

Regional SPARROW Modeling Projects

Available Approaches and Required Resources

Phase 1: Use national model predictions to describe local water-quality flux, flow-weighted concentration, source contributions, and delivery to downstream waterbodies (Required resources: few)

- Chesapeake Bay and New England examples

- Resources: Output from national models (also SPARROW Web)

Phase 2: Develop initial regional model using national SPARROW infrastructure (Hydro 1-km, ERF1-2.0) (required resources: modest)

- Link monitoring stations to reaches (reach ID)

- Estimate monitoring station loads

- Execute SAS program to subset reach data from national file

Phase 3: Develop regional model using refined local data (required resources: major)

- Infrastructure; NHD, Refined RF1

- Watershed data: e.g., municipal/industrial effluent loads, atmospheric deposition, additional monitoring sites (load estimation)