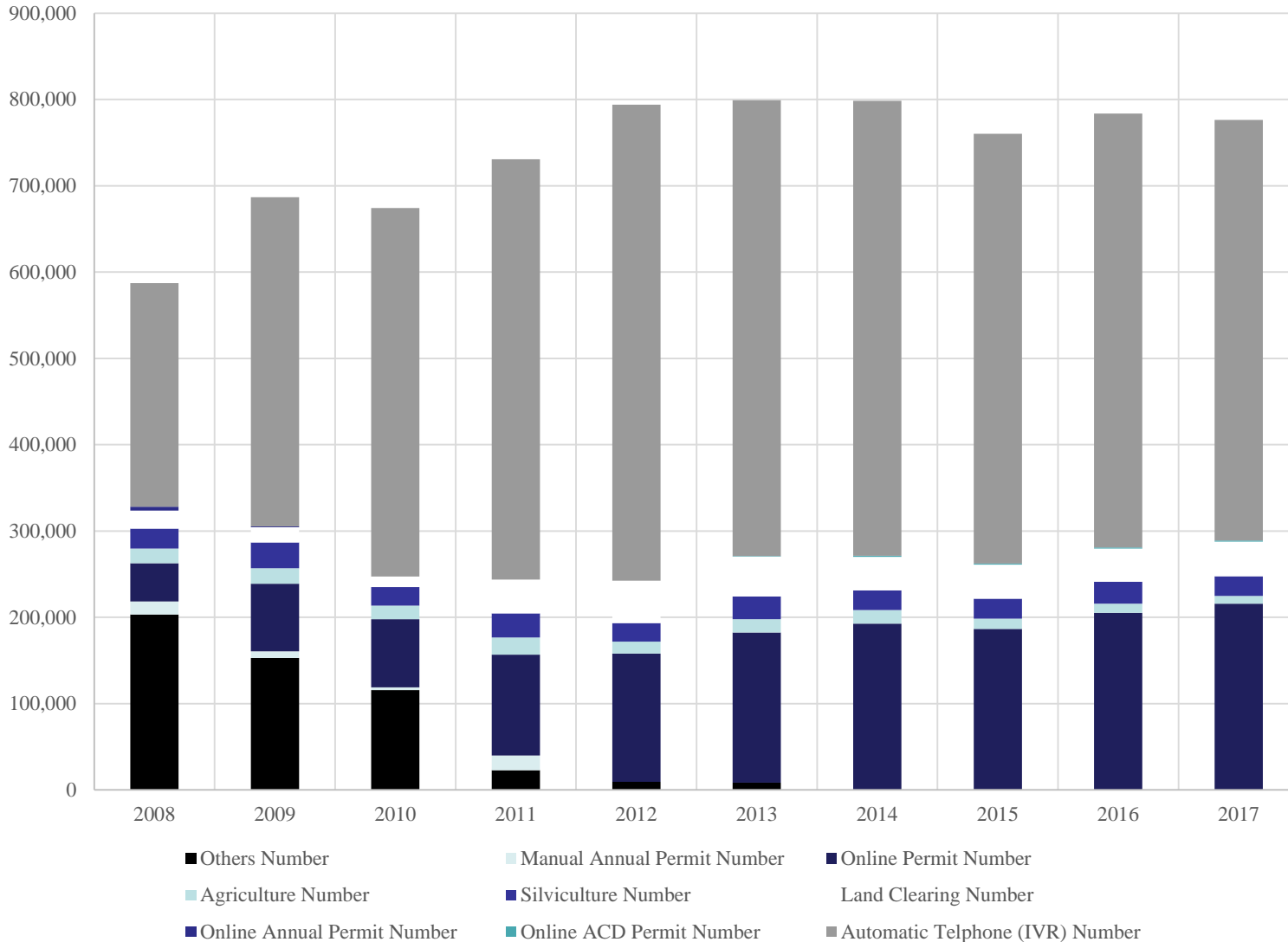




# SIPFIS Workshop Panel III

FY2009-FY2017 Number of Permitted Fires by Category



August 8, 2017

Towards a  
Community  
Information  
System

Dan Chan

Meteorologist

Georgia Forestry  
Commission

PO Box 819

Macon, GA 31202



# SIPFIS Workshop Panel III

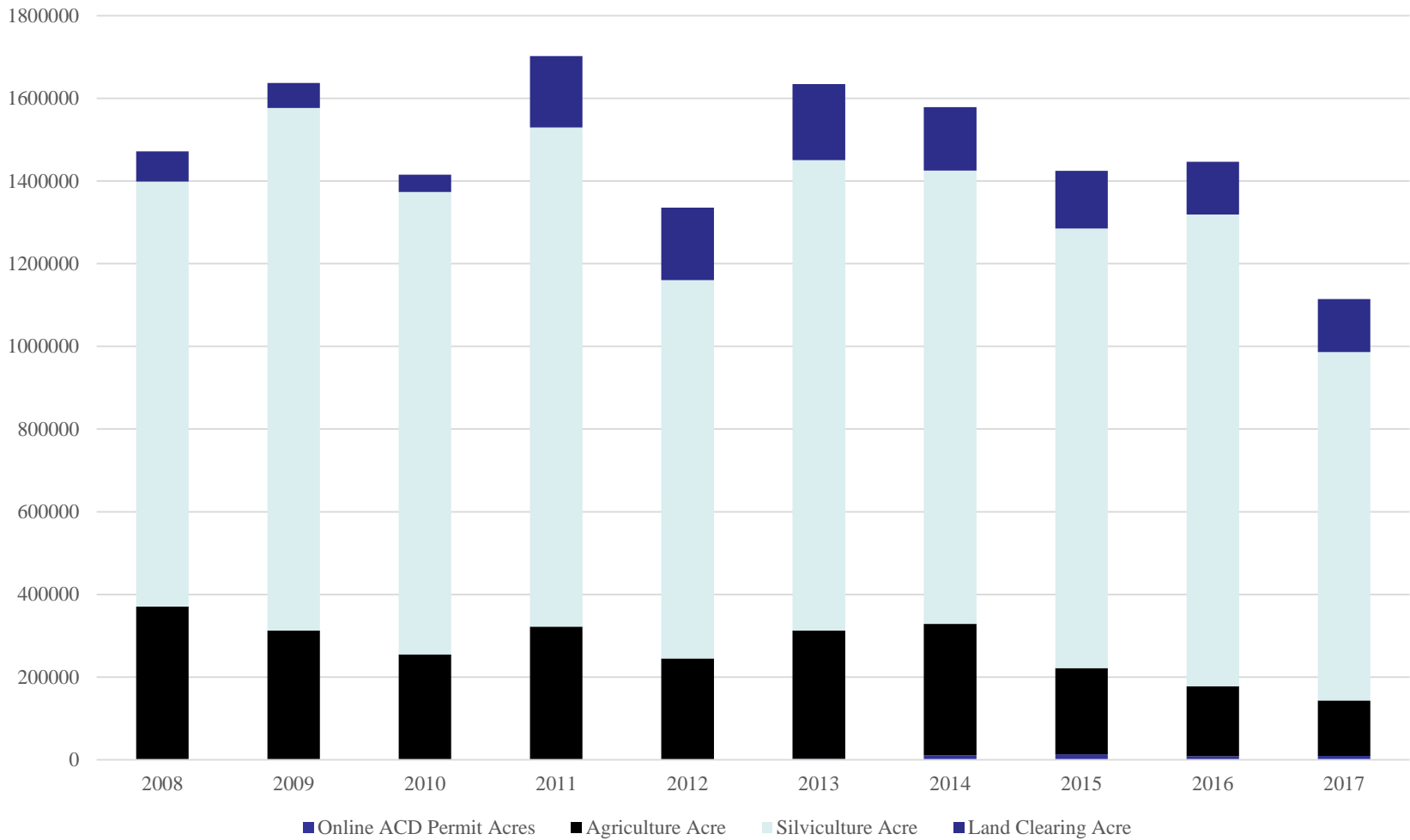
## FY2013-2017 Average Annual Prescribed Burn Numbers

	Type of Burn	Number of Permits	Percentage
Acreage Burns	Agricultural Burns	12,472	2%
	Silvicultural Burns	24,109	3%
	Land Clearing Burns	40,756	5%
Yard Debris Burns	Phone Permits	508,622	65%
	Online Permits	194,549	25%
	<b>Total</b>	<b>783,561</b>	<b>100%</b>



# SIPFIS Workshop Panel III

FY2008-2017 Prescribed Fire Acres by Category





# SIPFIS Workshop Panel III

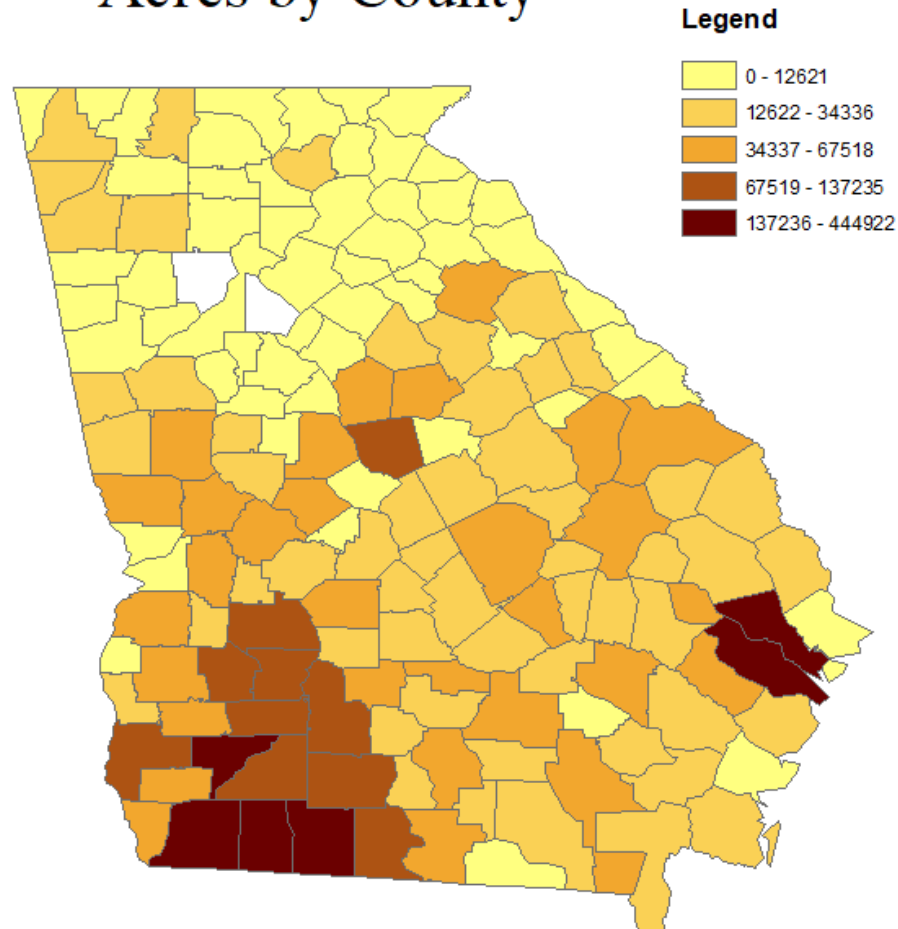
## FY2013-2017 Average Annual Prescribed Burn Acres

<b>Types of Prescribed Burns</b>	<b>Acres</b>	<b>Percentage</b>
Agricultural Burn	228,319	16%
Silvicultural Burn	1,056,435	73%
Land Clearing Burn	155,013	11%
Total	1,439,767	100%



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## FY2013-2017 Total Silvicultural Burn Acres by County





# SIPFIS Workshop Panel III

## FY2013-2017 Annual Average Prescribed Burns

<b>Prescribed Burns</b>	<b>N</b>	<b>N (%)</b>	<b>Total Acres</b>	<b>Total Acres (%)</b>
0.25-10 Acres	58032	72%	150,284	10%
10.1-100 Acres	20389	25%	825,595	57%
100.1-300 Acres	1475	2%	271,624	19%
300.1-1000 Acres	188	>1%	94,029	7%
1000.1-5000 Acres	54	>1%	91,455	6%
5000+ Acres	1	>1%	11,042	1%
Total	80139	100%	1,444,028	100%



# SIPFIS Workshop Panel III

How is Air Quality information used in Prescribed Fires management?

Now

**Forestry Weather & Smoke Management Forecast  
From Georgia Forestry Commission  
Issued at: 630 AM EDT Sat 10 Jun 2017**

<b>District 1 (Coosa-South)</b>					
<p>In corporation with the Georgia Environmental Protection Division, the Georgia Forestry Commission will not issue burning permits due to the high probability that open burning would make an unacceptable contribution to ozone formation today for the following counties, <b>Catoosa, Chattooga, Floyd, Gordon, Picken, Polk, Walker, Banks, Barrows, Clarke, Dawson, Jackson, Lumpkin, Madison, Morgan, Oconee</b></p>					
	Today	Tonight	Sunday	Sunday Night	Monday
Sky Condition	Mostly Sunny	Mostly Clear	Becoming Partly Sunny	Becoming Partly Cloudy	Clear
Temperature	85 To 89	63 To 67	86 To 90	66 To 70	87 To 91
Relative Humidity	35 To 40	90 To 95	38 To 43	90 To 95	41 To 46
Heat Index	84 To 89	----	85 To 92	----	87 To 95 (Extreme Caution)
Probability of Precipitation	None	None	20	None	20
Shower Coverage	None	None	Isolated	None	Isolated
Precipitation Type	None	None	Mainly Evening ThunderShowers	None	Mainly Evening ThunderShowers
Precipitation Amount	None	None	1/4 Inch Or Less	None	1/4 Inch Or Less



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What Data update frequency is required?

Now:

Daily Air Quality Forecasts are available by 2pm the day before.

Desired Future State (Dan Chan) :

Daily. Today's forecast be available by 6am.

Using the best science, given the maximum County by County permitted prescribed burn acres without serious impacts on air quality/health





# SIPFIS Workshop Panel III

What analytic tools and capabilities are desirable in an integrated information system?

Desired Future State:

1. Using the best science in producing accurate air quality forecast.
  - Prescribed Fire Locations, Fuel Loading, Consumption, Emission, Transport, Health Impact.
2. Timely dissemination of results
  - For us, Georgia Forestry Commission, to manage Prescribed Burns
  - For public to take pre-caution on impending impacts



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Fuel Loading/Consumption Issue on Ground Fires (Wetland/Swamp)

NEI Pains Bay (NC) Fire Data vs. Estimated Ground Fire PM Data from Gary Curcio, retired Forester from NC Forestry

Particulate Matter	Values Reported to EPA for NEI (lbs.)	Ground + Surface & Aerial Fuels consumption (lbs.)
<b>Total PM</b>	<b>?</b>	<b>?</b>
<b>PM 10</b>	<b>109,944</b>	<b>?</b>
<b>PM 2.5</b>	<b>93,172</b>	<b>460,285,137</b>

Ground Fires are Not supposed to happen in Prescribed Fires. But, firefighters has no control in Wildfire situation.



# SIPFIS Workshop Panel III

End