11
0.90	September 23
0.99	October 10

FF+4.1 Beta 05/17/2013-13:37



#### PSA NW01 (W1)

This area represents northern portions of western Washington and includes the Olympic Peninsula and west slopes of the north Washington Cascades. PSA fuel moistures are determined by the average of the Key RAWs in the zone.

Key RAWs: Sumas Mountain, Finney Creek, Gold Mountain, Johnson Ridge, Ellis Mountain, Cougar, Owl Mountain, Jefferson, Minot Peak

Each RAWs receives equal weighting for NFDRS Index calculations. Determination of DL: 100-hr FM "Large Fire Day" = A day with an occurrence of at least one 100+ acre fire

F100 threshold values used for DL determination  
Based on June-September data (2000-2011)

DL	F100 Threshold	% of all fire season days	% of all large fire days	Conditional Probability of a large fire
Green (moist)	≥ 17	54%	9%	< .5%
Yellow (dry)	13 - 16	31%	36%	1%
Brown (very dry)	≤ 12	15%	55%	3%

\* Conditional Probability: Assumes at least 1 ignition

#### Specifics for PSA NW01

Burn Environment – The probability of a large fire on any day independent of a lightning episode is less than 1%. Wind and instability show virtually no relationship to the occurrence of large fires, even when fire danger indices are at 95th percentile there is only a 3-4% chance of a large fire. ERC values >40 and thermal trough patterns over existing fires can and will contribute to large fire growth.

Lightning for this area 2004-2011 produced 4 large fires, all in the Olympic Peninsula.