NJ Air Quality Flag Program
AGENDA

- Why is Air Quality Important?

- Air Quality in NJ
  - Trends
  - Ozone and PM2.5

- Overview of the NJ Air Quality Flag Program
  - Goals of the Program
  - How the Program Works
  - Implementation of the Program
Why Is Air Quality Important?

- We breathe in air every day! Being outside, exercising, playing sports

- Air pollutants at certain levels can be harmful to our health

- Populations particularly vulnerable to unhealthy levels of Ozone and PM2.5 include those with asthma, heart/lung problems, children and teens, and the elderly
National Ambient Air Quality Standards

- National Ambient Air Quality Standards (NAAQS)

- Six Criteria Pollutants
  - Ozone
  - Particulate Matter
  - Carbon Monoxide
  - Lead
  - Sulfur Dioxide
  - Nitrogen Dioxide
Number of Days **2015 Ozone NAAQS*** was Exceeded
**2000 - 2022**

*NAAQS – National Ambient Air Quality Standard*
Number of Days **2008 PM2.5 NAAQS*** was Exceeded

2000 - 2022

*NAAQS – National Ambient Air Quality Standard*
Sources of Ground Level Ozone

Dry Clean

Volatile Organic Compounds

Nitrogen Oxides

OZONE
Ground Level Ozone

- NJ’s most persistent air pollutant
- NOx and VOCs react with sunlight to form ozone
- Higher levels during summer months
- March to October – NJ Ozone Season
  - Higher levels of outdoor activity
Fine Particulate Matter (PM 2.5)

- A mixture of extremely small particles and liquid droplets found in the air

- High levels can be harmful and threatening to our health, and also reduce visibility
Sources Of PM 2.5

- Motor vehicles
- Power plants
- Industry sources
- Wood burning stoves
- Forest fires
Health Effects Of Ozone And PM2.5

- Damage to airways and lungs
- Difficulty breathing
- Shortness of breath and coughing
- Development of asthma and increased asthma attacks
- Death
Environmental (Welfare) Effects Of Ozone and PM2.5

- Increases plants susceptibility to disease, insects, other pollutants and harsh weather
- Damage to trees and other plants
- Destroys landscapes, regional haze
- Damage to man-made materials

Source: www.ars.usda.gov

Good visibility

Source: Newark/NYC Haze Camera
You Can Help Reduce Air Pollution

✓ Ride your bike
✓ Take public transportation
✓ Carpool and combine trips

∅ Do not mow lawns on high ozone days
∅ Do not idle cars for more than 3 min
NJ Air Quality Flag Program Overview

• **Purpose:** provide a visible way for communicating outdoor air quality conditions to help protect public health, especially for the vulnerable population

• **Increase air quality awareness**
  • Know what actions to take
  • Know when it is safe to be active outside

• **Improve health and quality of life in NJ communities**
How Does The Program Work?

- Raise a color-coded flag each day to inform your community of outdoor air quality conditions.

- Flag colors are based on the Environmental Protection Agency's "Air Quality Index" (AQI).
Air Quality Index

- The AQI is a color-coded national air quality rating system
- It is used to report air quality for both ozone and PM2.5
- Each color represents a level of air quality/health concern
- Guidance on actions to take and when to be active is dependent on the air quality conditions
How Do I Know What Color Flag To Fly?

- Organization will sign up to receive "EnviroFlash" alerts

- EnviroFlash – free e-mail or text alert that provides daily Air Quality Forecasts

- Fly the corresponding flag color to let your community know the air quality conditions

Source: airnow.gov
What Actions Should I Take?

- AQI provides guidelines and recommendations for outdoor physical activity
- Adjust level of outdoor activity based on air quality
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