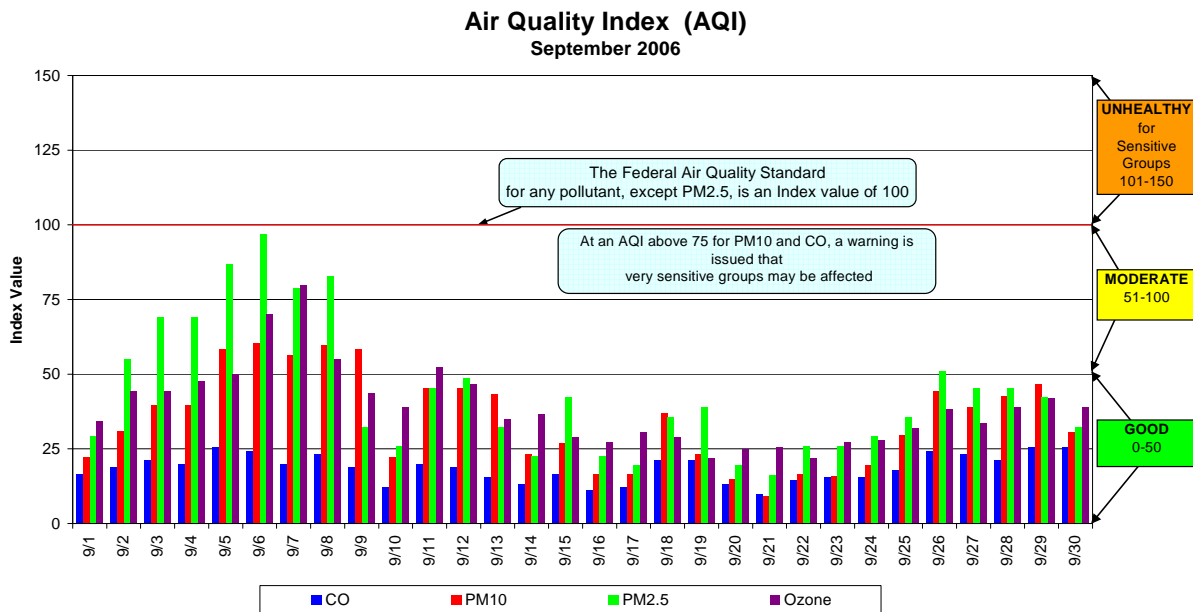


## Air Quality Report September 2006

The chart below shows the maximum Air Quality Index (AQI) for the period September 1 through September 30, 2006. Carbon Monoxide (CO), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and ozone (O<sub>3</sub>) are the criteria air pollutants defined by the United States EPA that are monitored in the Spokane area and for which AQI values are calculated. The AQI information is updated hourly on the Department of Ecology and SCAPCA web page ([http://www.scapca.org/air\\_quality.asp](http://www.scapca.org/air_quality.asp)). There were no measured exceedances of federal air quality standards in September.



The following tables contain the maximum AQI values for each pollutant for September and for the year to date. A table summarizing the year to date daily AQIs by category follows on the next page.

### Maximum for this reporting period

Pollutant	AQI/Concentration	Location	Date
CO	26/2.3 ppm	3 <sup>rd</sup> & Washington	09/05, 09/29, and 9/30/06
PM <sub>10</sub>	61/75 µg/m <sup>3</sup>	Freya & Ferry	09/06/06
PM <sub>2.5</sub>	97/39 µg/m <sup>3</sup>	Monroe & College	09/06/06
O <sub>3</sub>	80/0.077 ppm	Greenbluff	09/07/06

### Maximum for the current year

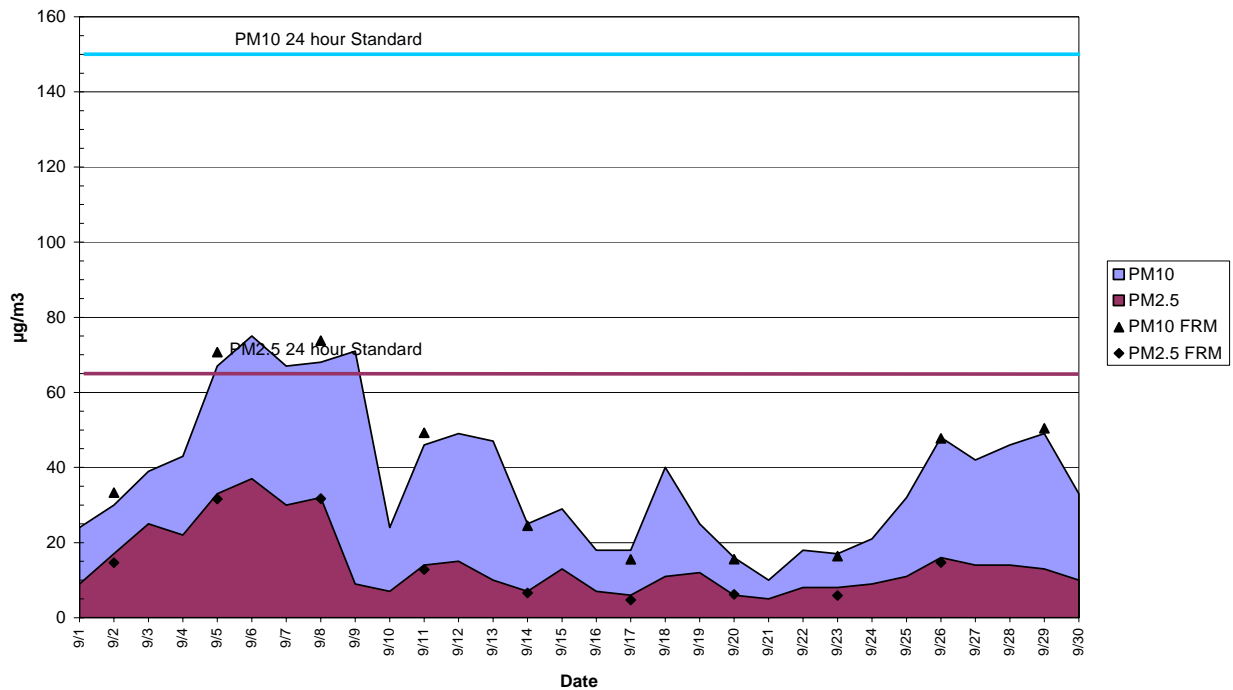
Pollutant	AQI/Concentration	Location	Date
CO	39 / 3.5 ppm	3 <sup>rd</sup> & Washington	02/08/06
PM <sub>10</sub>	74/101 µg/m <sup>3</sup>	Freya & Ferry	08/29/06
PM <sub>2.5</sub>	97/39 µg/m <sup>3</sup>	Monroe & College	09/06/06
O <sub>3</sub>	80/0.077 ppm	Greenbluff	09/07/07

### AQI Summary as of September 30, 2006

Category	Number of Days This Year	Last Year to Date
Good (0-50)	229	227
Moderate (51-100)	44	45
Unhealthy for Sensitive Groups (101-150)	0	1
Unhealthy (151-200)	0	0
Very Unhealthy (201-300)	0	0
Hazardous (>300)	0	0

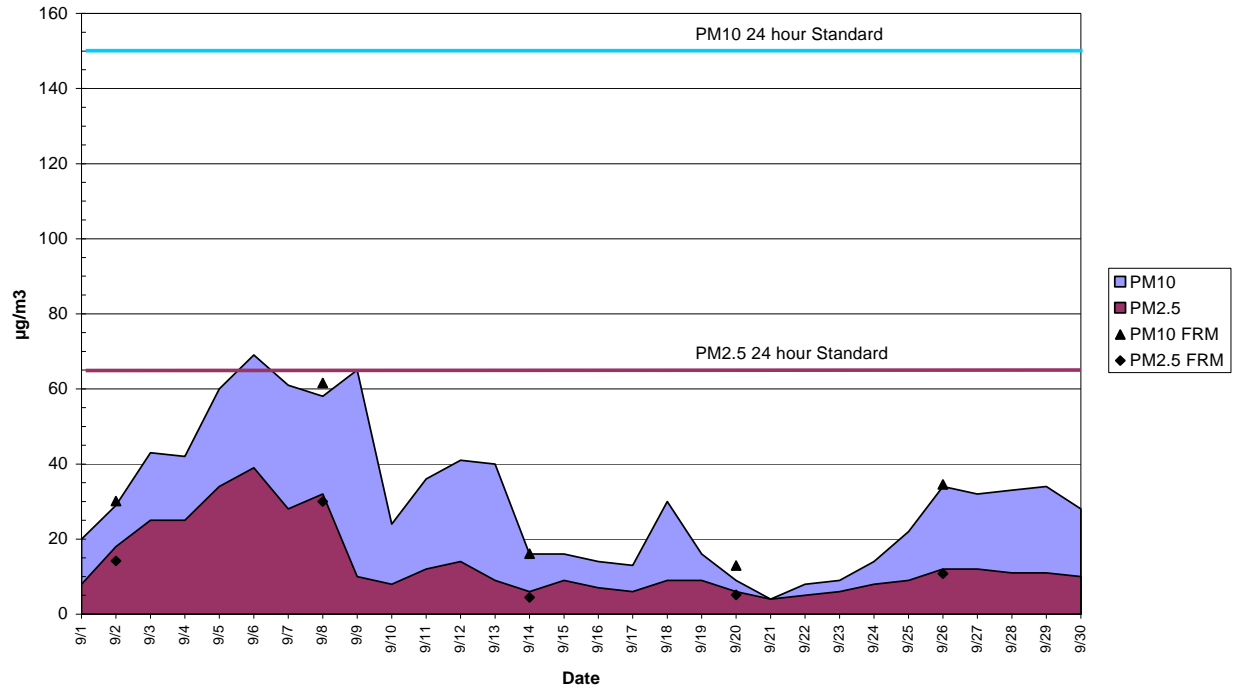
The next chart is a comparison between the concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> measured at the Freya & Ferry monitoring site. The site is located in a commercial, light industrial area on the east edge of the City of Spokane. Data on the chart are shown with the result of continuous monitors in solid colors and the Federal Reference Method (FRM) filter-based samplers as points. The correlation ( $r^2$ ) between the continuous monitor and FRM data is 1.00 for both PM<sub>10</sub> and PM<sub>2.5</sub>. All data are 24 hour average mass concentrations.

**Freya & Ferry Particulate Matter Data**  
24hr Average Daily Maximum



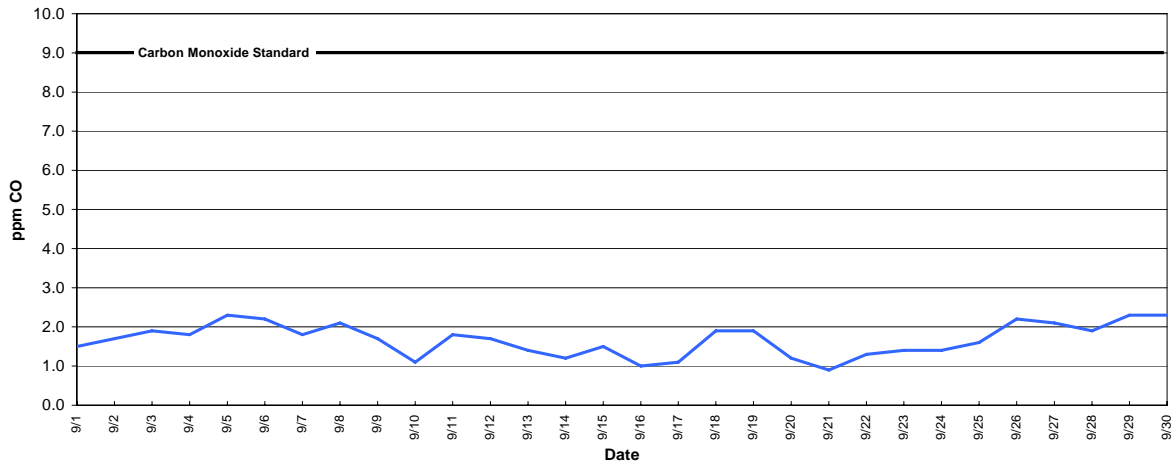
The chart below shows PM<sub>10</sub> and PM<sub>2.5</sub> continuous and FRM monitoring data from the Monroe & College site located near downtown Spokane. The correlation between the 24 hour average mass concentrations measured using the continuous monitor and FRM was 1.00 for PM<sub>10</sub> and 0.99 for PM<sub>2.5</sub> for the month. The FRM samplers are run on a one in six schedule so that only five points are available for a monthly correlation calculation.

### Monroe & College Particulate Matter Data 24hr Average Daily Maximum

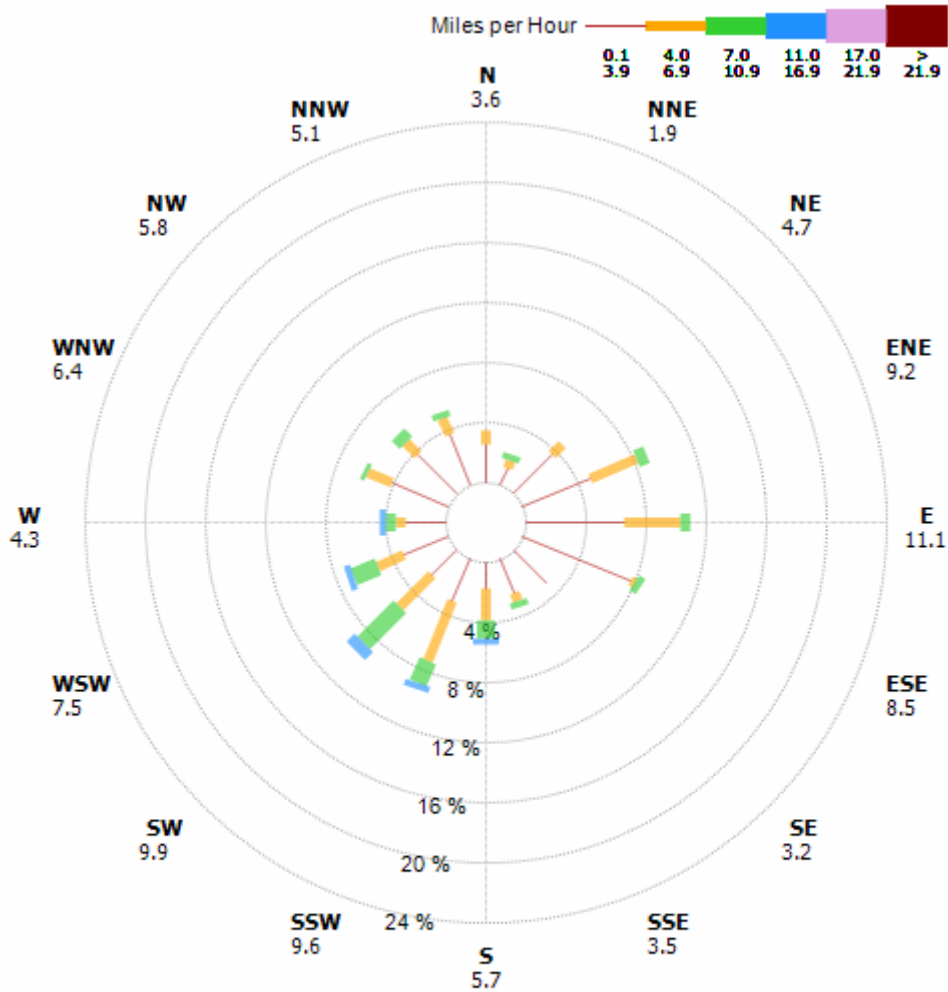


The chart below shows the daily maximums for the CO monitoring site in downtown Spokane (3<sup>rd</sup> & Washington) for this reporting period.

### Comparison of Maximum Daily 8 Hour Average CO Values 3rd & Washington, Spokane

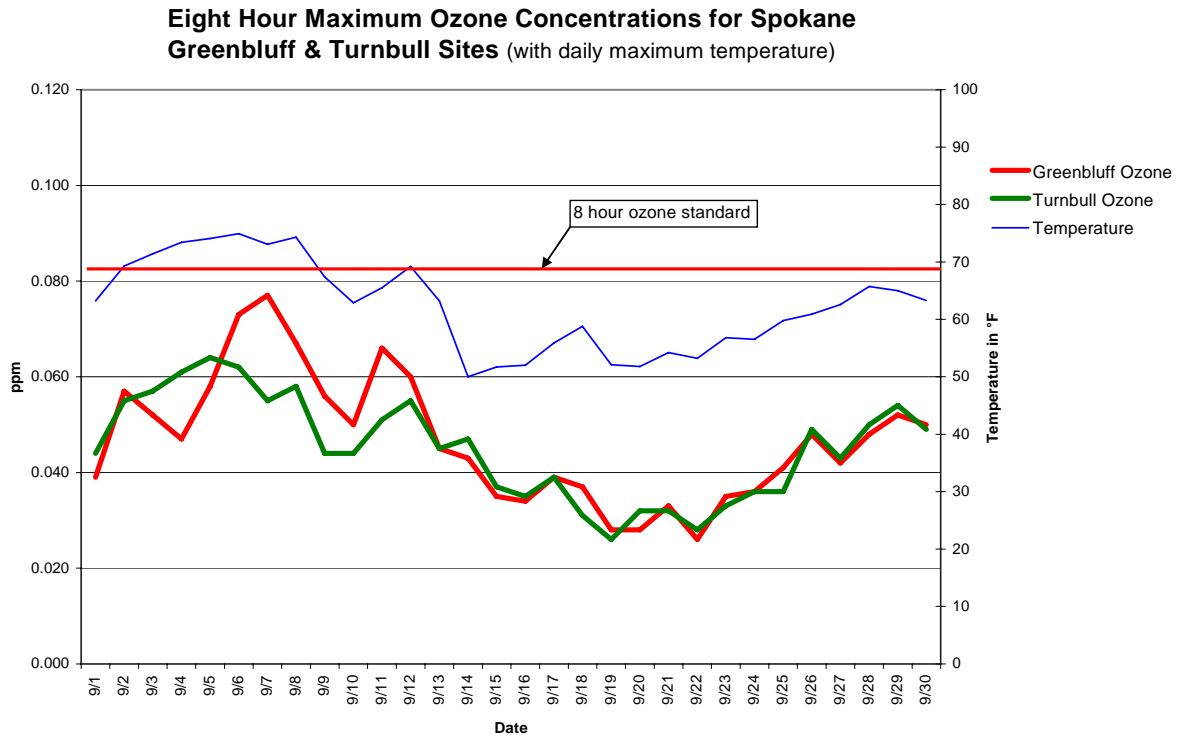


The wind rose below summarizes hourly average wind speeds and directions measured at the Freya and Ferry Site (Crown Z) in September.



**Hour Average Wind Speed**  
 Spokane E Ferry ~ 720 Observations  
 01 Sep 2006 through 30 Sep 2006

The chart below shows the ozone data for September measured at Greenbluff in the foothills of Mt. Spokane and Turnbull Wildlife Refuge southwest of the metropolitan area. The ozone data are plotted with the daily maximum temperature data from the Crown Z site. Temperature is a good surrogate for sunlight in the photochemical reaction that forms ozone. Ozone is monitored May 1 through September 30.



The aethalometer that is normally operated at the Freya and Ferry site was out of service for the month.