**Potential Smoke Impacts Daily Report**

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| **Fire Spread and Emissions Profile Predicted for May 10, 2011** | | | |
| **Rate of Spread** | | **PM2.5 Hourly Emissions** | |
| **Spread by Hr2300 on 050811.jpg** | |  | |
| The gray polygon above shows the approximate total area burned by May 8 (54,488 blackened acres). Based upon the rate of spread between May 7 – 8 it has been assumed the rate of active fire spread will continue at approximately 533 acres per hour. | | The average consumption was estimated to be 13 tons per acre, and this includes 3.6 tons per acre of duff consumption. Smoldering (drifted PM2.5) emissions are predicted to occur throughout the nighttime. Atmospheric stability is predicted to be moderately unstable until about 1800. | |
| **Air Quality Index Forecast for May 10, 2011** | | | |
| None available | **AQI** | | State air regulatory agencies provide forecasts using the [Air Quality Index (AQI)](http://www.airnow.gov/index.cfm?action=aqibasics.aqi). The colors of the AQI correspond to different pollution concentrations and related health warnings. |

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| **Forecasted Smoke Dispersion and Air Quality Impacts for May 10, 2011 (HYSPLIT Meteorological File: May 9, 2011 UTC12)** | | |
| **Daily PC HYSPLIT Smoke Dispersion Forecast Results** | **Hourly PC HYSPLIT Smoke Dispersion Forecast Results** |  |
|  |  | **Hourly AQI**   |  | | --- | | **Good** | | **Moderate** | | **Unhealthy for Sensitive People** | | **Unhealthy** | | **Very Unhealthy** | | **Hazardous** | |
| The PC HYSPLIT result above allows you to compare the results to a benchmark that reflects the 24 hour PM2.5 standard (35 ug/m3).  The only color showing for this run is Turquoise and it represents those areas that would have a 24 hour average concentration higher (including a background concentration of 10 ug/m3) than the benchmark on May 10.   This area (within about 38 miles of the burn unit) is where unhealthy levels of fine particulates could occur and the value exceeds the daily PM2.5 National Ambient Air Quality Standards (NAAQS). Waycross, GA may experience fine particulate matter concentrations near the or above the NAAQS. | The PC HYSPLIT result above allows you to view a compilation of all the predicted hourly results for May 10, 2011. The Environmental Protection Agency does not have a 1-hour NAAQS or AQI values. The 1-hour categories used in this analysis were developed by the California Resources Board. Very Unhealthy or Hazardous fine particulate concentrations are predicted to occur with 40 miles of the wildfire and high concentrations of fine particulate matter may impact the communities of Charlton and Waycross, GA. Furthermore, a shift in wind directions is predicted to occur tomorrow. |  |
| The results above are best viewed in Google Earth. The file name for the 24-hour daily results (left graphic) is:  HoneyPrairie\_May10\_Daily\_HYSPLITconc\_0509\_evening.kmz  The file name for the 1-hour results (right graphic) is:  HoneyPrairie\_May10\_Hourly\_HYSPLITconc\_0509\_evening.kmz | | |

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| |  |  | | --- | --- | | **Forecasted Smoke Dispersion for May 11, 2011 (HYSPLIT Meteorological File: May 9, 2011 UTC12)** | | | **Hourly PC HYSPLIT Smoke Dispersion Forecast Results** |  | |  | **Hourly AQI**   |  | | --- | | **Good** | | **Moderate** | | **Unhealthy for Sensitive People** | | **Unhealthy** | | **Very Unhealthy** | | **Hazardous** | | | The modeling predictions above are for between midnight and 0800 on May 11, 2011. Winds will continue to shift from southerly directions to westerlies. Very Unhealthy or Hazardous fine particulate matter concentrations are predicted to be present and smoke could be present and disperse across Interstate 95. |  | |
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