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National Air Quality Forecast (AQF) Capability:

- Improving the Basis for AQ Alerts
- AQ Information for People at Risk



National AQF Capability will Expand over the next Decade

	Current AQ Alerts	NWS Initial Operational Capability: September, 2004	NWS Capability: 5-Year Vision	NWS Capability: 10-Year Vision
Purpose: Limit adverse effects from	Next-day warnings for large cities	State-of-the-science ozone forecast guidance:	State-of-the-science ozone forecast guidance	State-of-the-science ozone and particulates forecast guidance:
poor AQ, by providing		to assist state / local AQ forecastersto assist people at risk from poor AQ	to assist state / local AQ forecastersto assist people at risk from poor AQ	to assist state / local AQ forecastersto assist people at risk from poor AQ
Products for Public	Daily AQ alerts; predicted interpretive AQ Index category	Hour-by-hour predictions of air pollutant concentrations in digital and graphical formats	Hour-by-hour predictions of air pollutant concentrations in digital and graphical formats	Hour-by-hour predictions of air pollutant concentrations available in state-of-the-art formats
Coverage	Approximately 300 cities	Entire Northeast United States	Nationwide	Nationwide
Pollutants Forecasted	Air Quality Index for ozone; some cities include particulates	Ground-level ozone	Ground-level ozone	Ground level ozone, particulate matter , possibly others
Forecast Period	Next-day; also through weekends	Forecast guidance issued through midnight next day	Forecast guidance issued through midnight next day	Forecast guidance extended to 2 days or beyond
Spacial Resolution	Alerts are community- wide; little/ no other spacial information	12 kilometer grid for northeast U.S	5 km grid for Nation	2.5 kilometer grid for Nation
Temporal Resolution	Daily	Hourly and 8-hr averages each hour throughout the forecast period	Hourly and 8-hr averages each hour throughout the forecast period	Hourly and 8-hr averages each hour throughout the forecast period