

# Little River Sourcewater Protection Plan



# Why Sourcewater Protection

## Multiple Barrier Approach

- Sourcewater Protection
- Treatment and Disinfection
- Secure Distribution

# Why Sourcewater Protection

- Protects public health
- Reduces treatment costs
- Reduces chance of violations
- Positive economic impact

# The Goal

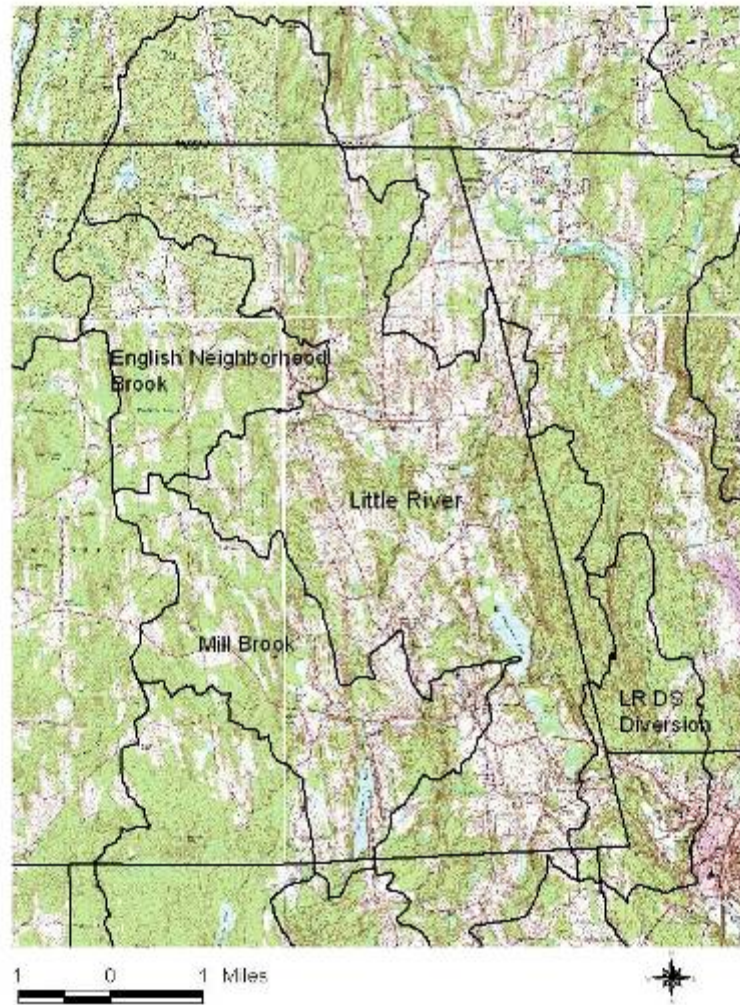
- Develop a Sourcewater Protection Plan for the Little River watershed, source for Putnam, CT city center
  - Sourcewater Protection Workshop
  - Assemble local team
  - Evaluate threats
  - Develop protection strategies
  - Prepare plan

# The Watershed

- Mostly in Woodstock, CT
- Extends into Thompson, Pomfret, Putnam, CT, and Southbridge, MA
- Approx. 11 miles N-S, 5 miles E-W
- 39 square miles, 35.4 above diversion
- Much of it classified as B/AA
- Roseland Lake and some tributaries are listed as “impaired”

# Little River Watershed

Prepared by ASRWVA - December 2005

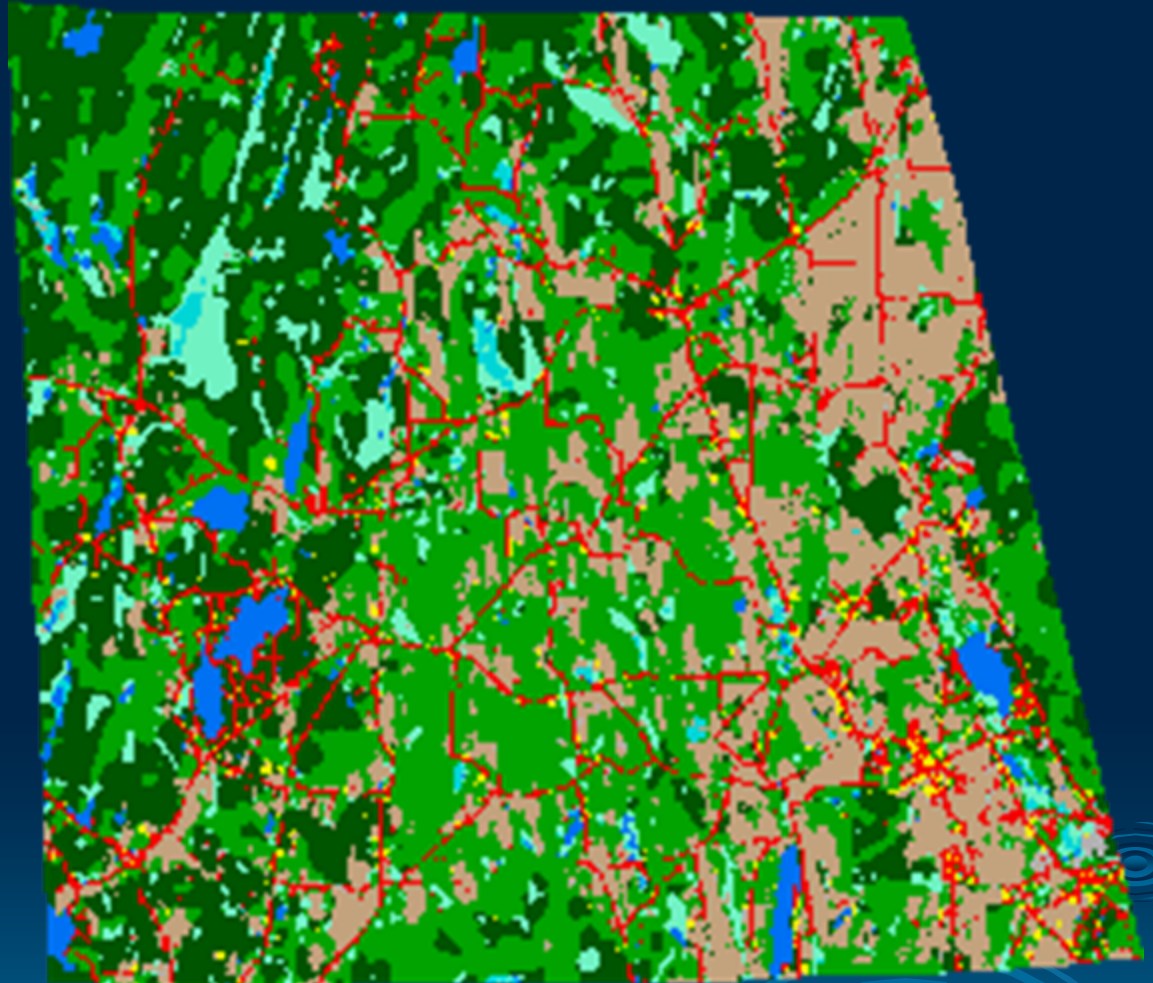


# Woodstock, CT

- Low population density  
(7,221 people / 61.6 sq mi = 117)
- Scenic vistas
- Lots of open space (7.8% developed)
- Very little protected (only 7.7%)
- Historical contamination from agriculture?

# Land Use Map

Red  
indicates  
developed  
areas



# The Team

- Diverse group of stakeholders from town administrators and boards, water systems, businesses, industry and agriculture



Atlantic States Rural Water & Wastewater: Marc Cohen  
Audubon Society: Andy Rzezinkiewicz  
CT Dept. of Environmental Protection: Eric Thomas  
E. CT Resource Cons. & Development: John Guskowski  
E. CT Conservation District: Scott Gravatt, Greg Smith  
Green Valley Institute: Holly Drinkuth  
Local Builders: Doug Porter  
Local Farmers: Paul Miller  
Local Outdoor Recreation Business: Ian MacRae  
Muddy Pond Neighborhood: Mary Ellen Blake  
The Nature Conservancy: Cyrus Harvey, Jr  
Northeast District Department of Health: Maureen Marcoux

Putnam Town Administration: Doug Cutler  
Putnam Water Pollution Control Authority: Bill Trayner  
Quinebaug-Shetucket Heritage Corridor: Jean Cass  
Roseland Park: Ed Higgins  
UConn Cooperative Extension: Joyce Meader  
UDSA Natural Resources Cons. Service: Nancy Ferlow  
Woodstock Conservation Commission: Jean Pillo  
Woodstock Planning Department: John Guskowski  
Woodstock Planning & Zoning Commission: Sandy Rotival  
Woodstock Selectmen: Delpha Very  
Woodstock Water Pollution Control Auth: Peter Ellsworth  
Wyndham Land Trust: Dick Booth

# The Challenges

- Watershed in Woodstock source for Putnam water supply
- Very little data on contaminate sources
- Very little land in the watershed protected
- Active agricultural community

# Threats

- Mostly Non-point sources
  - Agricultural run-Off
    - Nutrients (Nitrates and Phosphates)
    - Pathogens (E-coli)
  - Erosion from development
  - Septic systems
  - Roadways







# Focus of Plan

- Comprehensive evaluation of the watershed
- Agricultural best practices
- Protect watershed land
- Education and outreach

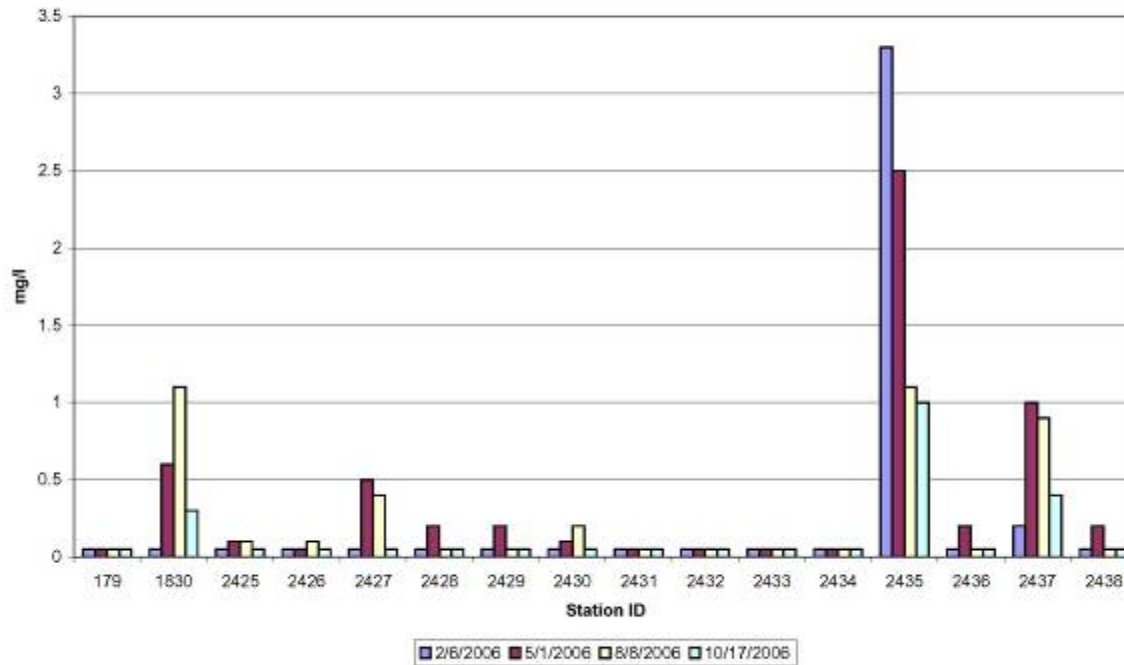
# Comprehensive Evaluation of the Watershed

- Northeast District Department of Health sampled 16 sites over four seasons
- Audubon doing rapid bio-assessment
- E. CT. Conservation District doing evaluations of impaired waterbodies

# Agricultural Best Practices

- Continue ongoing work with Extension Service, USDA/FSA, USDA/NRCS, Conservation District
- EPA 319 grant to study the effectiveness of liquid manure incorporation to reduce nutrient runoff

Little River Watershed - Nitrate  
 ( Detection Level = 0.1 mg/l )





# Protect Watershed Lands

- Work with local land trusts
  - Wyndham Land
  - Opacum Land Trust
- State greenway designation



# Education and Outreach

- Septic system brochures to lakefront property owners
- Attend Celebrating Ag fair

# Why Were We Successful

- Local team was very active
- Implemented at the grass roots level
- Raised public awareness
- We had the support of town government
- Work will be ongoing

Marc Cohen  
Sourcewater Protection Specialist  
Atlantic States Rural Water & Wastewater  
Association  
413.687.3956  
mcohen@asrwwa.org  
www.asrwwa.org