

Proposed Changes - Fairfax County Air Quality Monitors

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TAC Meeting

MWCOG

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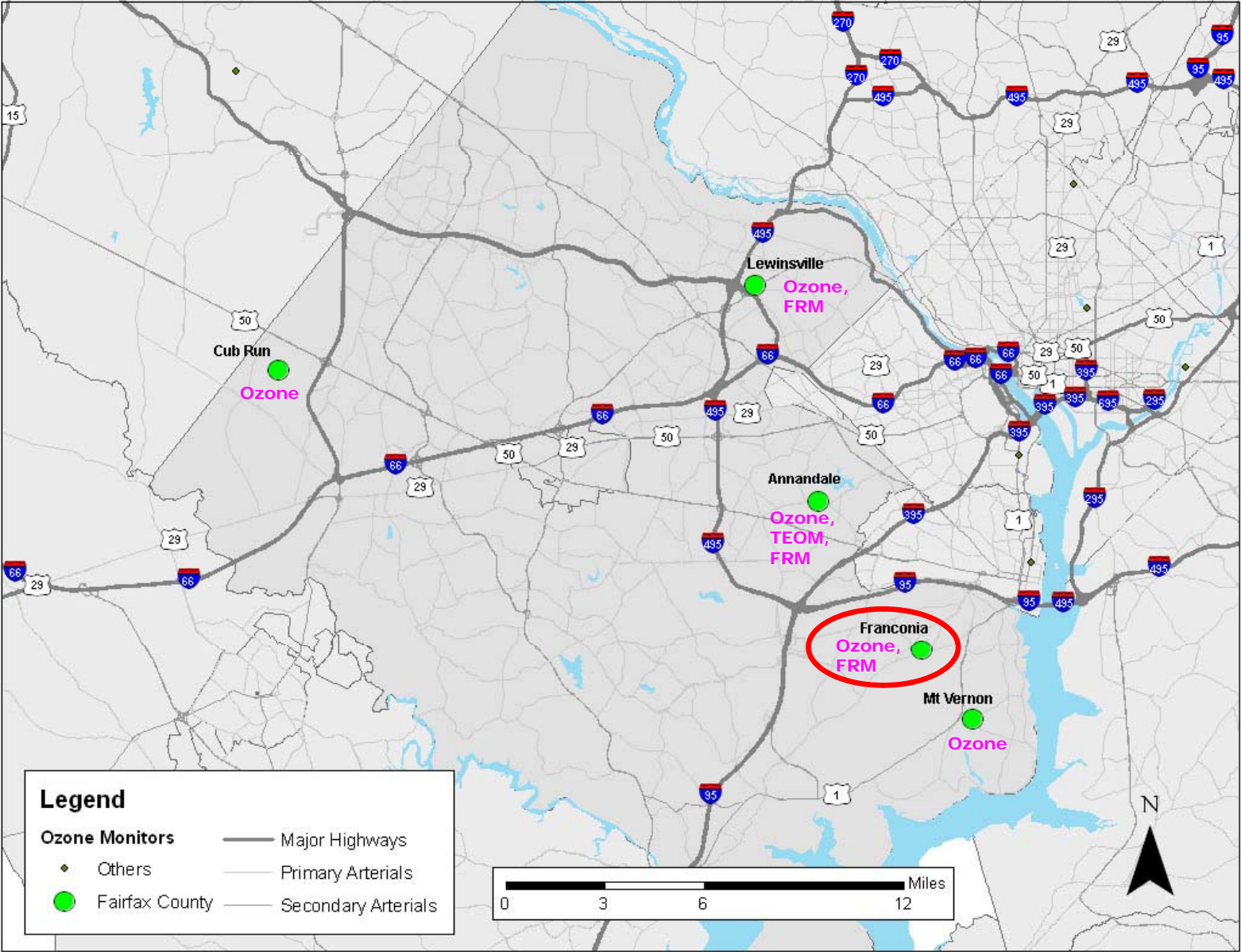
Fairfax Monitors until 6/30/10

Total Monitoring Locations - 5

Total Monitors – 5 Ozone, 1 TEOM, 3 FRM Monitors

Monitor Location	Monitor Type	Owned/Operated by
Cub Run (Chantilly)	- Ozone	FxCo/FxCo
Lewinsville (McLean)	- Ozone	FxCo/FxCo
Mount Vernon	- Ozone	FxCo/FxCo
Annandale	- Ozone, TEOM	FxCo/FxCo
Annandale	- FRM	VDEQ/FxCo
Lewinsville (McLean)	- FRM	VDEQ/FxCo
Lee Park (Franconia)	- FRM	VDEQ/FxCO
Lee Park (Franconia)	- Ozone	VDEQ/VDEQ

Current Fairfax Monitor Locations



Minimum Monitoring Requirements

- Ozone Monitors – Total 3 monitors needed if population in MSA between 4 to 10 millions.
 - Washington, DC MSA population = 5.4 million (2009 census estimate), currently 18 monitors
- PM2.5 FRM/FEM Monitors – Total 3 monitors needed if population in MSA exceeds 1 million.
 - Currently 12 such monitors
- PM2.5 Real-time (TEOM) Monitors – Total 2 monitors needed in Washington, DC MSA
 - Currently 3 such monitors

Fairfax Monitors – General importance of data

- Monitor ozone and fine particle concentrations in highly populated areas
- Data used by the general public, federal, state and local air agencies for :
 - Air quality evaluation and long-term trend analysis
 - Calculating design values for checking attainment of ozone and fine particle standards for the region
 - Forecasting and issuing health advisories

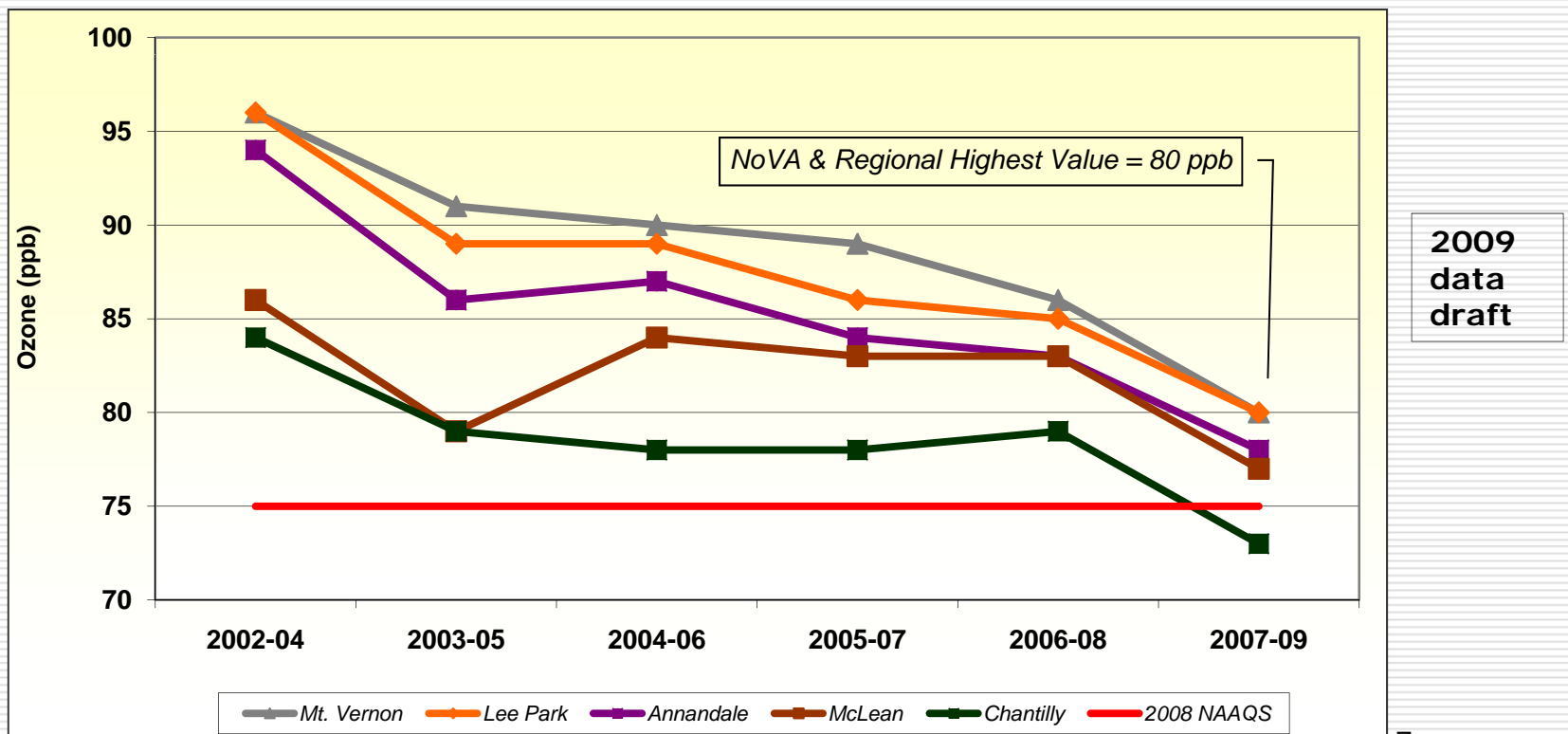
Fairfax monitors – Specific use of data

Monitor	Data Reporting	Data Use
Ozone	Hourly (Real-time)	Ozone Design Value* Washington SIP Daily Ozone Forecast Ozone Trend Analysis
TEOM (PM2.5)	Hourly (Real-time)	Daily PM2.5 Forecast
FRM (PM2.5)	Daily Average	PM2.5 Design Value* Washington SIP PM2.5 Trend Analysis

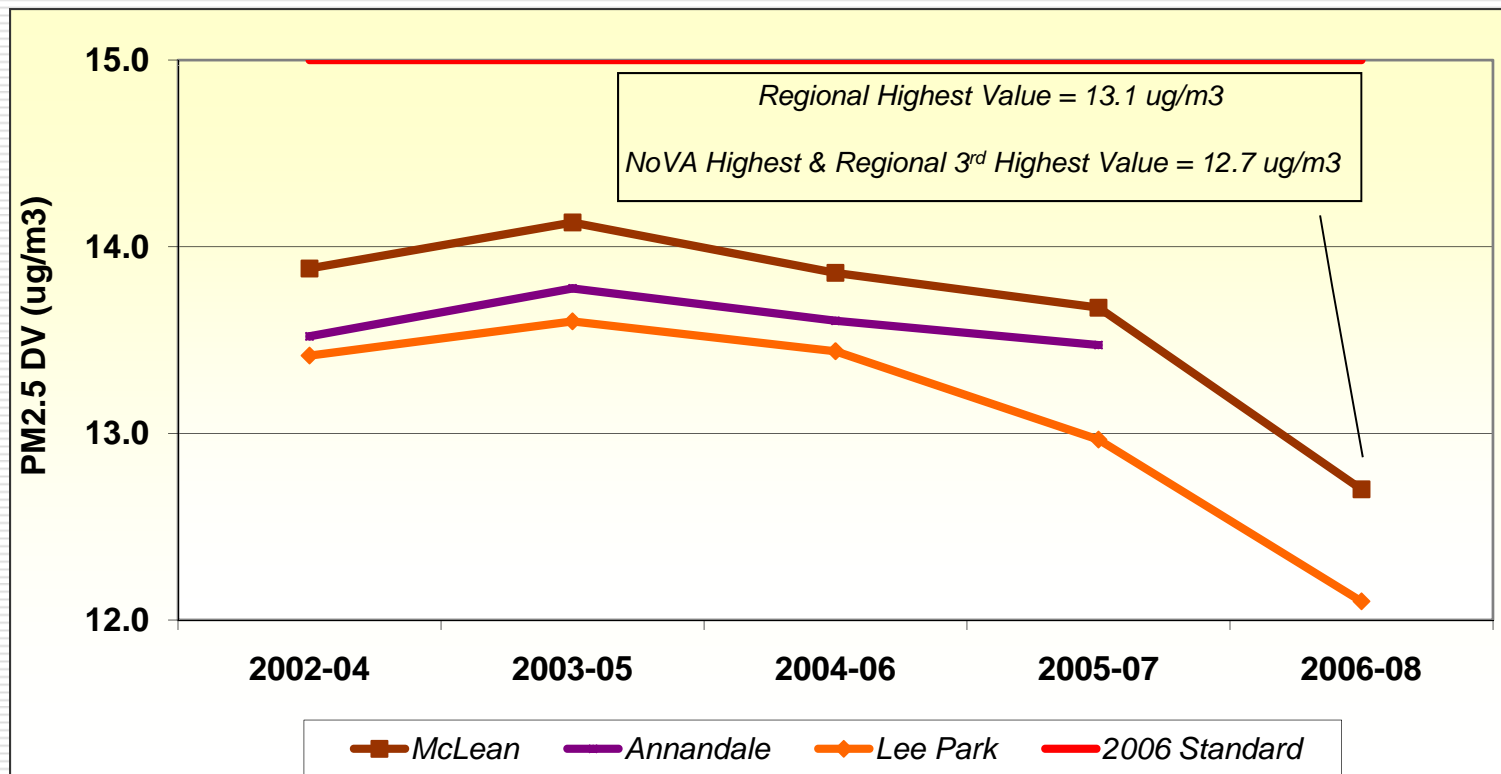
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* Design value: Parameter used to check attainment status (Ozone, PM2.5 std.) of the region.

Fairfax Monitors – Trend in 8-hour ozone design values



Fairfax monitors – Trend in annual PM2.5 design values



Fairfax monitors – Trend in 24-hour PM2.5 design values

