

Net Environmental Benefit

Environmental Quality Advisory Council Meeting
May 12, 2021

Joe Gorney, AICP, Senior Environmental Planner
DPD, Planning Division, Environment & Development Review Branch



Environmental Quality Corridors

- Integrated network of ecologically valuable land and surface waters for present & future residents



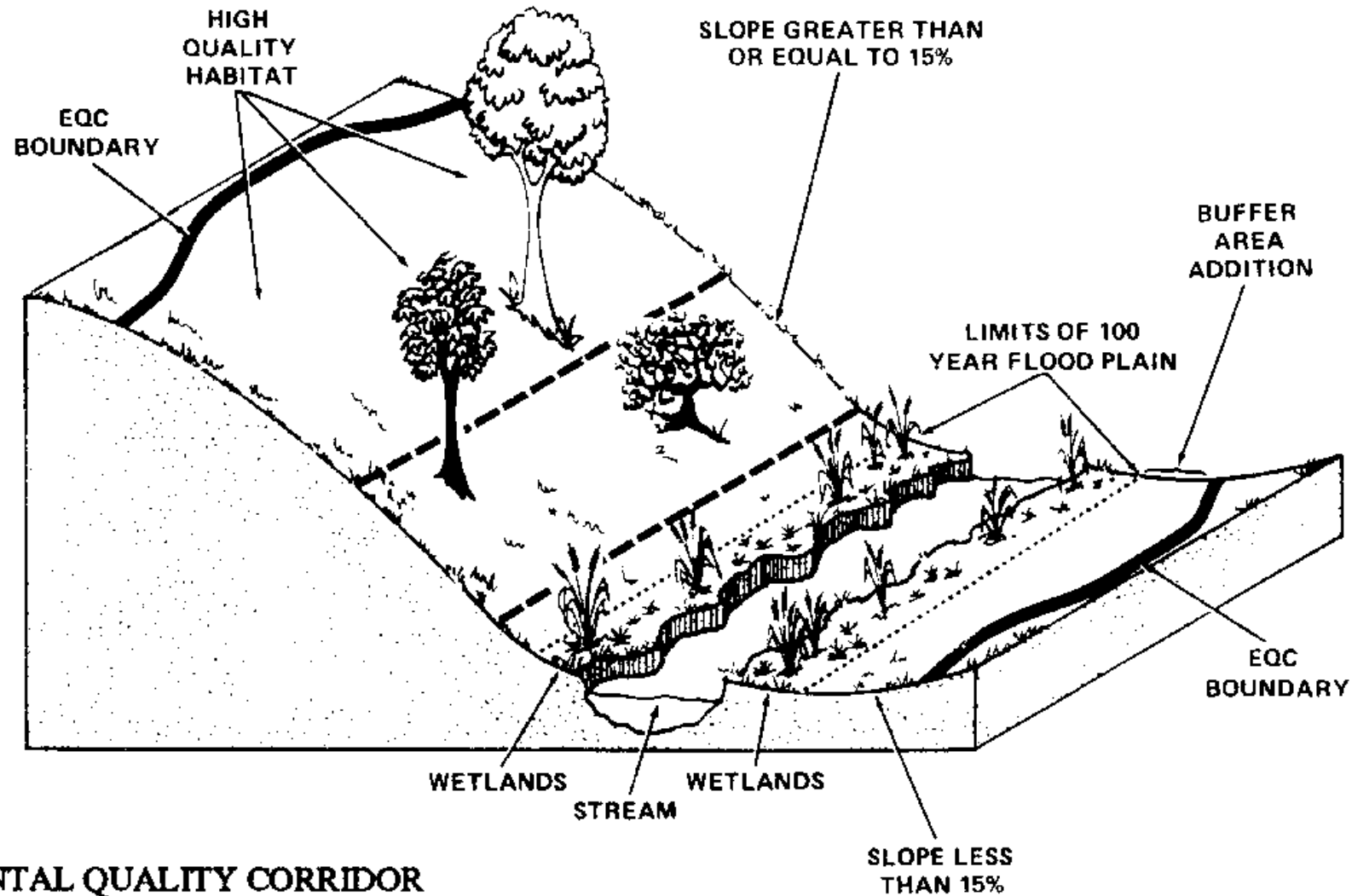
EQC Purposes

- ▶ Habitat quality
- ▶ Connectivity
- ▶ Hydrology/stream buffering/
stream protection
- ▶ Pollution reduction



EQC Components

- ▶ 100-year floodplains
- ▶ Steep slopes
- ▶ Wetlands connected to stream valleys
- ▶ Buffer



A TYPICAL
ENVIRONMENTAL QUALITY CORRIDOR

Source: Fairfax County Office of Comprehensive Planning

Encouraged Uses within EQCs

- ▶ Stream stabilization & restoration
- ▶ Replanting
- ▶ Wetland and floodplain restoration
- ▶ Removal of non-native invasive vegetation

Other Disturbances within EQCs

- ▶ Other disturbances to EQCs should only be considered in extraordinary circumstances and only where mitigation/compensation measures are provided that will result in a clear and substantial **net environmental benefit**. In addition, there should be **net benefits** relating to most, if not all, of the EQC purposes listed above (habitat; connectivity; stream health; pollution reduction) that are applicable to the proposed disturbances.

EQC Modifications

- ▶ When the area designated does not benefit the purposes described above
- ▶ Some disturbances that serve a public purpose:
 - ▶ Unavoidable public infrastructure easements
 - ▶ Rights of way



Land Development



Policy Plan – Environment Element

- ▶ Air Quality
- ▶ Water Quality
- ▶ Transportation Noise
- ▶ Light Pollution
- ▶ Environmental Hazards (soils, floods, pipelines)
- ▶ Environmental Quality Corridors
- ▶ Tree Cover
- ▶ Conservation Easements
- ▶ Environmental Monitoring
- ▶ Green Building
- ▶ Tidal Shoreline Erosion Control
- ▶ + Chesapeake Bay Supplement



Trees

Benefits:

- ▶ Stormwater management
- ▶ Energy conservation
- ▶ Air quality
- ▶ Habitat for wildlife
- ▶ Aesthetics
- ▶ Shade
- ▶ Sense of safety and protection

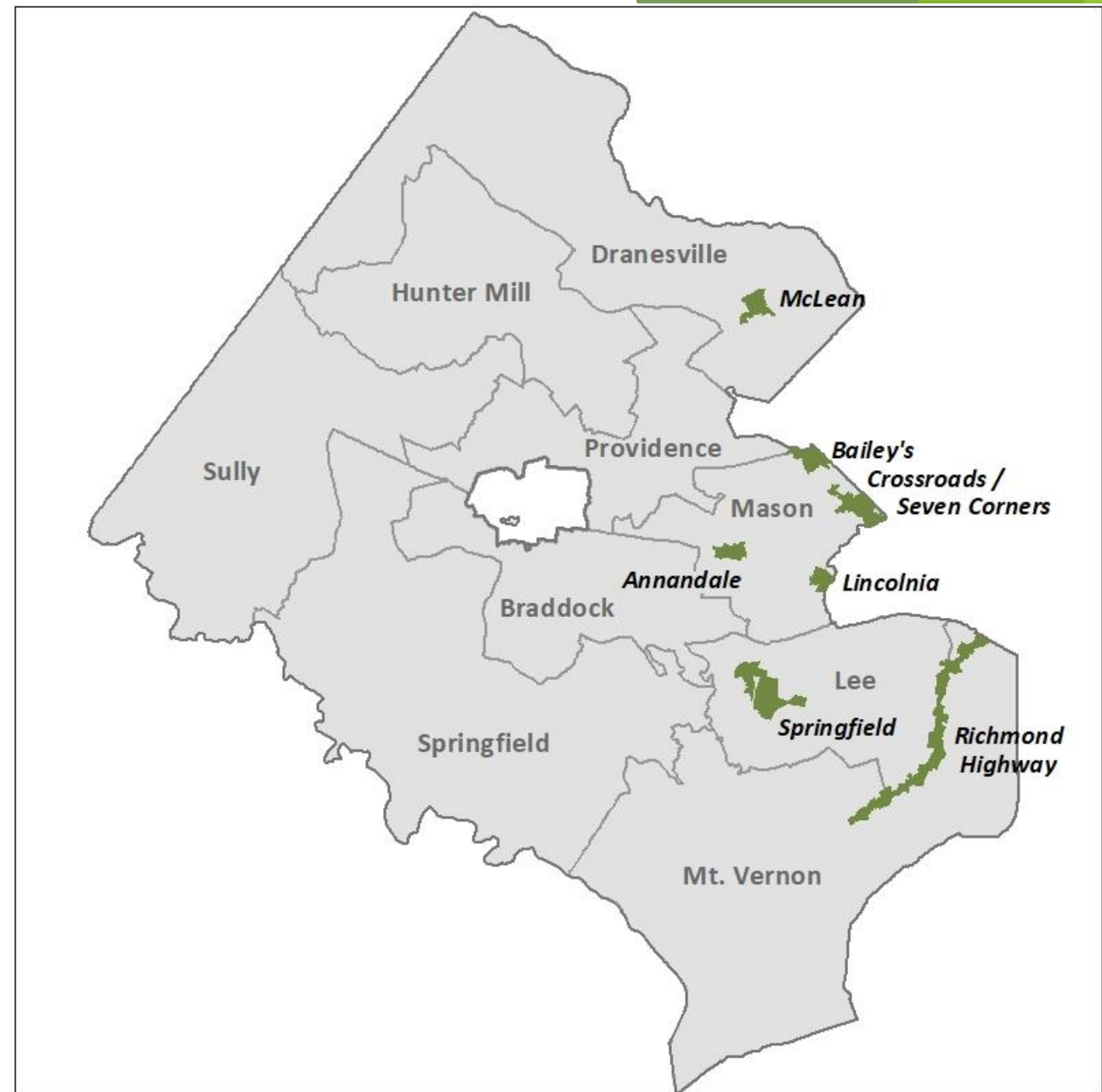
Strategies/Methods:

- ▶ Use native plantings
- ▶ Remediate the soils
- ▶ Replace existing trees
- ▶ Eradicate invasive species



Water

- ▶ Detain on-site & slowly release
- ▶ Reuse
- ▶ Clean
- ▶ Make visible



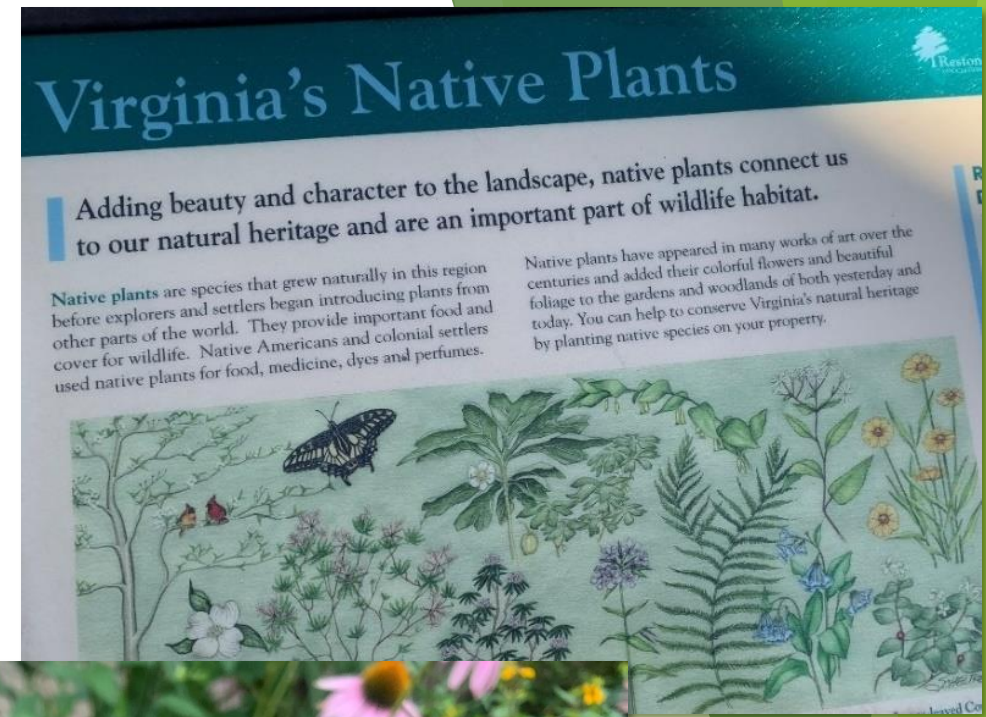
Green Building

- ▶ Location & Transportation
- ▶ Sustainable Sites
- ▶ Water Efficiency
- ▶ Energy & Atmosphere
- ▶ Materials & Resources
- ▶ Indoor Environmental Quality



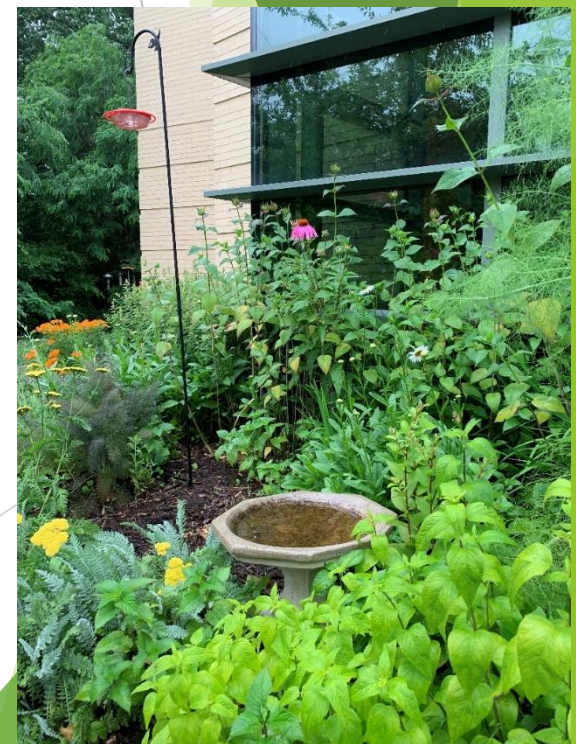
Natural Landscaping

- ▶ Restore aesthetic & ecological functions
- ▶ Preserve & recreate ecological features and native plant communities
- ▶ Use native plants
- ▶ Control invasives
- ▶ Maintain healthy soils
- ▶ Retain rainwater on-site



Intentional Design

- ▶ Community health
- ▶ Equity
- ▶ Community identity
- ▶ Each site has a role to play



Considerations (DPD 2019 ARE Response)

- ▶ Future Comprehensive Plan amendments could:
 - ▶ Consider and define net environmental benefits across all areas of the county and various development scenarios (infill, redevelopment, & new development); &
 - ▶ Define the ecosystem services, such as habitat, heat reduction, & erosion and flood control, that a site can protect or regenerate.
- ▶ Net environmental benefit could:
 - ▶ Help connect and enhance each area of the county;
 - ▶ Be tailored to the unique character of each area;
 - ▶ Recognize that each area has a role to play in the health of the applicable resources; and
 - ▶ Guide land use expectations for all lands and waters in the county, whether public or private; whether urban, suburban, or rural.