

# RESOURCE ANALYSIS

## Natural Environmental

- A total of 121 Wetland Habitats were delineated. Between 1-3 Acres may be impacted.
- A total of 198 Streams were delineated. Anticipated impacts may include:
  - 22 Stream Crossings
  - 16 Parallel Streams
  - Numerous Drainage Channels
  - Stream within the Interchange Areas
- Several hundred acres of Woodlands/Forest were delineated. Anticipated impacts may include:
  - Approximately 50' along the Forest Edge
  - Within the Interchange Areas



Wetland near Maryland House Travel Plaza



Wetland along I-95 Near MD 22

## Historic/Archaeological

- Evaluate structures listed on the National Register of Historic Places and other potential sites.
- Identify potential archaeological sites and determine if there are any consequences.



Historic structure along Raphael Road

## Parks & Cultural Facilities

- Determine if parks and/or recreational facilities are adversely affected.
- Prepare Section 4(f) analysis if there are anticipated impacts to justify that there are no prudent and feasible options to avoid the impacts.



Gunpowder Falls State Park

## Properties & Buildings

- Determine impacts to residences and commercial businesses.



St. Francis de Sales Church

## Social & Economic Considerations

- Determine effects on existing and future land use.
- Evaluate economic benefits and impacts on the corridor.



Aberdeen Proving Grounds

## Hazardous Materials

- Identify potential hazardous material locations. If within the improvement area, evaluate clean-up requirements.



Ripken Stadium

## Air Quality

- Perform analysis to determine if air quality will be affected.

## Noise

**Noise Sensitive Area's (NSAs):** A total of 26 NSAs were identified for analysis within the Section 200 study limits.

**Noise Measurements:** A total of 126 noise measurements were taken within the 26 NSAs.

**Analysis & Prediction:** Noise levels for existing conditions and future predictions (based upon increased traffic volumes) are being completed.

### What is Reasonable and Feasible?

There are several factors that need to be taken into consideration before the Authority decides whether to install noise barriers. First it has to be determined that it is reasonable to install a noise barrier. If the answer is yes, then the Authority must decide if it is feasible to do so.

### Is a Noise Barrier Reasonable?

- Will noise levels increase by 10 dBA over existing noise levels?
- Will noise levels increase by at least 3 dBA over what future noise levels would be if the project weren't built?
- Do residents want a barrier? At least 75 percent of impacted homeowners must approve the noise barrier.
- Would the barrier impact recreation areas, parks, historic sites on or considered eligible for the National Register of Historic Places or wildlife areas?

### If a Noise Barrier makes sense, is it Feasible?

- Will a barrier reduce noise by 7 to 10 dBA?
- Can the wall be built? Is it feasible from an engineering standpoint? Generally, noise barriers are no higher than 26' tall.
- What is the cost of the barrier per benefited residence? Currently, the Authority will construct a barrier if the cost is less than \$50,000 per benefited residence.
- Will a barrier cause a safety problem such as blocking a driver's view around a curve?



Sound Meter



Person using sound meter