Proposed Changes - Fairfax County Air Quality Monitors

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MWAQC Meeting

MWCOG

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Fairfax Monitors

Total Monitoring Locations - 5
Total Monitors – 5 Ozone, 1 TEOM, 3 FRM Monitors

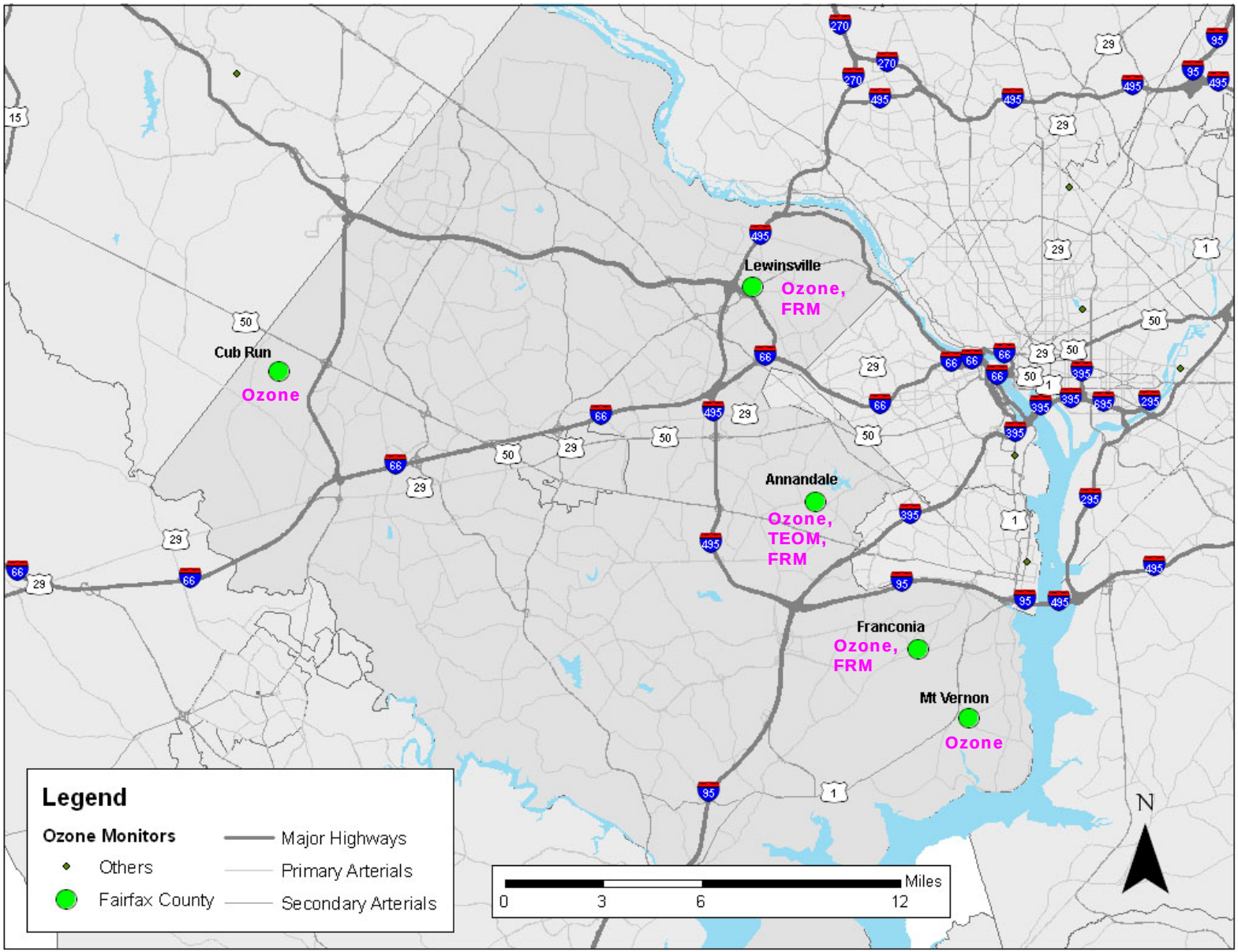
Monitor Location	Monitor Type	Owned/Operated by
Cub Run (Chantilly)	- Ozone	FxCo/FxCo
Lewinsville (McLean)	– Ozone	FxCo/FxCo
Mount Vernon	- Ozone	FxCo/FxCo
Annandale	– Ozone, TEOM	FxCo/FxCo
Annandale	– FRM	VDEQ/FxCo
Lewinsville (McLean)	– FRM	VDEQ/FxCo
Lee Park (Franconia)	– FRM	VDEQ/FxCO
Lee Park (Franconia)	– Ozone	VDEQ/VDEQ$_2$

Fairfax County Proposal

- Discontinue county operated 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

Fairfax Monitor Locations



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

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

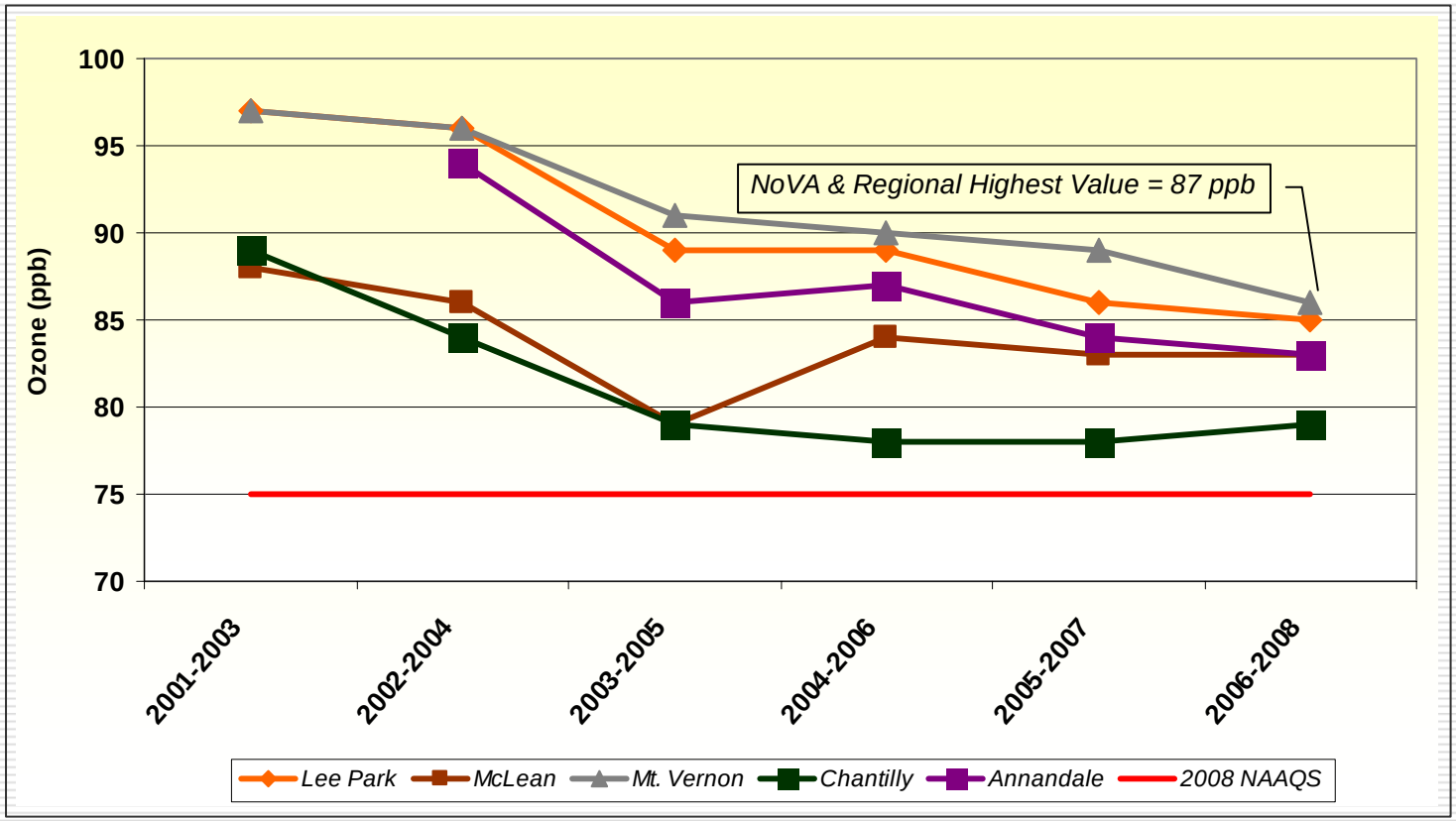
Fairfax monitors – Importance of forecasting & health alerts

- Daily data used for issuing next 3 day forecasting and color-coded health alerts.

- AQ data page - 1.5 million hits (ozone season).

- People check data to determine if they need to alter their daily activities due to poor air quality.

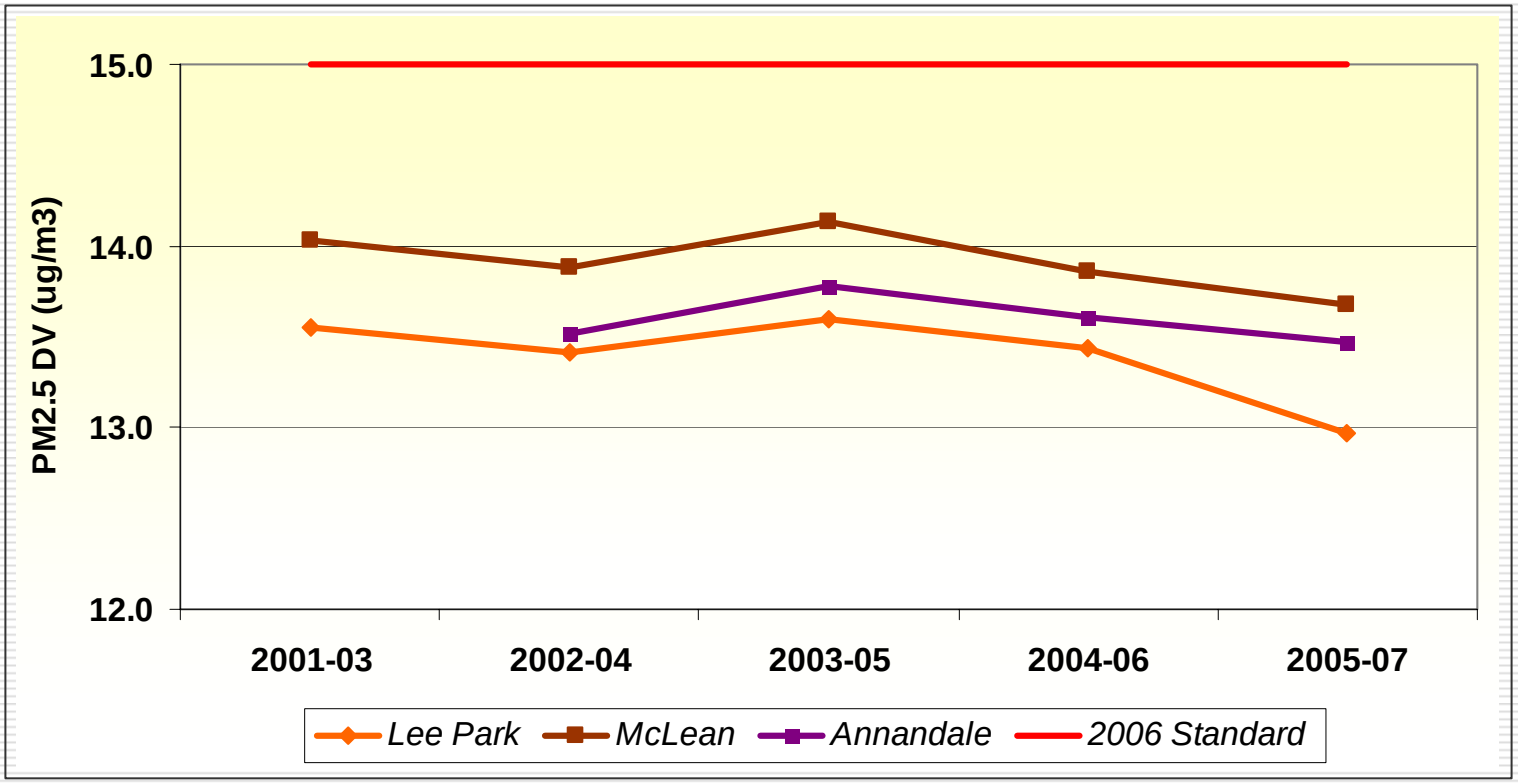
Fairfax monitors – Trend in 8-Hour Ozone Design Values



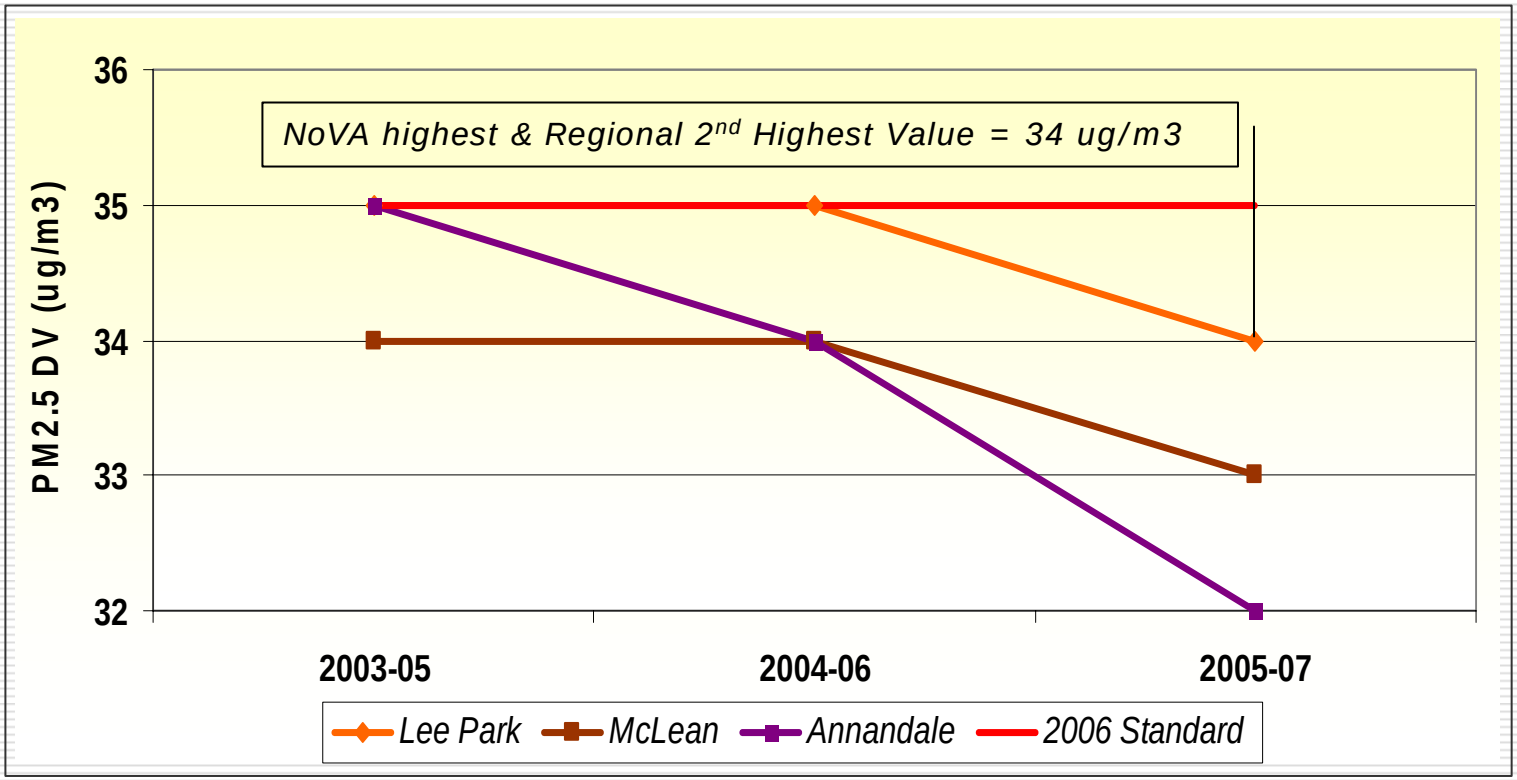
2008 data draft

Courtesy - Thomas Ballou, VDEQ (MWAQC, February 25, 2009)

Fairfax monitors – Trend in Annual PM2.5 Design Values



Fairfax monitors – Trend in 24-Hour PM2.5 Design Values



Fairfax monitors – Regulatory aspects of monitor network changes

- State monitoring network assessment - every five years

- Network plan submitted to EPA after public comment for their approval

- EPA Reg. - monitor measuring NAAQS violations in previous five years may not be discontinued (CFR 40 Part 58, Subpart B §58.14)

Fairfax monitors – Conclusions

- Monitors needed for :
  - Air quality forecasting
  - Checking attainment status of the region for ozone & fine particle standards
  - Validating projected 2009 ozone & PM2.5 design values for Fairfax monitors in SIPs
  - Air quality trend analysis

Fairfax monitors – Conclusions

- A few monitors – Regional highest or 2nd highest design values for ozone & fine particles.
  - So need to be maintained
- Regulatory aspects of monitor network changes
  - EPA approval needed

Fairfax county schedules

- Public hearing on budget proposal : March30-April 1
- Final budget decision : April 27
- Proposed monitoring shutdown : July 1