

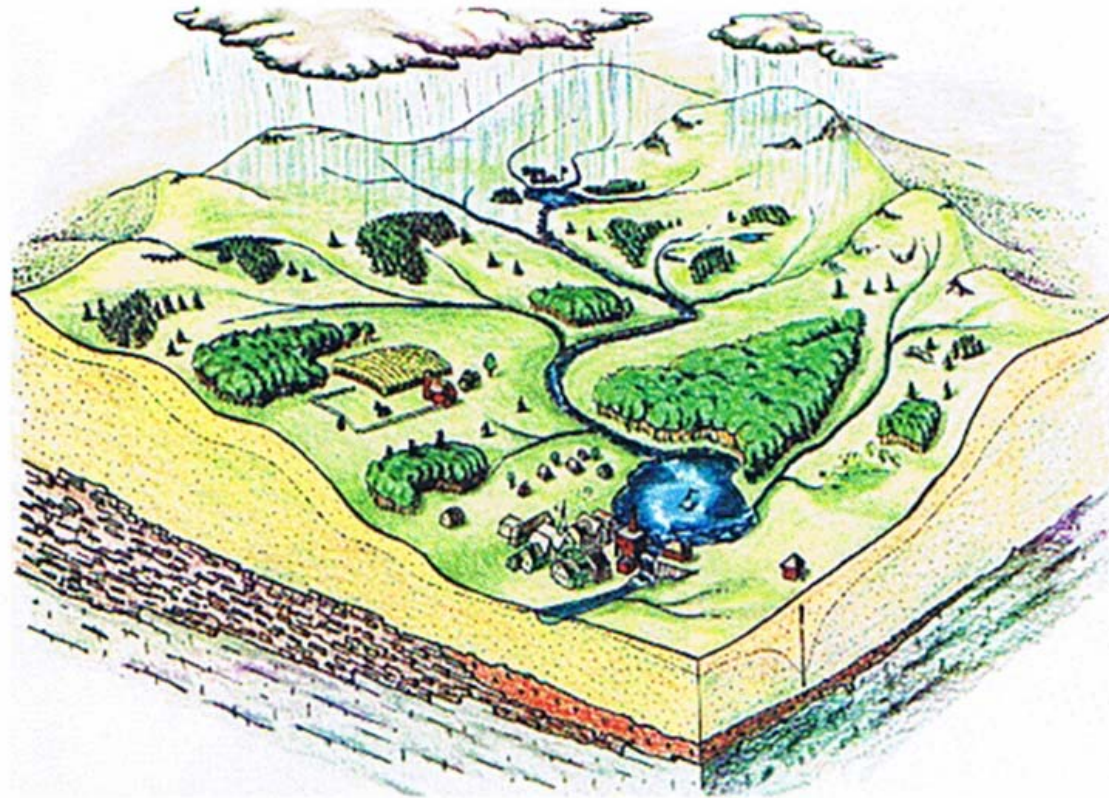
# MRPC/MRWC STORMWATER/LID INTRO WORKSHOP for the MILLERS RIVER WATERSHED:

## A Brief Introduction to the Millers River Watershed

Ivan Ussach,  
Millers River  
Watershed Council  
June 15, 2011  
Gardner, MA



“Healthy Rivers for Healthy Communities”

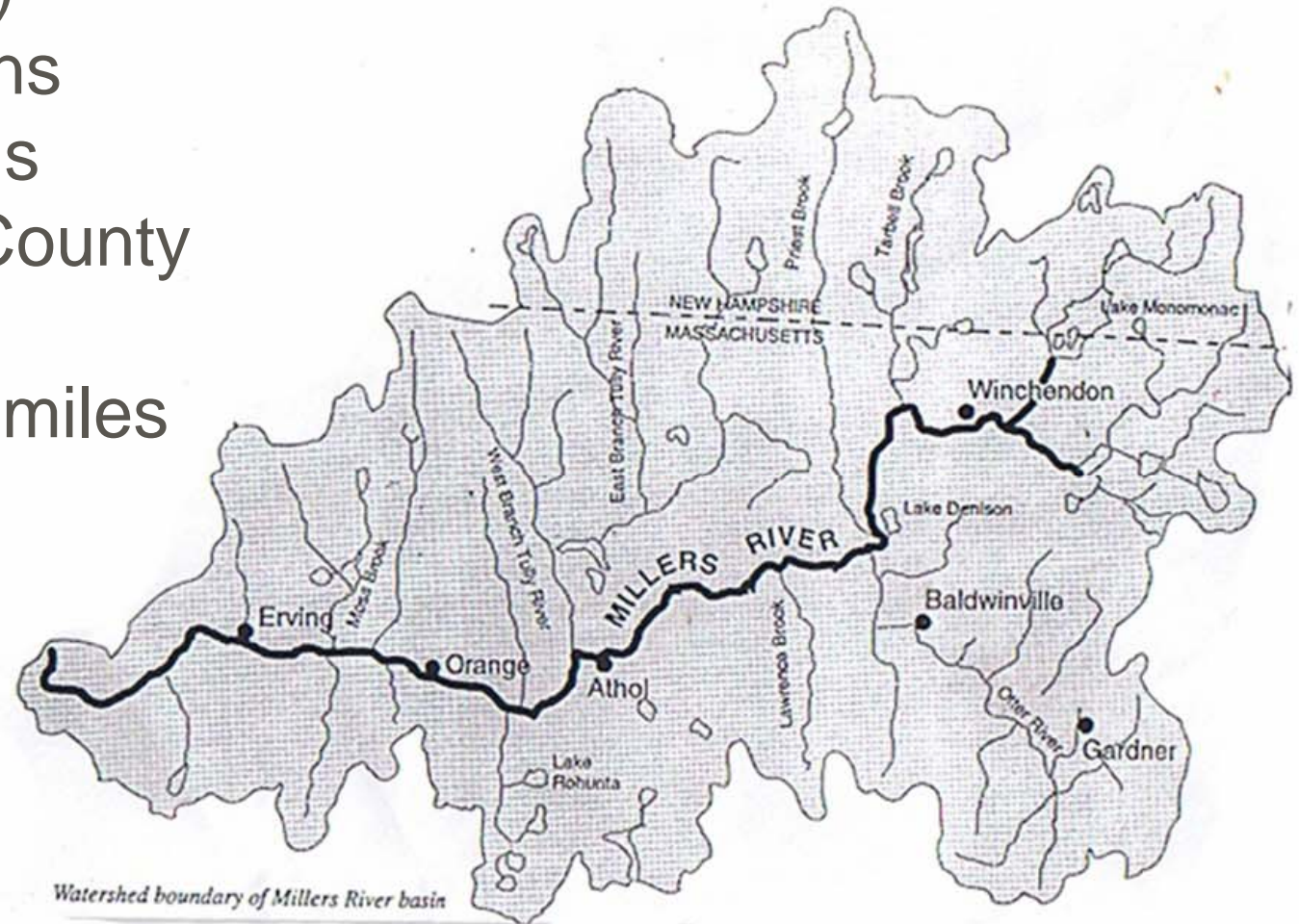


**A TYPICAL RURAL WATERSHED** *This diagram shows how water connects the downtown village to headwater streams. The watershed collects rainfall from all regions of the basin.*

A watershed is simply the drainage basin for a particular body of water: every brook, stream, lake and river has its own watershed. Water moving downhill is either captured, evaporated or collected by that receiving body of water.

# Millers River Watershed

- \* 392 sq. mi.  
(320 in MA)
- \* 17 MA towns
- \* 6 NH towns
- \* 10 Worcester County towns
- \* Millers R. - 51 miles

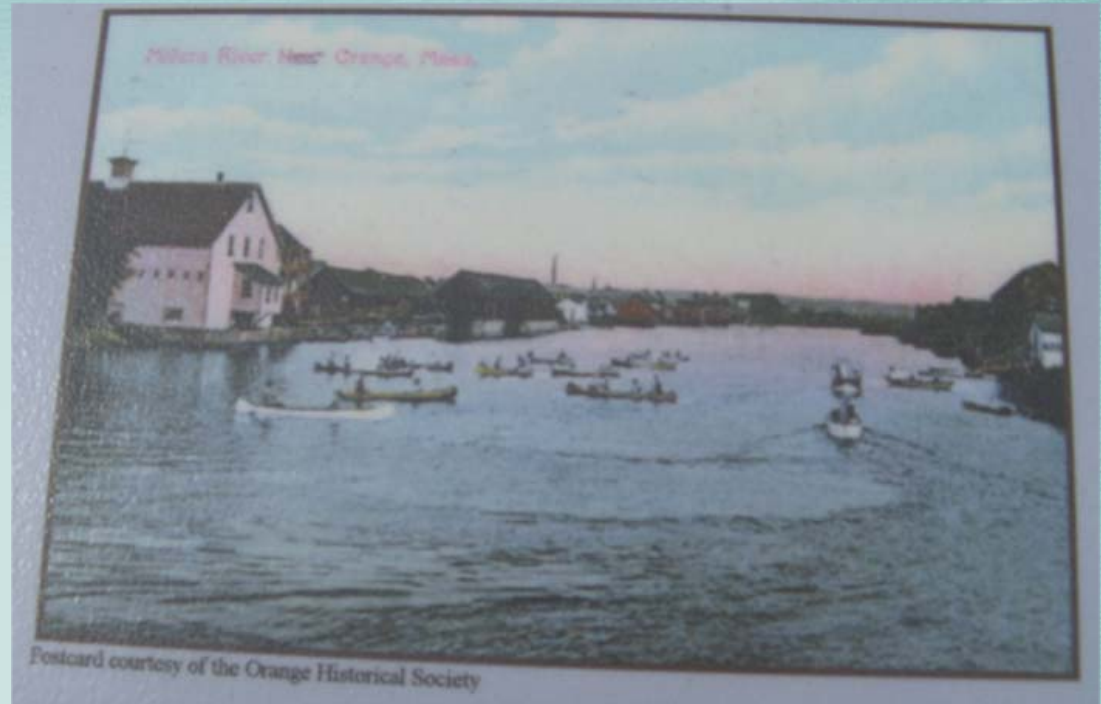


## Neighboring watersheds:

- \* East: Nashua R.
- \* South: Chicopee R.
- \* West: Connecticut R.

An exceedingly brief historical overview of river conditions:

- \* **Pre-European settlement:** River waters full of salmon, trout and other fish
- \* **17th c.:** Settlement ushered in dams and mills that began to change the character and quality of the water.
- \* **1930s and 1940s:** Millers River was still one of the best-stocked trout streams in the state.
- \* **1950s:** Pollution from industrial and domestic sources ruined the river for fishing and recreation. River color varied daily, depending on the dyes used and discharged from upstream paper mills.
- \* **1970s and 1980s:** River water improved dramatically due to permitting and regulation of municipal and industrial discharges (“point sources”).



- \* **Today:** Water quality still affected by various pollutants: toxic substances (PCBs, mercury, chlorinated compounds, heavy metals), erosion, acid rain and **stormwater runoff**.

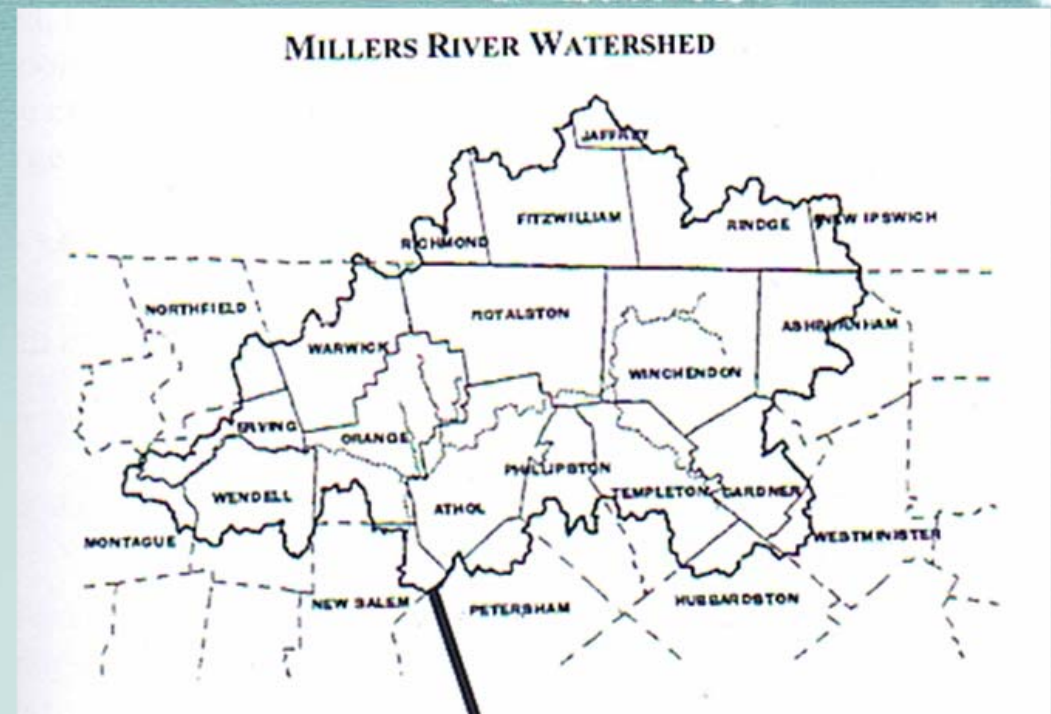
Source: Mass. EOE, c. 2000

Worcester County municipalities **completely or mostly** in Millers River Watershed (5) --with est. 2009 pop.:

- \* City of Gardner (20,972 +1%)
- \* Town of Athol (8,851\*)
- \* Town of Royalston (1,353 +7.9%)
- \* Town of Templeton (7,963 + 17.1%)
- \* Town of Winchendon (12,848\*)

Worcester County municipalities **partially** in Millers River Watershed (5):

- \* Town of Ashburnham (6,070 +9.4%)
- \* Town of Hubbardston (4,479 +14.6%)
- \* Town of Petersham (1,327 +12.5%)
- \* Town of Phillipston (1,787 +10.2%)
- \* Town of Westminster (7,478 +8.3%)



### Franklin County Towns

(7): Erving, Orange, Montague, New Salem, Northfield, Warwick, Wendell

**New Hampshire Towns (6):** Fitzwilliam, Jaffrey, New Ipswich, Richmond, Rindge

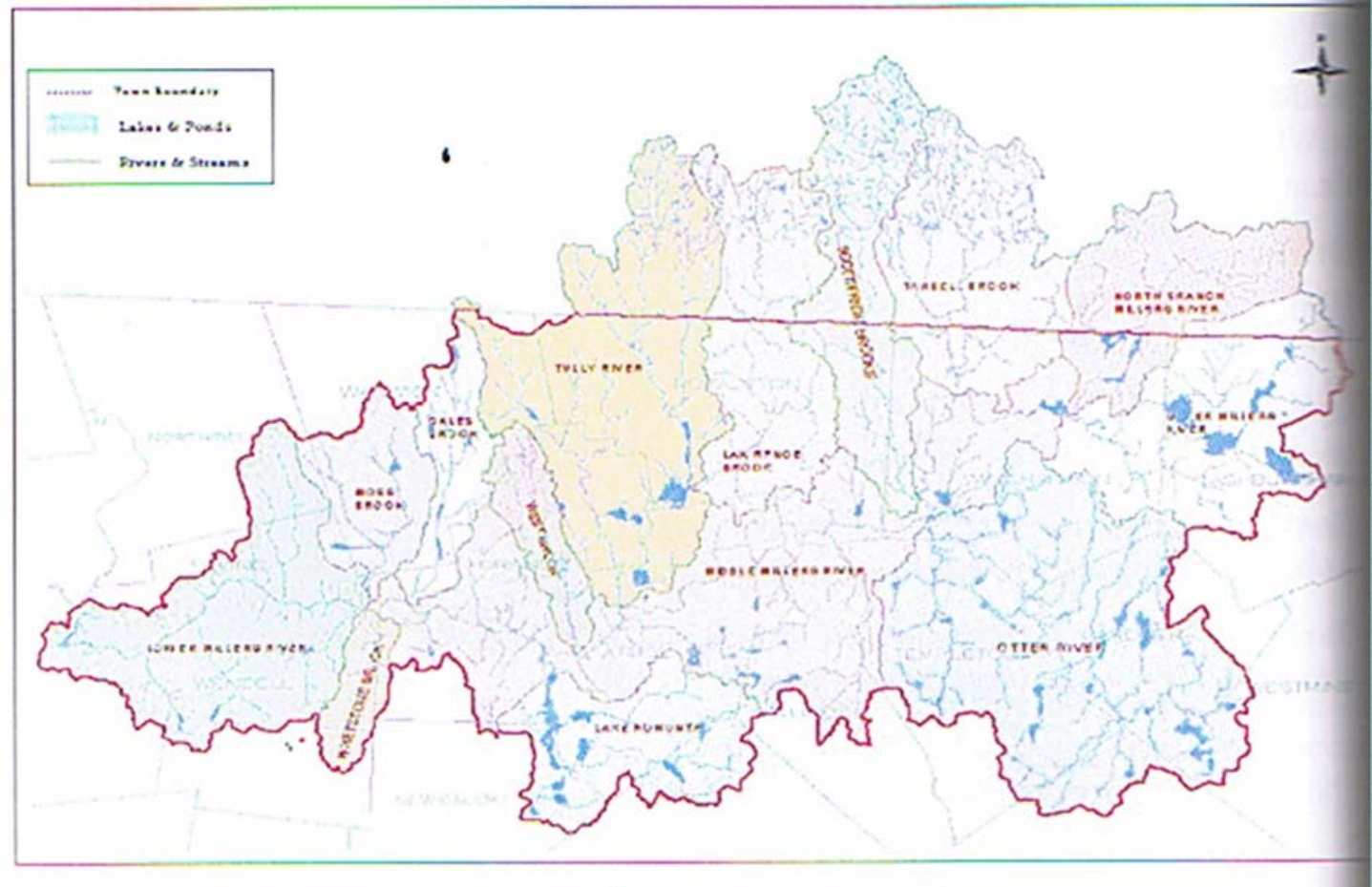
## Millers River Watershed Sub-basins in Worcester County (9):

\* Upper Millers River: Ashburnham, Winch.

\* N. Branch Millers R.: Winchendon

\* Middle Millers River: Phillipston, Winch., Templeton, Athol

\* Otter River: Hubbardston, Gardner, Templeton, Winch., Westminster



\* Lawrence Brook: Royalston  
Winchendon

\* Tarbell Brook:

\* Lake Rohunta: Petersham, Athol

\* Priest Brook: Royalston,

\* Tully River: Royalston, Athol

Winchendon

***Rivers connect communities!***

# Millers River Watershed Council (MRWC): A Growing Investment in Stormwater Management

## ***Streets are tributaries to waterways!***

- \* Annual Meeting Presentations on SWM/LID by FRCOG (2006), Horseley-Witten Consultants (2007), Mass Watershed Coalition (2009).
- \* 2009: Partnered w/MWC and Town of Winchendon for LID Bylaw Development.
- \* 2011: Submission of Comments on Proposed Large Retail Development, Orange MA.
- \* 2011: Development of MWC Statewide Stormwater Reduction Campaign--Summer, 2011 Launch.
- \* 2011-12: Partner w/MRPC on Millers SWM/LID Project.





# Millers River Watershed Council (MRWC):

100 Main Street, Athol, MA

978-248-9491

[council@millersriver.net](mailto:council@millersriver.net)

## Current Program Priorities:

- \* Quantitative Water Monitoring: Bacteria
- \* Education & Outreach: SWM/LID
- \* Recreation: Millers & Otter River Blue Trails

