## **Suggested EID Outline/ Topics**

- A. Proposed Project and Funding Status
  - 1. Project Purpose and Need (select at least one)
    - a. Water Quality/Water Quantity Problems
    - b. Public Health Concerns
    - c. Inadequate System or System Components
    - d. More Stringent Effluent Limits (wastewater only)
      - (1) Existing Effluent Limitations
      - (2) Proposed Effluent Limitations
    - e. Other (specify:
  - 2. Project Description
    - a. Project Summary
    - b. Planning Area Description (including a map with facilities)
    - c. Planning Period (time period)
    - d. Description of Project Construction Phases
    - e. Owner and Operator of the Facilities
    - f. Location of the Facilities
    - g. 8.5 X 11 inch, Black and White Project Map Suitable for Distribution

)

- h. capacity
- 3. Relevant Design Parameters
  - a. Description of Major Unit Processes
  - b. Flow Diagram
  - c. Sewer/Water Pipe Lengths, Sizes, and Locations
  - d. Basic Design Criteria
  - e. Design Storm(s)
  - f. Description of Major Storm Water Components (Structural and Non-Structural)
  - g. Estimated Pollutant Removal Capability (i.e., performance criteria of structural components)
  - h. Other
  - i. Calculate annual energy requirements\*
  - j. Determine source of energy and GHG emissions\*
  - k. Calculate annual water requirements\*
  - 1. Water efficiency measures?\*
  - m. Energy Efficiency measures?\*
  - n. Renewable Energy produced?\*
  - o. Green infrastructure?\*
  - p. Reuse program implemented?
  - p. Proposed Total Project Cost
  - r. Portion of Total Project Cost Funded by EPA
  - s. List of Amount, Sources, and Status of All Funding Sources
- B. Existing Environment As Pertains to Project
  - 1. Public Health Problems Due to Water Quality
  - 2. Water Quality Problems, Fish Kills, etc.

- 3. Water Quantity Problems (drought, arid conditions, groundwater overdrafts, location of water source from site?)
- 4. Surface & Ground water Hydrology
- 5. Drinking Water Sources and Supply
- 6. Physiography, Topography, Geology & Soils
- 7. Federally Endangered & Threatened Species
- 8. Air Quality (non-attainment area needs state sign-off)
- 9. Environmental Justice Information
  - a. Conditions, Minority & Low Income Areas (include median family income)
  - b. Census Maps
- 10. Land Use & Development, Percent Impervious Cover, Pollutant Sources
- 11. Identification of Floodplains and Wetlands

## C. Existing Wastewater/Drinking Water/Storm Water System

- 1. General Description of Wastewater Collection & Treatment and Storm Water System & Map
- 2. Existing Wastewater System (wastewater only)
  - a. Wastewater Flows: Current Average, Peak, Wet Weather
  - b. Influent Characteristics
  - c. Major Industrial Users
  - d. Residuals (sludge) Disposal
  - e. Service Area
  - f. Infiltration and Inflow
  - g. Present capacity (is there excess capacity in digesters?)
  - h. Calculate annual energy requirements\*
  - i. Determine source of energy and GHG emissions\*
  - i. Calculate annual water requirements\*
  - k. Water efficiency measures?\*
  - 1. Energy Efficiency measures?\*
  - m. Renewable Energy produced?\*
  - n. Green infrastructure?\*
  - o. Reuse programs implemented?

## D. Existing Drinking Water System (drinking water only)

- 1. Description of Treatment and Distribution System
  - a. Water Demand: Average, Peak
  - b. Surface Water Source (intake locations, permitted and actual withdrawal)
  - c. Ground water Source (wells & well fields)
  - d. Water Storage
  - e. Raw Water Characteristics
  - f. Residuals (sludge) and Backwash Disposal
  - g. Service Area
  - h. Calculate annual energy requirements\*
  - i. Determine source of energy and GHG emissions\*

- j. Calculate annual water requirements\*
- k. Water efficiency measures?\*
- 1. Energy Efficiency measures?\*
- m. Renewable Energy produced?\*
- n. Green Infrastructure?
- E. Existing Storm Water System (storm water only)
  - 1. Detailed Description of Existing Storm Water System
    - a. Description of Major Structural Components
    - b. Description of Non-Structural Components/Actions-full cost pricing
    - c. Design Parameters/Performance Criteria/Permits.
    - d. Existing capacity and reuse program
    - e. Green infrastructure?\*
- F. Existing System Performance
  - 1. National Pollutant Discharge Elimination System (NPDES) Violations
  - 2. Safe Drinking Water Act Violations
  - 3. Other System Problems
- G. Need for Proposed Project
  - 1. Expanded Description of Need
  - 2. Land Use Projections/Impervious Cover/Pollutant Sources
  - 3. Population Forecast/Projections
  - 4. Calculations and Assumptions for Forecasted Flow and Waste load
  - 5. Future Environment Without the Project
- H. Analysis of Alternatives
  - 1. Development of Alternatives
    - a. No-action
    - b. Optimum Utilization of existing facility
      - \* (1) Renewable Energy Produced?
      - \* (2) Reuse Program Implemented?
      - \*(3) Water and Energy Efficiency measures?
      - \* (4) Green Infrastructure?
    - c. New Construction Alternatives
    - d. Source Reduction
    - e. Non-structural and Structural Storm Water System Components
  - 2. Alternative Screening (discussion for each alternative)
    - a. Criteria for Evaluating Alternatives
    - b. Assigning Weights for Criteria
      - i. Present Worth or Equivalent Annual Cost
      - ii. Reliability
      - iii. Complexity
      - iv. Environmental Factors
      - v. Feasibility (constraints)
      - vi. Flexibility

## vii. Water/Energy use comparison\*

- 3. Identification of Preferred Alternative
- I. Environmental Consequences and Mitigation Measures for Preferred, No Action, and Alternative Options
  - 1. Direct
  - 2. Secondary impacts of future growth & development
    - a. GHG Emissions\*
    - b. Water/Energy use comparison\*
  - 3. Unavoidable Adverse Impacts
  - 4. Minimization of Adverse Impacts
  - 5. Mitigation
  - 6. Cross-cutter Environmental Laws and Coordination and Consultation Process
    - a. Archeological Resources
    - b. Air Quality
    - c. Coastal Barrier Resources
    - d. Coastal Zones
    - e. Endangered Species
    - f. Environmental Justice
    - g. Floodplains
    - h. Wetlands
    - i. Protected Farmlands
    - j. Fish and Wildlife
    - k. National Historic Resources
    - 1. Drinking Water Supplies
    - m. Wild and Scenic Rivers
    - n. Essential Fish Habitat
  - 7. Intergovernmental Review per Executive Order 12372
  - 8. Necessary Permits (NPDES, wetlands) issued
  - 9. Necessary Inter-municipal Agreements Executed
- J. Public Participation
  - 1. Summary of Public Participation
  - 2. Documentation of any Public Participation
    - a. Public Meeting Date & Record if applicable
    - b. Copy of any Publication/Copy of Newspaper Advertisement