

Why Volunteer Monitoring Makes Sense

Scoping Meeting: *Involving Tribal
Colleges and Universities in Volunteer
Monitoring*

June 9, 2009



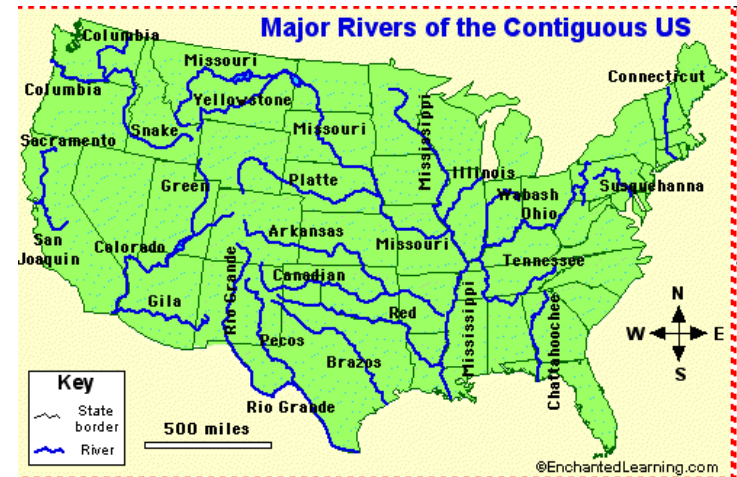
What is Volunteer Monitoring?

- 💧 Unpaid people who willingly monitor various environments.



Why Monitor our Waters?

- 💧 3,500,000 rivers miles in the USA
- 💧 Thousands and thousands of lakes and ponds
- 💧 Millions of acres of wetlands
- 💧 ...
- 💧 They're where we recreate.
- 💧 They're where our children play.
- 💧 They're in our communities.
- 💧 They may be our drinking water or affect our drinking water quality. Basically...
- 💧 We care.

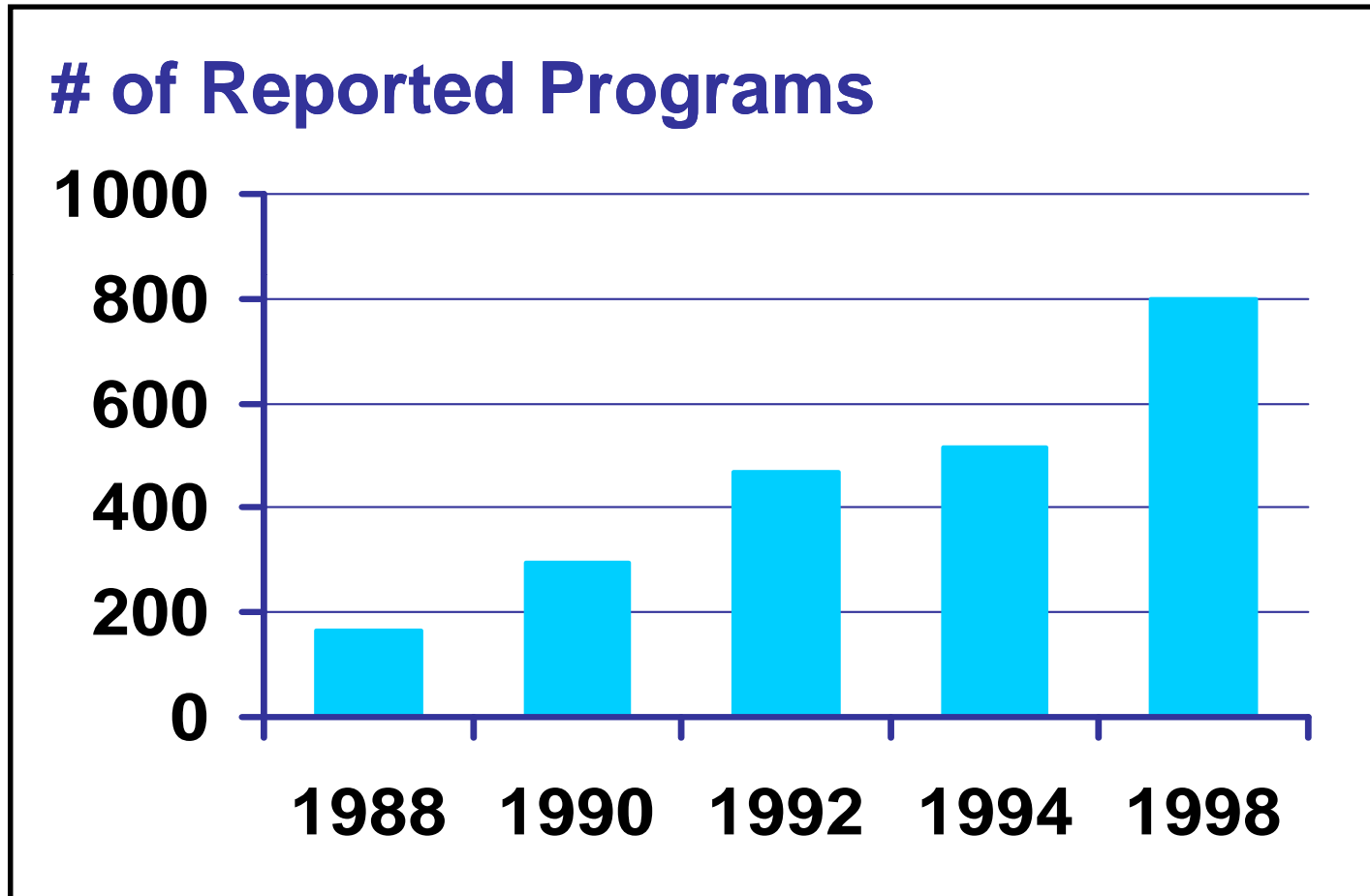


Why Monitor Our Waters?



~ Cassie Champion

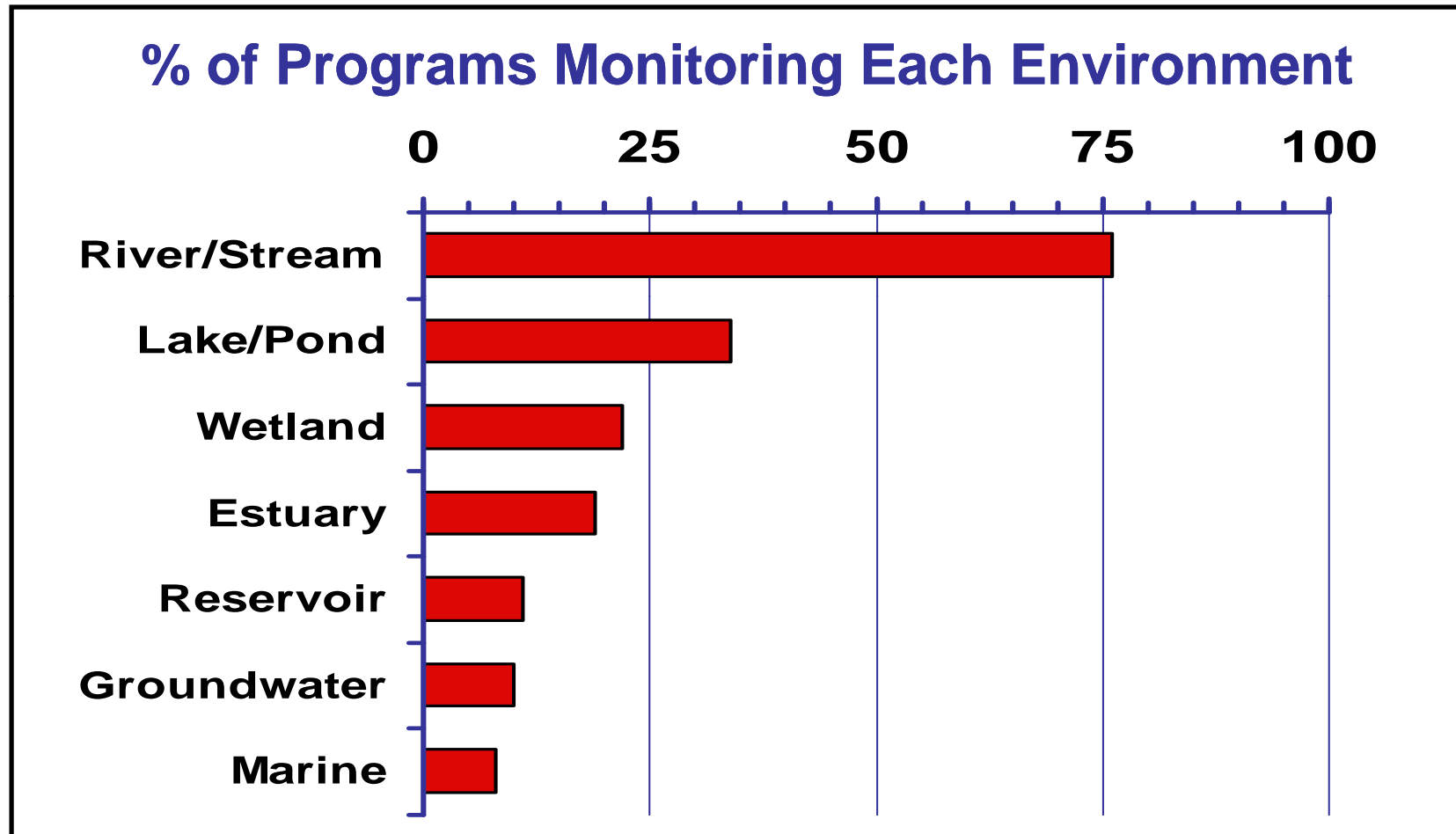
Volunteer Monitoring Came of Age in the 1990s*



* Nat'l Dir. of Envir. Mon. Progs. - 5th Ed.



Ecosystems Monitored



* Nat'l Dir. of Envir. Mon. Progs. - 5th Ed.

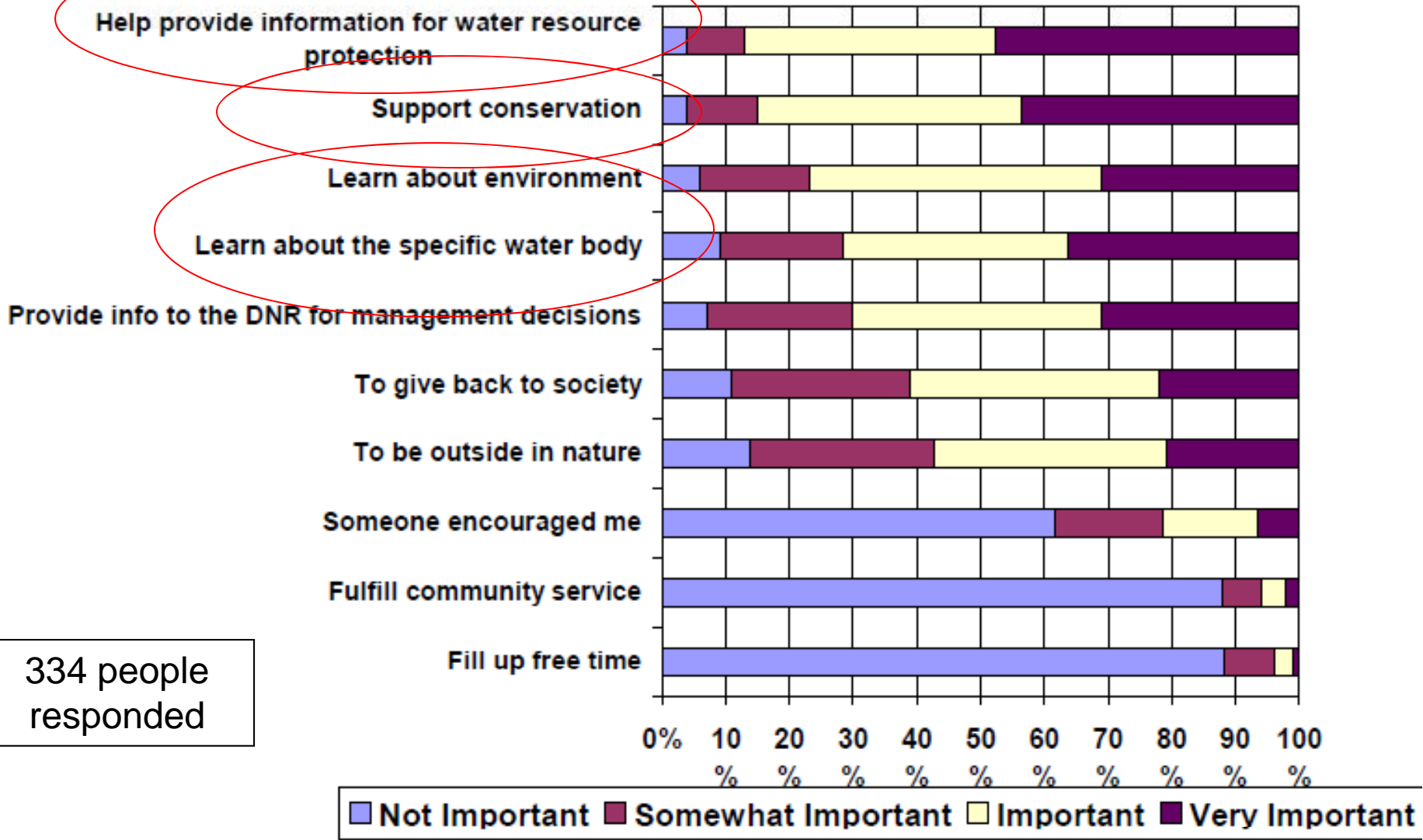


Why Monitor our Waters?

- 💧 To educate ourselves about our water
- 💧 To assess ecosystem health and human use
- 💧 To detect early warnings of change
- 💧 To provide insight into the causes of problems
- 💧 To tell us whether we've achieved our management goals



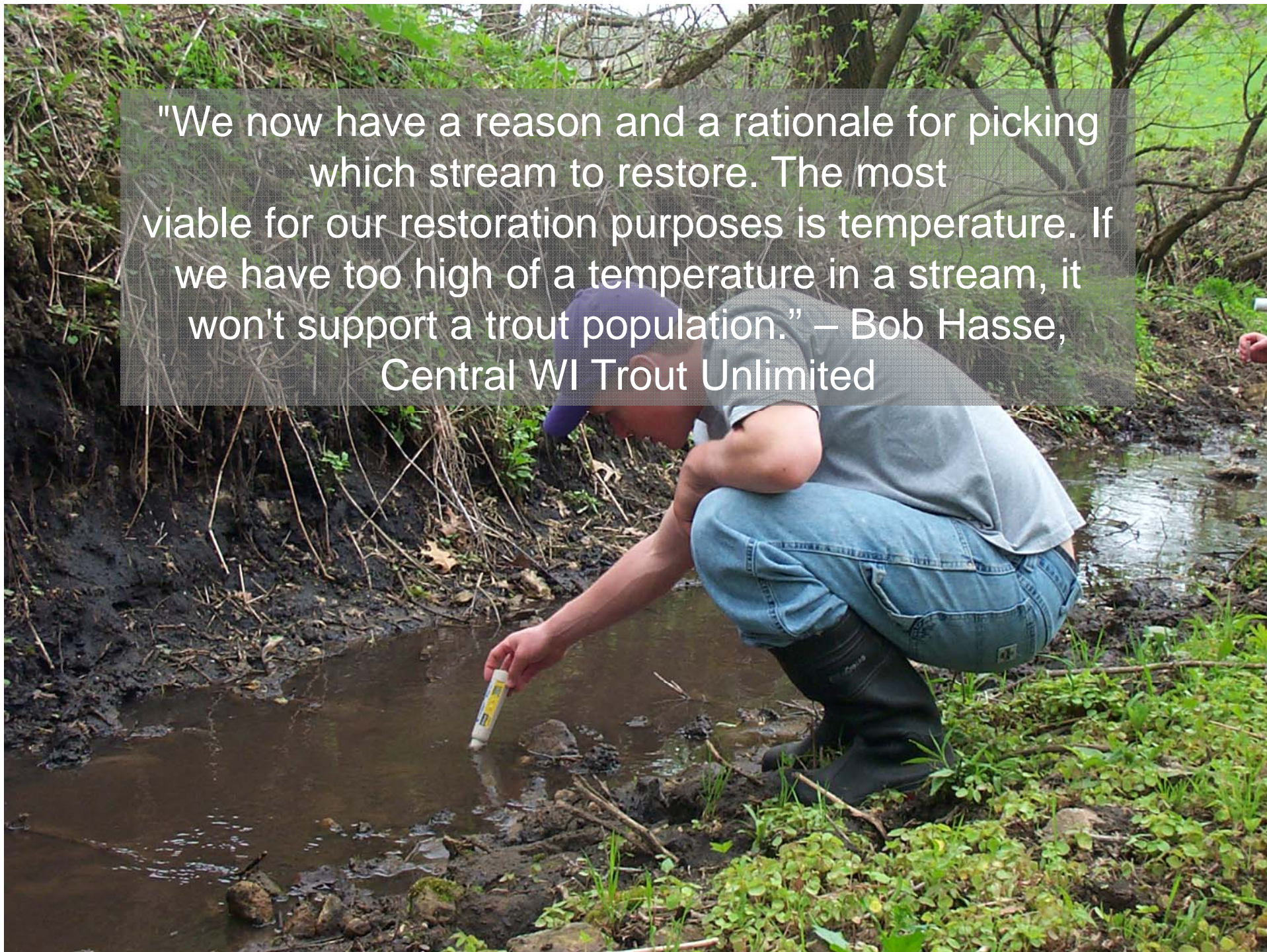
6a. Importance of Reasons to Train and Possibly Monitor



334 people responded



"We now have a reason and a rationale for picking which stream to restore. The most viable for our restoration purposes is temperature. If we have too high of a temperature in a stream, it won't support a trout population." – Bob Hasse, Central WI Trout Unlimited



Volunteer Monitoring Engages Citizens in Watershed Protection and Enhancement

- ◆ Helps communities make informed decisions and improve water quality



Alabama Water Watch

- 💧 Volunteers assisted with data collection to enable listing of watercress darter as endangered
- 💧 Now monitor water quality to describe water quality where the darters are found



Wisconsin's Volunteer Stream Monitoring Program

- ◆ In 2003, surveyed 155 experienced monitors and 105 new monitors
- ◆ We assessed:
 - Frequency, duration, and type of involvement with volunteer monitoring
 - Feeling of connectedness to others with interest in natural resources
 - Extent of participation in resource management-related political activities
 - Socioeconomic information



Average Results

Demographic	Experienced volunteers	New volunteers	US Population
Age (years)	46	42	35
Male (%)	63	50	49
Education (% college +)	75	63	23
Household income (\$1000s)	50-75	50-75	42
Months in WAV	20	--	



Wisconsin's Volunteer Stream Monitoring Program

- ◆ Experienced monitors felt more connected to others in their community who were also concerned about natural resources ($p < .001$)
 - Experienced monitors knew average of 9 others
 - Inexperienced monitors knew average of 4 others



Wisconsin's Volunteer Stream Monitoring Program

- Experienced monitors were more likely to participate in political action events
 - Experienced: 5 political events per year
 - New: 4 political events per year
- Participation in political events increased with length of time in the program ($p < 0.001$, $r^2 = 0.157$)



Wisconsin's Volunteer Stream Monitoring Program

- Types of political participation by experienced volunteers:
 - Engaged in personal reading or research on water issues (72%)
 - Talked with neighbors about water or other resource issues (72%)
 - Attended a public meeting to discuss water or other resource issues (63%)



URI Watershed Watch

" We have actually seen volunteers proudly list their monitoring activities as a reason to elect them to public office."

Linda Green, URI Watershed Watch



Volunteer Monitoring Engages Citizens in Watershed Protection and Enhancement

- ◆ Obtains long-term data or new data on water bodies that otherwise may go unmonitored due to budget or staffing constraints



Sierra Club River Prairie Group

Volunteers conducted a decade of monitoring and released a study of emerging contaminants in metro Chicago rivers.



Streamkeepers of Clallam County, Washington

Volunteers' data were used to list impaired waters based on long-term macroinvertebrate studies.



Volunteer Monitoring Engages Citizens in Watershed Protection and Enhancement

- ◆ Captures the excitement and attention of local communities and citizens to water quality issues



Delaware Riverkeeper and New Jersey Water Watch Networks

Over 70 people volunteered to watch for migration of oil into tidal estuaries and creeks following an oil spill. The organizations now developed a toolkit for citizen monitors.



Volunteer Monitoring Works for Colleges and Universities

- ◆ Creates two-way communication between College/University and the public
- ◆ Heightens visibility and credibility of University education programs
- ◆ Builds strong community partnerships



Volunteer Monitoring Works for Colleges and Universities

- ◆ Unique capacity to educate and motivate citizens for water quality protection
- ◆ Involve a broad spectrum of the community
- ◆ Enable communities to make informed decisions
- ◆ Have a multiplier effect



Volunteer Monitoring Programs Make A Difference

- 💧 Identify & solve problems locally
- 💧 Involve people in real science
- 💧 Raise awareness
- 💧 Provide information on places where no one else is looking
- 💧 Create an informed constituency
- 💧 Promote individual actions for water quality protection

