

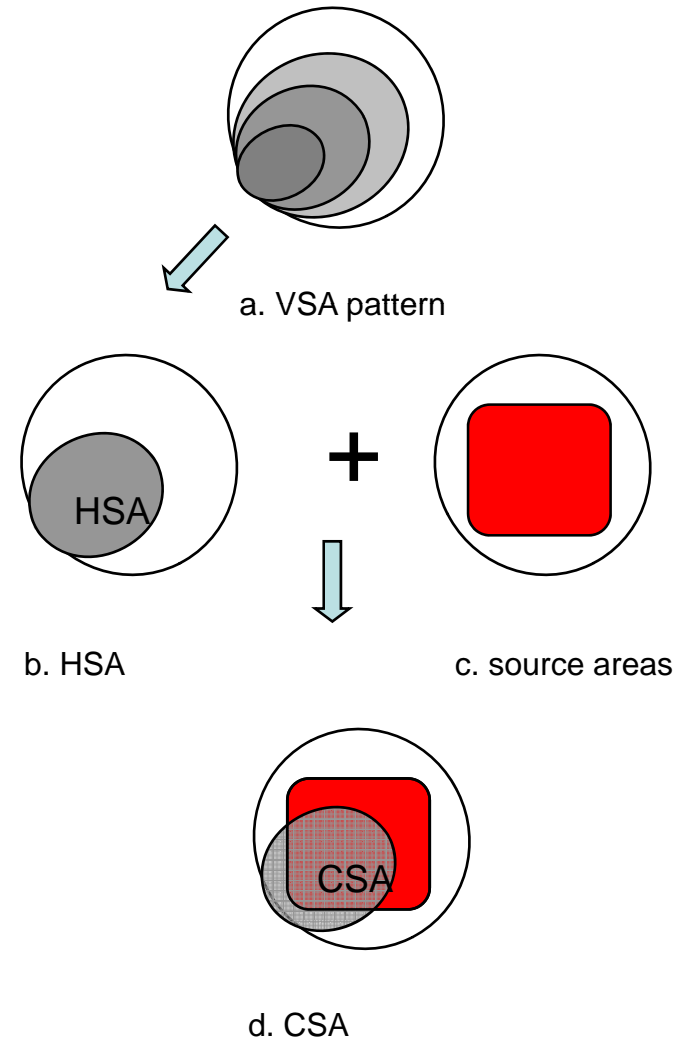
Protection of Critical Source Areas for Achieving Long-term Sustainability of Water Resources in Rockaway Creek Watershed

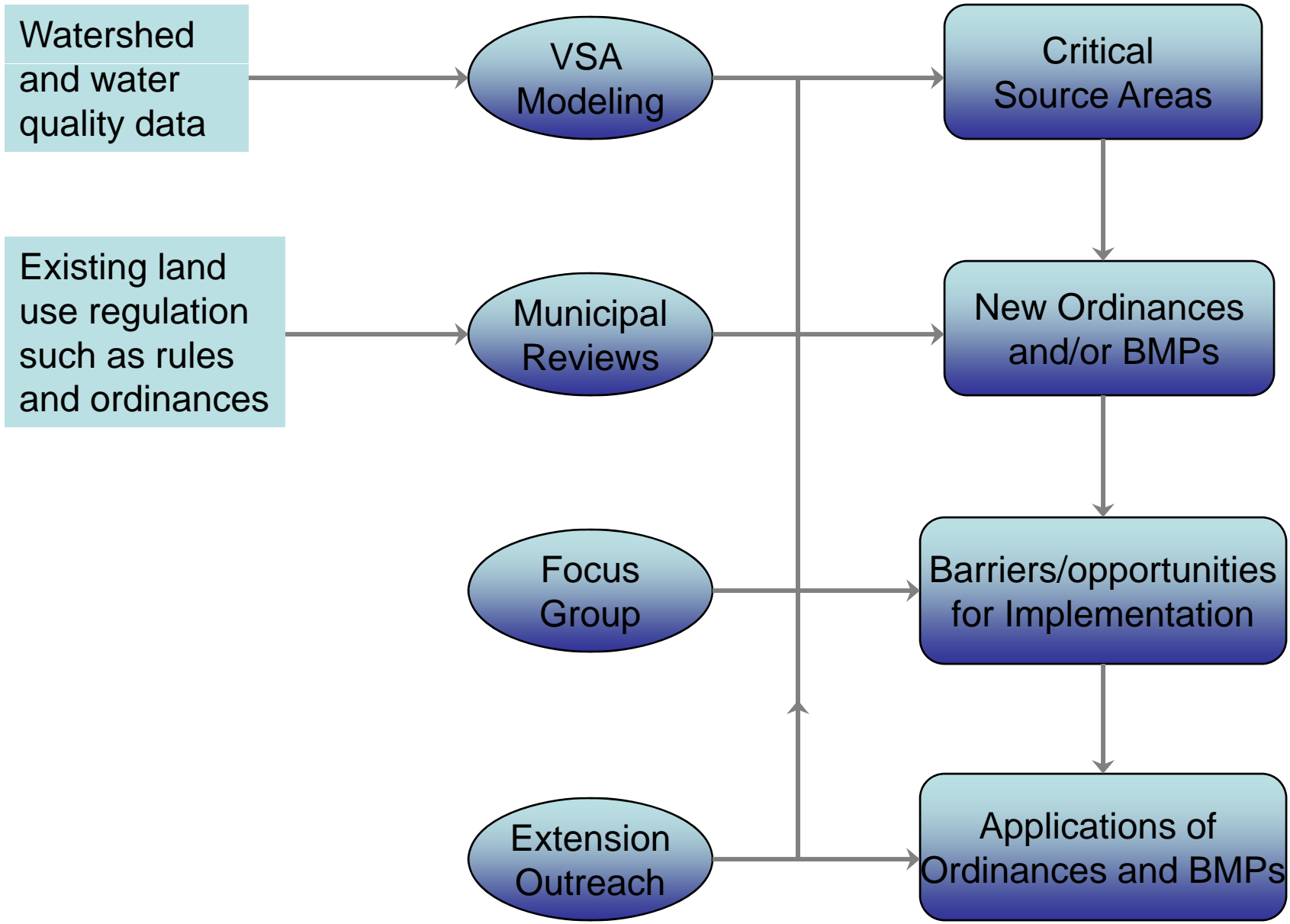
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Support Long-term Sustainability of Water Resources by Properly Managing Land Uses

- Promote a set of new concepts such as variable source areas (VSAs), hydrologically sensitive areas (HSAs), critical source areas (CSAs) for land use planning and management
- Develop a set of tools to identify VSAs, HSAs and CSAs for municipal uses in their land use planning and management
- Develop a set of land use-based model ordinances and best management practices (BMPs) to protect CSAs
- Evaluate the technical, social, economic and institutional barriers to implement those ordinances and BMPs





Project Team

New Jersey Institute Technology
North Jersey RC&D
New Jersey Water Supply Authority
College of New Jersey

VSA modeling & CSA identification
BMPs & Ordinances review & development
Focus group
Education & outreach

CSAs Management Technical Committee

University scientists
Governmental agency personnel
Environmental consultants
Non-governmental organizations

VSA model calibration and validation
Other applications of CSA concepts
Education & outreach beyond the study area

Rockaway Creek Watershed Project Advisory Committee

Clinton Township
Tewksbury Township
Lebanon Borough
Readington Township
New Jersey DEP
New Jersey Highlands Council
Hunterdon County Planning Dept
Citizen volunteers

Site identification
BMPs & Ordinances evaluation

Surprising Findings or Lessons

- Overwhelming interests in the concept and ideas of managing CSAs for improving water quality
- Strong demands on VSA model validation and calibration
- Complexity of land use planning and management at the municipal level
- Potential for other applications of CSA concept

- Questions
 - What are the expected outputs and/outcome from EPA perspective?
- Contacts
 - EPA experiences on developing land use-based model ordinances
 - USDA ERS group on water quality and land use management led by Dr. Marc Ribaudó
 - Any other EPA contacts who may be interested in the project methodology and results.