

WATER ALLOCATION PROGRAM DEVELOPMENT IMPACT SUBCOMMITTEE MEETING

MINUTES OF MEETING 1-21-03 at the Offices of the RI Economic Policy Council

Next meeting of subcommittee: February 10 at 2:30 AM (same place)

Present:

Connie McGreavy, Kathy Crowley, Beth Collins, Paul Napolitano, Katherine Wallace and Judy Benedict

Purpose: Discuss what we know about the Blackstone Valley and outline priority tasks

1. New Information

Katherine Wallace shared tables of population trends and growth estimates for Rhode Island. The Blackstone and Pawcatuck both have strong growth pressures.

The USGS will be doing a new study with the Water Resource Board over the next 3-4 years including hydro-geologic modeling combined with the evaluation of land use scenarios and well locations.

Judy Benedict reported that the published discussions of environmental impacts are very general. She has not found studies with simple unit values of losses that are relevant. As we identify water dependent resources we may do better compiling descriptive assessments of assets rather than quantitative ones.

2. What we know about the Blackstone Valley

General Discussion:

- We can start with a variety of frameworks: 1.) We can start by identifying the kind of economic development and environmental conservation we want in each region and plan to deliver water supply where it is desired 2). We could estimate the new water supply required by build out and ask if that is feasible and what the impact will be of meeting build out level demand.
- We want a plan that transcends political boundaries.
- We want to look at the availability of water as it applies to decision-making for development. How should water influence comp plans?

Water Supply

- 10 Water Supply Authorities, 3 supplied by the Providence Water Supply Board (see poster prepared by K. Wallace 1-21-03)

Task: Get estimates of maximum safe yield from each supplier's Water Supply Management Plan (Paul Napolitano)

Resources: USGS Blackstone Valley Study

Water Use

- We have the recent past water use figures from USGS

Future Scenarios for Water Use

Tasks: Use Blackstone Valley Build-Out Analysis Tool to determine water demand at build out of current zoning. What are the build-out estimates of population and jobs – are they in balance?

ID existing assets vulnerable to water shortage and assess economic, social, and/ or ecological impacts of short and long term water shortage on each asset. What would signs of ecological stress be?

What environmental assets have already been identified as high priority by the Nature Conservancy, PNB, or others. How hydrologically sensitive are these assets?

Resources: Statewide Planning land use trends analysis Technical Paper 149 (provides statewide trends only)

Impact of Build Out on Water Supply (Impervious Surfaces)

Task: Need estimates of change in impermeable surfaces in recent past and projected for build out scenarios.

Resources: YQ Wang at URI has done some estimates and is preparing more for Statewide Planning
UCONN: “Measuring impervious surfaces for non-point source pollution modeling”
NBC studied the impact of impervious surfaces as part of a rate study American Rivers. “Paving our way to water shortages.”

How Does Urban Form Impact Water Use and Water Supply

After looking at build out scenarios using average water use, examine how the water use per household can be minimized. What are best practices for water conservation?

How can the average household have a smaller impact on the watershed and thus the available water supply?