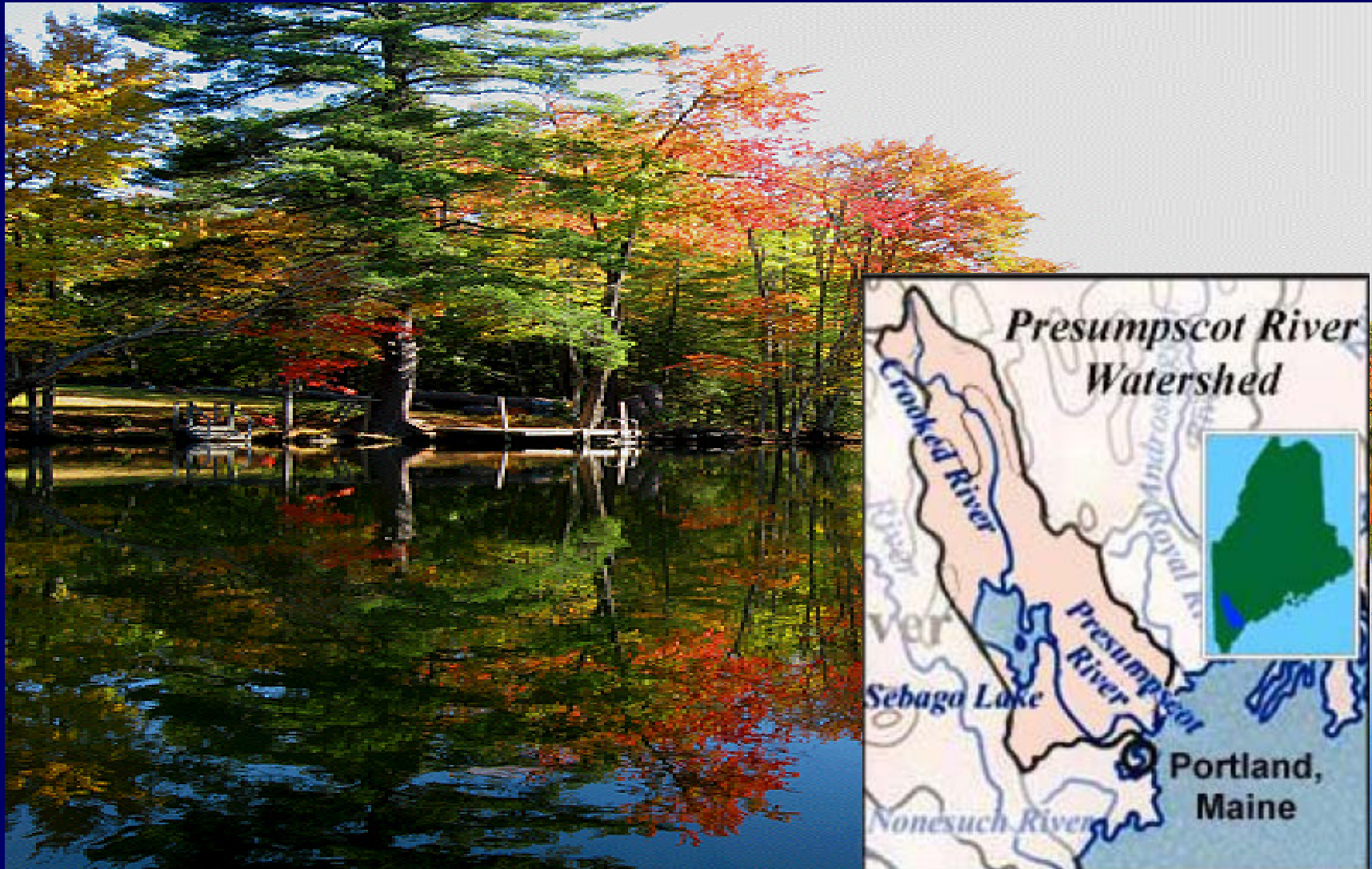


Presumpscot River Watershed Maine Forest Service -Informational Meeting Woodland Stewardship &Financial Assistance



Presumpscot River Watershed
Maine Forest Service - Informational Meeting
Woodland Stewardship & Financial Assistance

Agenda

- Introductions
- Brief introduction to MFS & watershed & grant
- Forests and their importance on water quality
- Forest Management & Stewardship opportunities
- Community Forest opportunities
- Community Wildfire Protection Plans (CWPP)
- Other – Invasive Species meetings, teacher tour
- Q & A

Presumpscot Watershed Grant

- The Maine Forest Service received a two year grant; “Conservation and Protection of Priority Forest Lands in the Presumpscot River Watershed” for \$360,000
- Why? Protecting and managing forests in source watersheds is an essential strategy for providing clean, safe, affordable drinking water.
 - The “Forests, Water and People Assessment” identified Maine’s Presumpscot River watershed as a priority for forest land conservation based on the percent of unprotected private forest lands within the watershed, its importance to public drinking water supplies, and the forecast high rate of development pressure by 2030

Clean Water – One of Many Forest Products

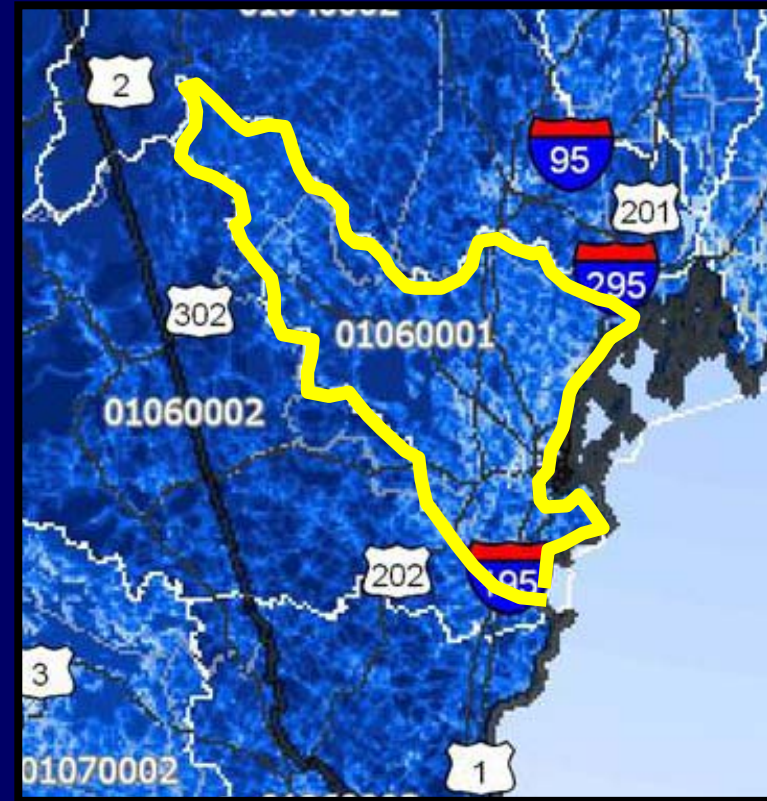
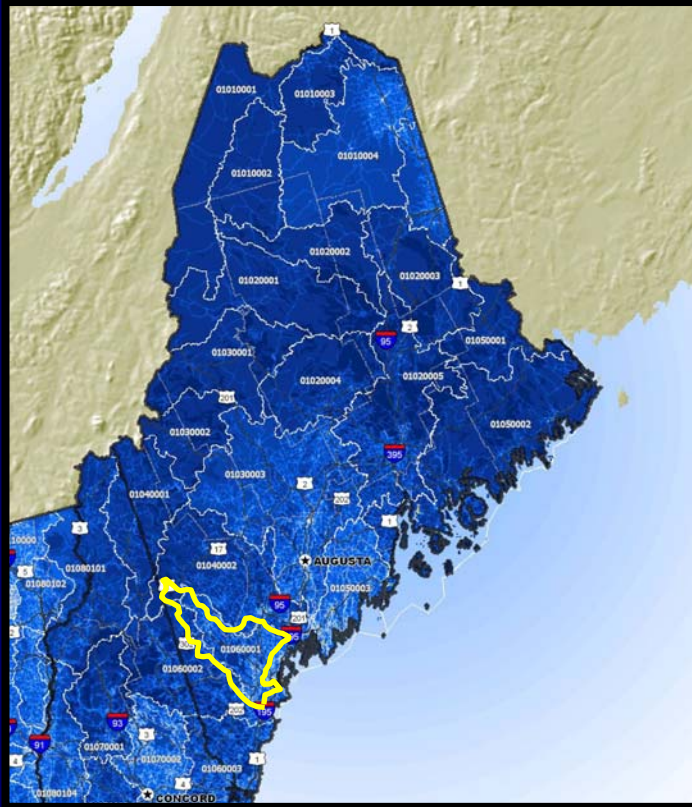


Keith Kanoti

Water Resources Forester
Maine Forest Service

Presumpscot Watershed Meetings

Maine's Forests Produce Excellent Water Quality



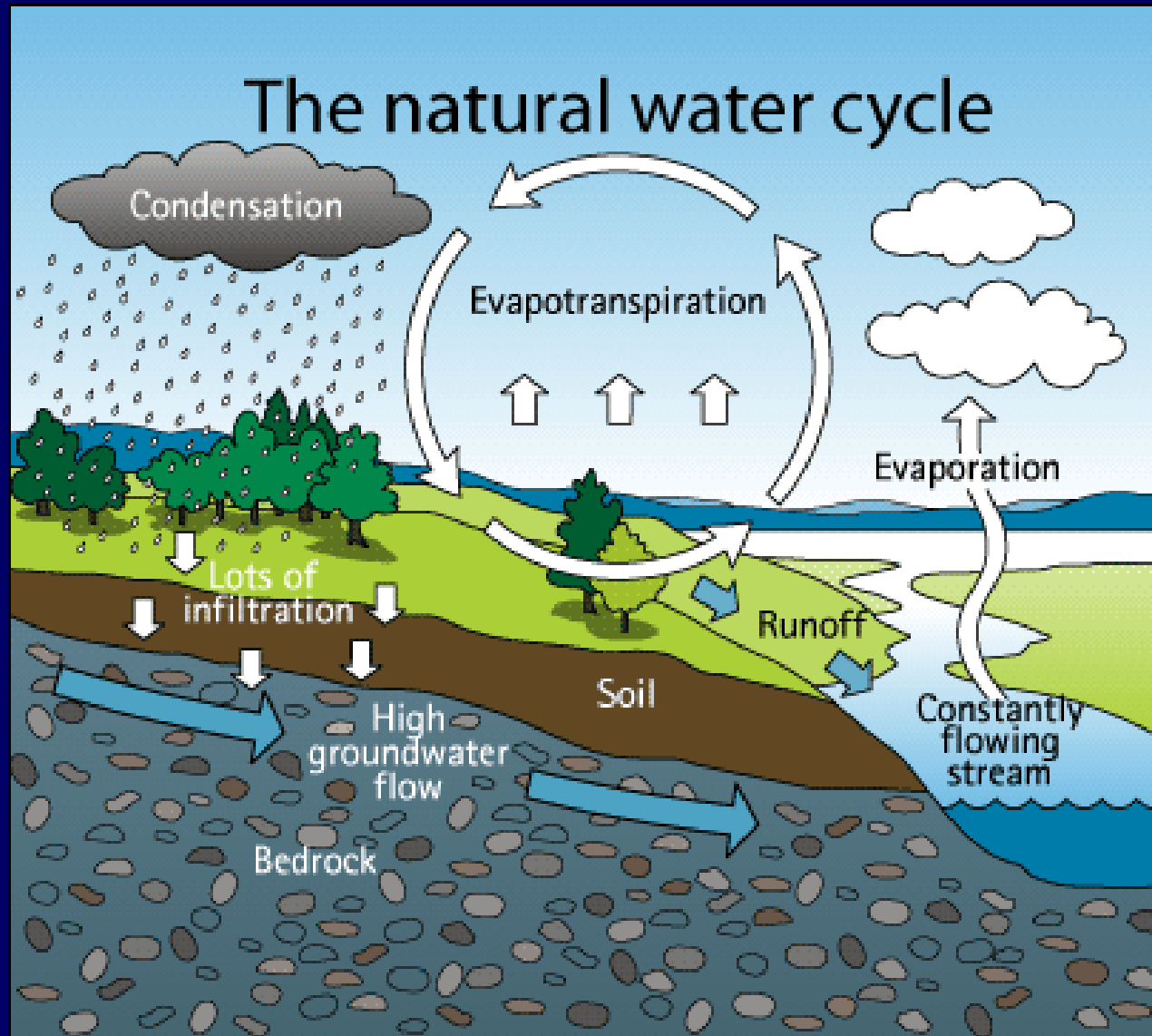
“Forests provide the best land cover when it comes to protecting soil, moderating streamflow, supporting healthy aquatic systems, and sustaining good water quality.”

Barnes et al. 2009 Forests Water and People

These Maine Forests

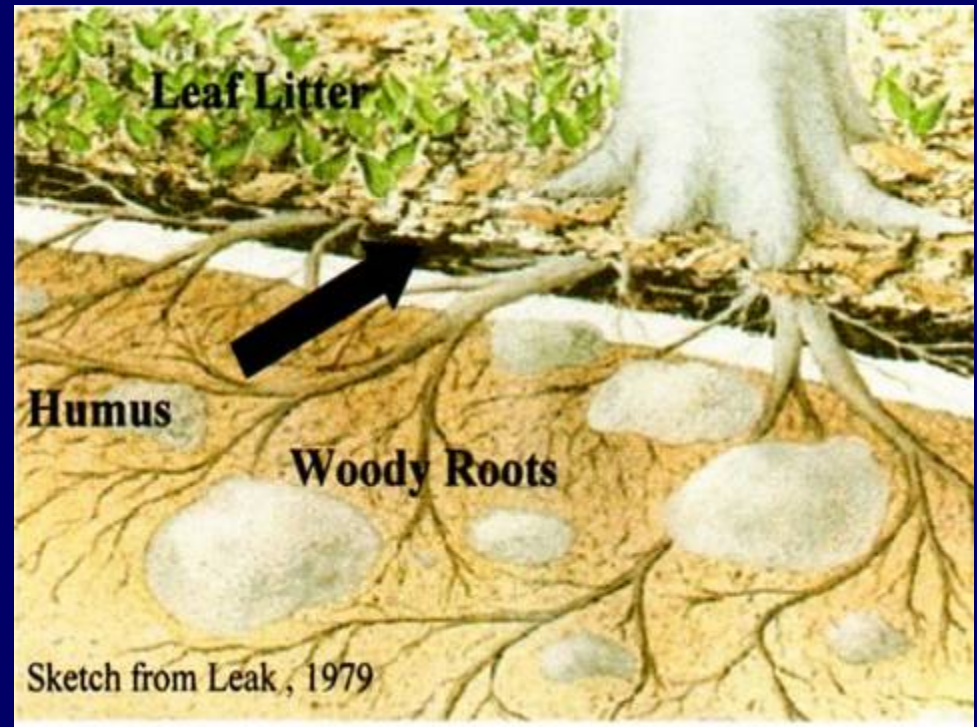
- Cover about 89% of Maine
 - About 80% of the Sebago lake watershed (Portland Water Supply)
- Are 94% privately owned
- Have about 6.5 million cords of wood harvested from them annually

Forests and the Water Cycle

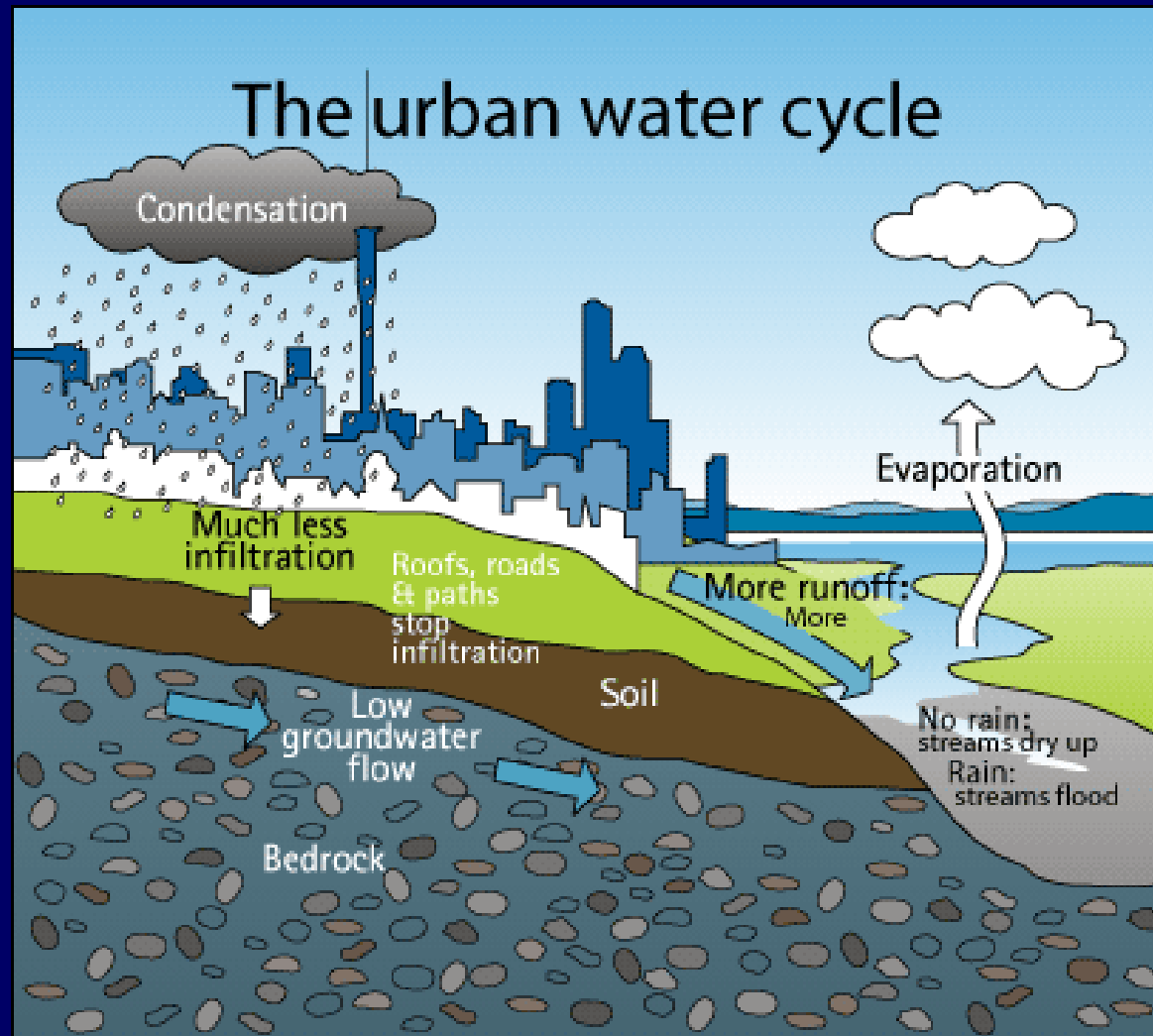


The Forest Floor

- Slows water down and allows it to infiltrate into the soil
- Covers exposed soil limiting or preventing erosion



Conversion to Non-Forest



Effects on Stream Flows

- Less interception
 - More water reaches the ground
- Forest floor replaced by surfaces less able to infiltrate water
 - Water runs off more quickly
- Less ground water recharge

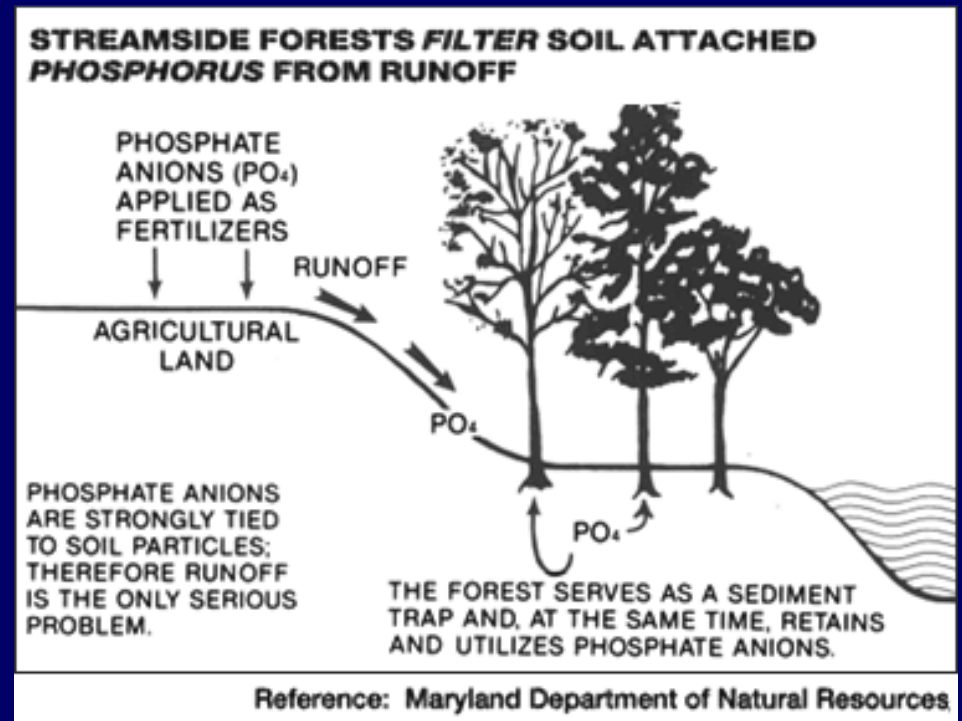
This Knowledge Isn't New



**First “Protection Forest” established in Switzerland
in 1342**

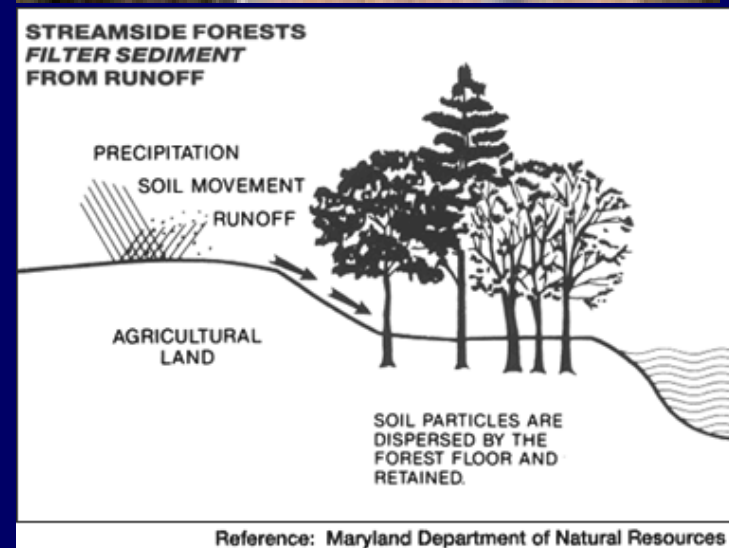
Forests Act as Pollutant Filters

- Stream side vegetation can remove metals, nutrients, and other chemicals from runoff via plant uptake, and by facilitating bacterial transformation.
 - Studies have shown that buffers along streams can reduce Nitrogen and Phosphorous pollution by 80-90%



Surface Pollutants

- Sedimentation – A major pollutant
 - Canopy and forest floor cause moving water to lose energy
 - Means less energy to erode soil into streams
 - Reduced peak stream flows = less erosion along stream banks



Different Watersheds in Spring Flood



**Developed
Watershed**

**Forested
Watershed**



Forests Reduce Public Drinking Water Costs

- For every 10% increase in forest, treatment costs are reduced 20%.
- Many water supplies with healthy forests in the watershed do not need EXPENSIVE filtration plants!
 - Portland ME, New York City
- Water supplies with <75% forest often require treatment plants

**Protecting the Source: Land Conservation as a Drinking Water Protection Tool by Caryn Ernst, Trust for Public Land et al, 2003*

Forest Management

- Forests can be managed for other products and still provide clean water
- The same forests that provide Maine's clean water also sustain the forest products industry.



Timber Harvesting vs. Removal of Forests

- Timber harvesting is temporary – Trees grow back
 - Properly planned timber harvesting leaves the forest floor intact
- Removal of trees for development is not forest management
 - Development replaces the forest floor and canopy with roofs, lawn, roads etc.

Stewardship



A path, not a destination

Elements of Stewardship

- Informed decisions
- Working with professionals
- Written planning
- Personal satisfaction, pride of ownership
- Protection of values
- Best management practices
- Legacy



Working With Professionals

- MFS District Foresters



- Licensed private foresters
- Professional Timber Harvesters

Forest Management Planning

- What you want: goals, vision for future
- What you have: inventory, potential
- What can be done: recommendations, practices, options
- Results
- Next steps

Priority WoodsWISE Plans

- ✓ Application period ends January 31, 2011
- ✓ Stewardship Forester
- ✓ Ranking
- ✓ Reimbursement: 50% of cost up to \$500 (10-50 acre) or \$8/acre
- ✓ 1 Year to complete
- ✓ EQIP Eligibility, other benefits

Town Forest Management

- 34 towns own woodlands in the watershed
- 50/50 cost share for available for management on public lands
- Governments, non-profits, schools eligible
- Different application process than WoodsWISE

Conclusion

- Clean water is one of many products produced by Maine's forests
- The more forests in the watershed the better water quality is likely to be

