

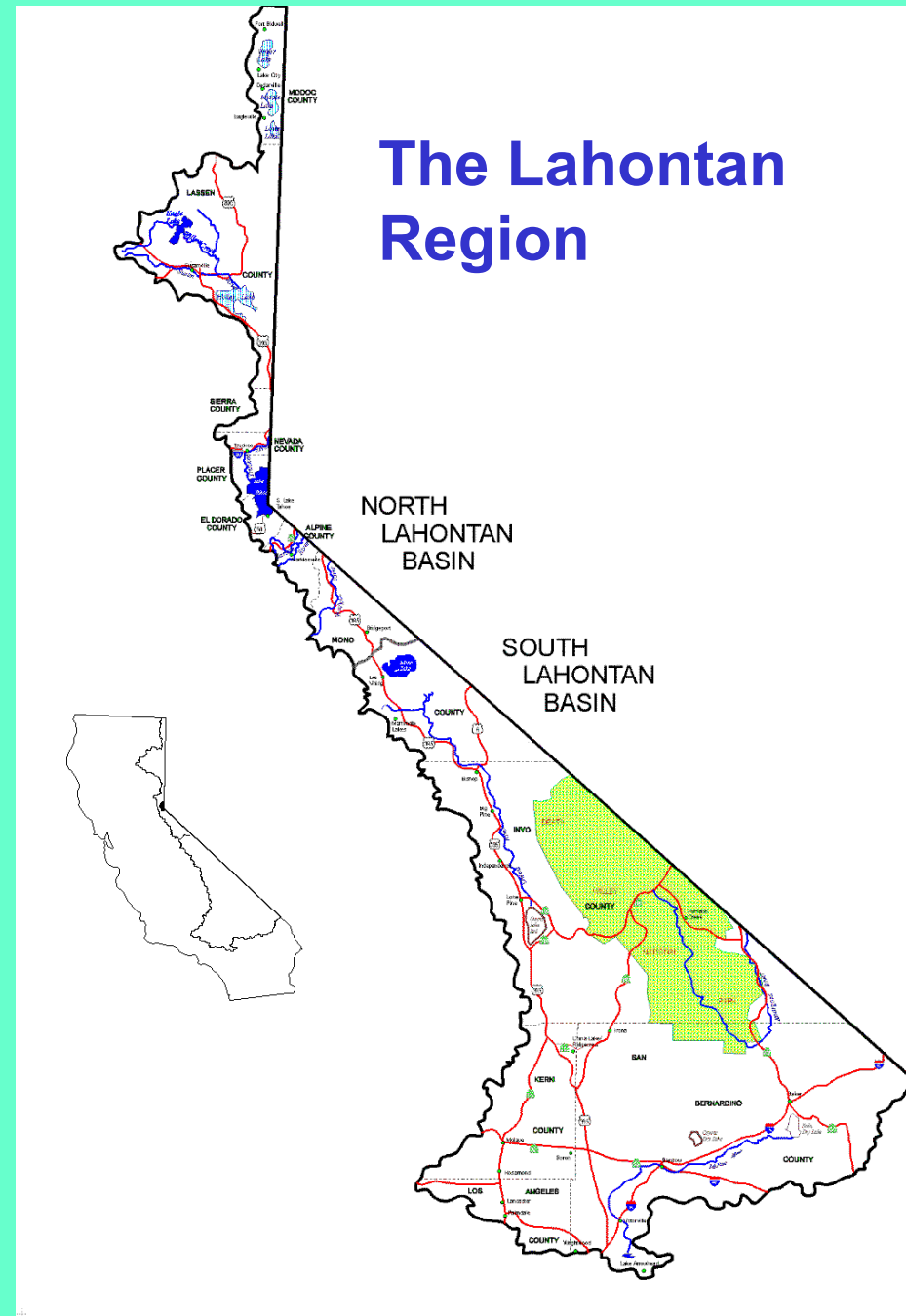
HERBICIDE USE, WATER QUALITY, AND REGULATORY CONSIDERATIONS

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Presented at California Exotic Plant Pest Council symposium

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The Lahontan RWQCB is one of nine California Regional Water Quality Control Boards under the umbrella of the State Water Resources Control Board and the California Environmental Protection Agency



Regional Water Quality Control Boards

- **Develop "basin plans" for their hydrologic areas**
- **Impose requirements/issue waste discharge permits**
- **Take enforcement action against violators**
- **Monitor water quality**

The Water Quality Control Plan for the Lahontan Region— “Basin Plan”

- **Designates beneficial uses for water bodies**
- **Contains numeric and narrative standards (“water quality objectives”) to attain/protect those beneficial uses**
- **Includes Implementation Plan**

Basin Plan Pesticide Provisions

Regionwide water quality objectives:

- no detectable pesticide residues in water
- no increase in sediment pesticide concentrations in surface waters
- no increase in bioaccumulation

Waste discharge prohibition:

- No waste discharge may violate water quality objectives.

California Toxics Rule

Numeric standards (water quality criteria) for priority pollutants promulgated by US EPA in accordance with CWA Section 303(c)(2)(B).

Implemented by “State Implementation Policy”

Pesticide active ingredients on priority pollutants list: acrolein, copper

Statewide Aquatic Pesticides General NPDES Permit

- **Adopted by SWRCB July 19, 2001. Expires January 31, 2004.**
- **Allows use by “public entities” for resource or pest management (protecting waterways or public health).**
- **Allows pesticide use where previously prohibited by Basin Plan.**
- **Coverage requires only submittal of a form to the SWRCB, unless RWQCB issues Notice of Exclusion denying coverage**

Statewide Aquatic Pesticides General NPDES Permit

Notable Provisions:

- **Requires dischargers to identify/implement BMPs and evaluate alternatives to pesticides**
- **Requires discharger to submit, upon request, any additional information to RWQCB to evaluate eligibility for permit coverage**
- **Requires dischargers to submit a Monitoring Plan to RWQCB for approval**

Statewide Aquatic Pesticides General NPDES Permit

Notable Provisions (continued):

- Exempts dischargers from meeting water quality standards for priority pollutants
- Exceeding water quality standards for **non**-priority pollutants is not a violation if:
 - Regional Board is notified
 - BMPs were implemented, and discharger proposes additional BMPs and implementation schedule for Regional Board approval

Tahoe Regional Planning Agency (TRPA)

TRPA Code sub-section 81.6.A(3) states:

“No detectable concentration of any pesticide shall be allowed to enter any stream environment zone unless TRPA finds that application of the pesticide is necessary to attain or maintain the environmental threshold standards.”

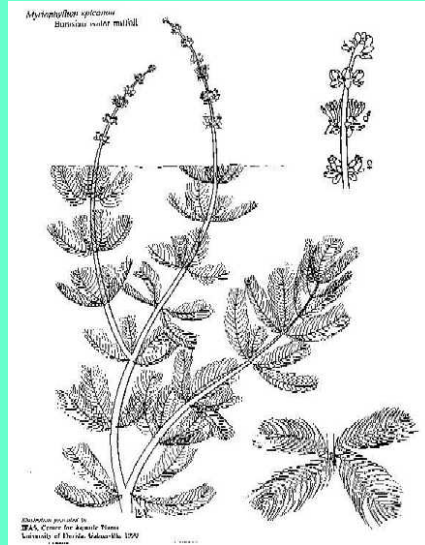
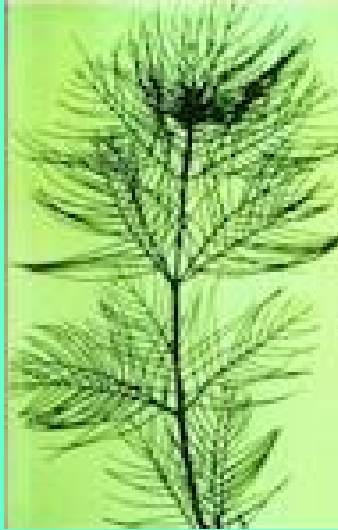
Best Management Practices (BMPs) to Protect Water Quality

- **Use alternatives to herbicides when feasible**
- **Minimize herbicide use**
- **Avoid persistent or easily mobilized herbicides**
- **Use buffer zones near surface waters**
- **Avoid applying in windy conditions/prior to storms**
- **Avoid use in areas with shallow groundwater**

Recent Lahontan RWQCB Involvement in Herbicide/Pesticide Use

- **Proposed pilot-scale study of herbicides for Eurasian watermilfoil control in Tahoe Keys**
- **Tahoe Basin Weed Coordinating Group agreement**
- **Alpine Co./Upper Carson River Watershed Weed Management Group**
- **Herbicide provisions of Timber Harvest Waiver Policy**
- **Rotenone use by Calif. Dept. of Fish & Game**

Eurasian watermilfoil (*Myriophyllum spicatum*)



The Tahoe Keys



Optimal growth conditions:

- shallow areas
- minimal slope
- abundant light
- protected from wind/wave action
- nutrient rich organic sediments