Reducing phosphorus use in lawn care: Getting information to the right place

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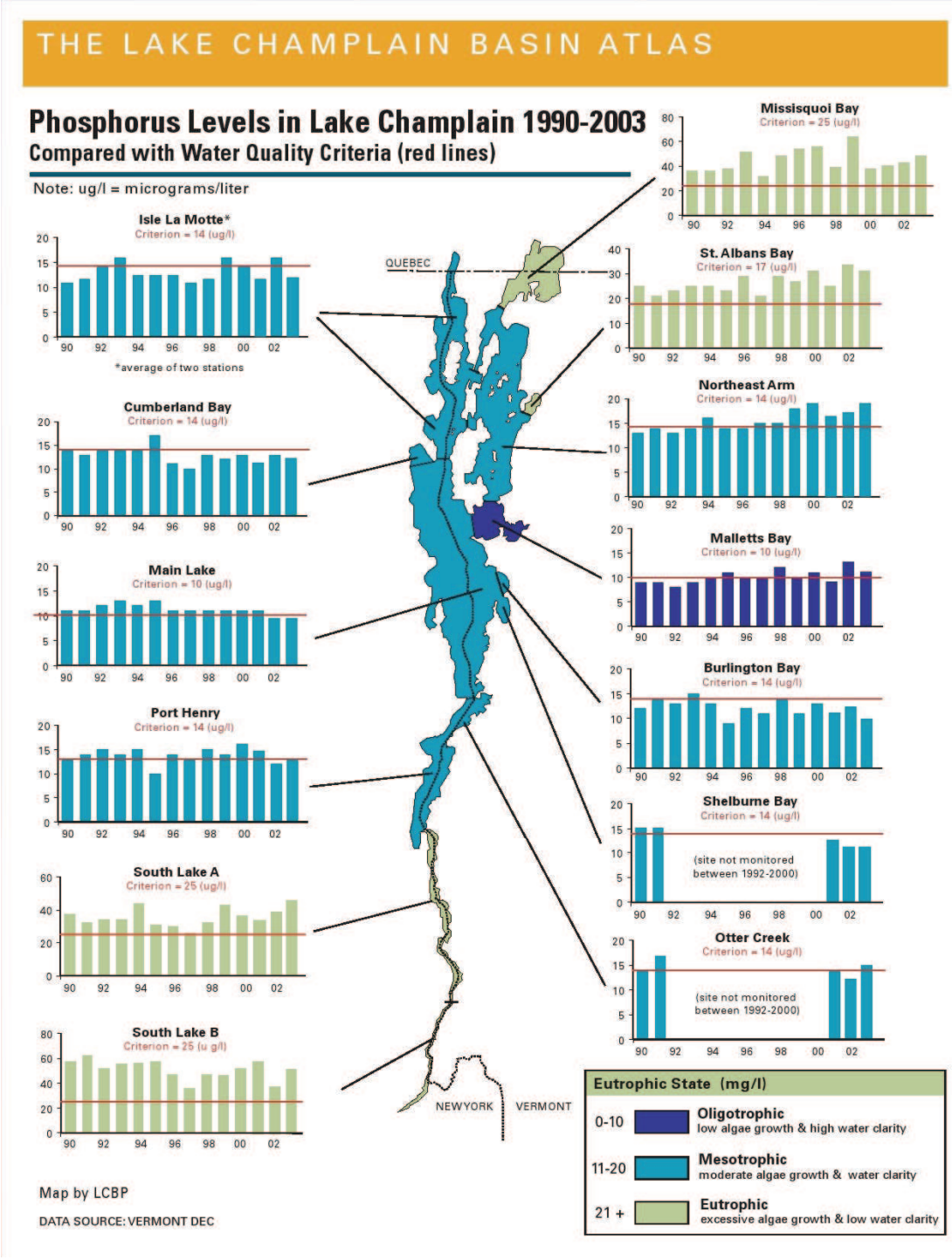

- Lake is overloaded
- Drives noxious and toxic algal blooms
- Basin under P TMDL
- 27% (80 mt/yr) input reductions

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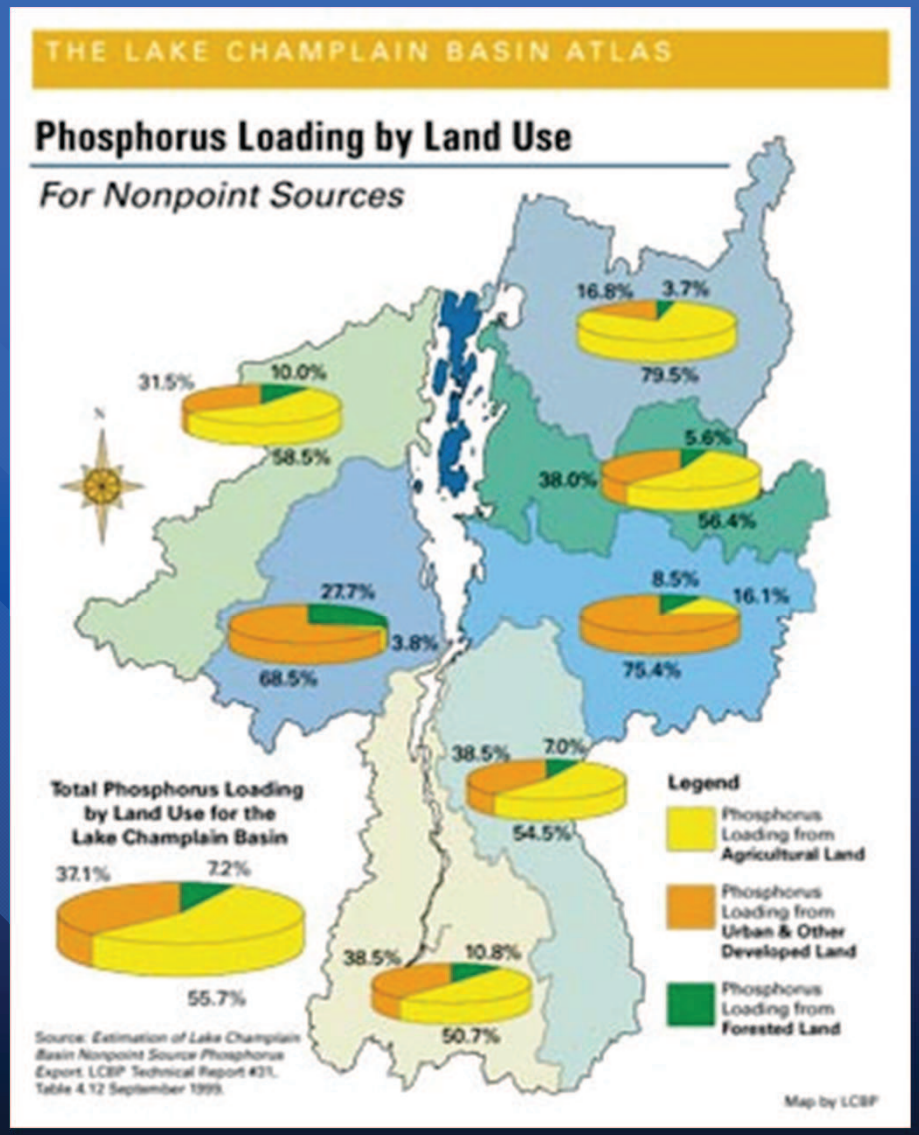
Phosphorous in Urban Storm Water

- Urban areas are 5.6% of lake watershed
- Contribute 37% of total annual P load
- Over 75% of P load is urban in some basins
- Recognized as a priority lake management concern in 1996



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The Problem: Residential Fertilizer

- Phosphorus in non-farm/residential fertilizer is a principal source
- In 1996, Vermont was one of three states with greater than 30% non-farm fertilizer use
- 2003: 60% of lawns tested statewide and 76% of Chittenden County had an excess of phosphorous

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Why the Coalition?

- Lots of homeowner education activity, but ineffective
- **Focus**: Dispersed, uneven
- **Educators**: lacked training, advocacy based, did not know audience
- **Message**: unclear, competing issues, did not resonate
- **Methods**: inefficient (effort/cost per unit contact hour), ineffective (measurable behavior change)

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Green Lawn Coalition

- Founded in 2002
- Goal: Science based information and education on sustainable lawn care practices
- Long Term Objective: Reduce inputs of fertilizer, pesticides and pathogens in developed areas to storm water runoff.

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Strategies

- Focus on phosphorous
- Treat P fertilizer as a commercial product
- Social marketing to understand consumer behavior, effect change by decision makers
- Regional scope and objectives
- …but with an "All outreach is local" mindset

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Decision Makers

- Homeowners
- Resident associations (condos, apartments)
- Businesses and non-residential entities
- Service providers
- Municipalities
- State and local officials: elected and staff

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Homeowners:

- Male
- 29-45
- DIY

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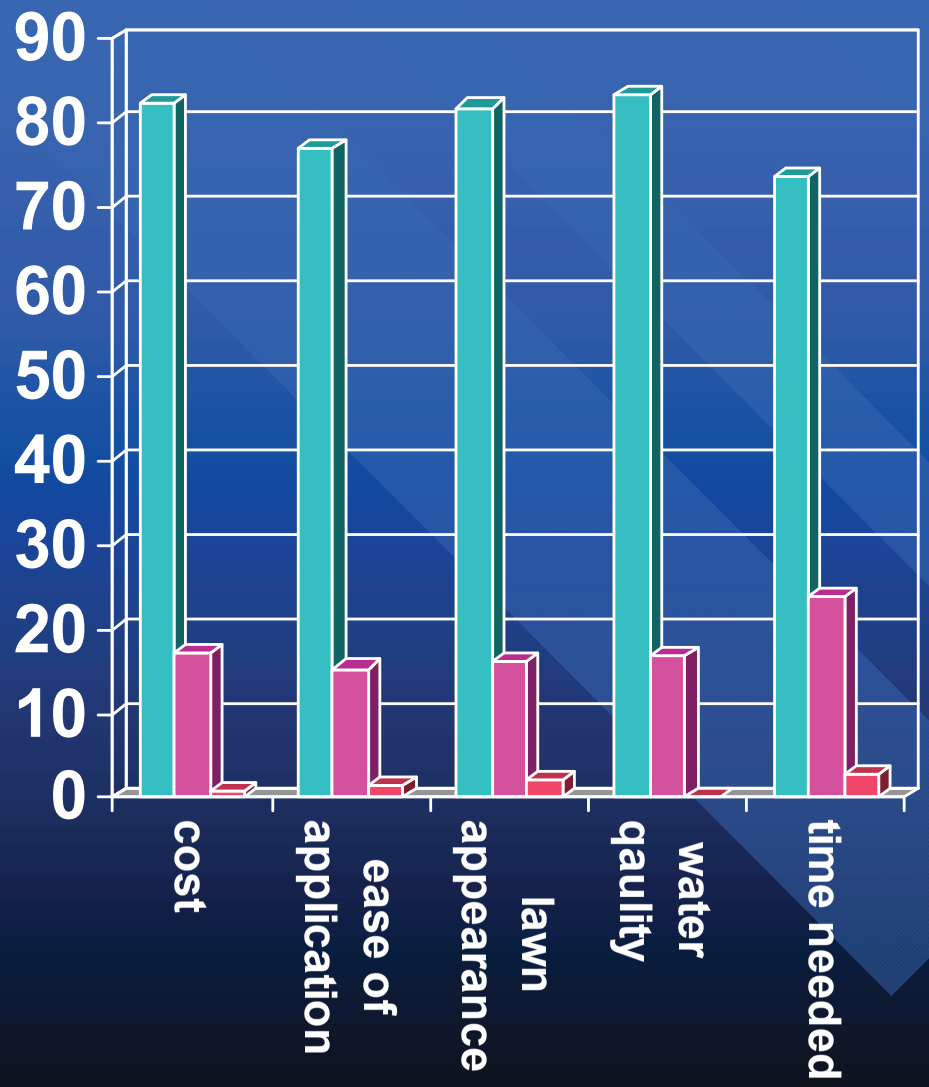
What are they responsive to? Drivers of Change



- agree/strongly agree
- neutral
- disagree/strongly disagree