

Presentation to State Water Board

**2010 Integrated Report
Clean Water Act 303(d) List
June 15, 2010**

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Presentation Outline

State Water Board Listing Policy

Review data

Future actions

Recommendation



State Water Board Listing Policy

Provides Consistency – use of
statistical approach

Weight-of-evidence approach



6.1.5 Data Quantity Assessment Process

Before determining if water quality standards are exceeded, RWQCBs have wide discretion establishing how data and information are to be evaluated, including the flexibility to establish water segmentation, as well as the scale of spatial and temporal data and information that are to be reviewed.

6.1.5.1 Water Body Specific Information

Data used to assess water quality standards attainment should be actual data that can be quantified and qualified. ... In order to be used in developing the lists:

- If applicable and available, environmental conditions in a water body or at a site must be taken into consideration (e.g., effects of seasonality, events such as storms, ...

Listing Criteria

Sample Size	List if exceedances equal or greater
2-24	2*

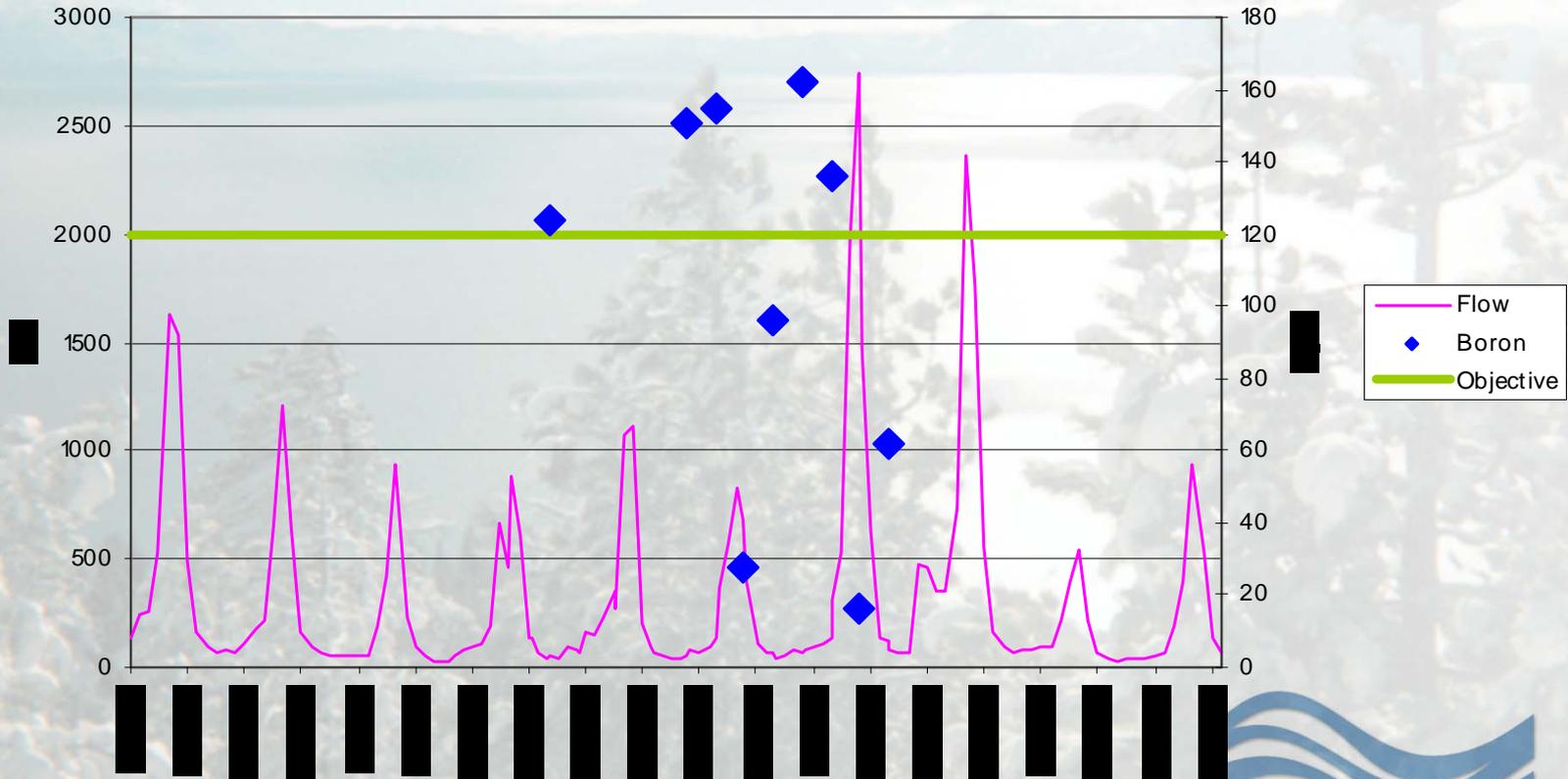
*Application of the binomial test requires a minimum sample size of 16.

Delisting Criteria

Sample Size	Delist if exceedances equal or less
28 - 36	2

Significant Temporal Changes

East Fork Carson River near Markleeville
Boron



Boron Data Analysis

DATE	RESULT	OBJECTIVE
Sep 2002	124	
Annual Ave.	124	120 ppb
Nov 2003	151	
Annual Ave.	151	120 ppb
Feb 2004	155	
May 2004	28	
Aug 2004	96	
Nov 2004	162	
Annual Ave.	110	120 ppb
Feb 2005	136	
May 2005	16	
Aug 2005	62	
Annual Ave.	71	120 ppb



Water Boards

Mammoth Creek Tributary

Sample Date	Flow (cfs)	As (ug/l)	Hg (mg/l)
Oct 29, 03	est 31	29	0.06
Jan 28, 04	est 20	31	0.04
Apr 28, 04	0.8	21	0.3
Jul 28, 04	0.8	30	0.17
Oct 27, 04	est 20	27	0.04
Jan 25, 05	est 15	27	0.06
Apr 26, 05	est 20	27	0.16
Jul 21, 05	est 32	24	0.07
Standard		10	0.05 30 day ave

U.S. EPA Technical Nutrient Criteria Guidance Manual

“The characterization of “ambient” conditions with a few grab samples is inappropriate, if not reckless.”



Lahontan Water Board Future Actions

Initiated more intensive sampling in approximately 50% of these 31 water bodies

Will do same for others in out years as SWAMP budget allows



Summary

1. Policy allows for (requires) application of judgment
2. Highly variable waters
3. Limited number of samples - below minimum for binomial test
4. Many objectives are annual averages
5. Many objectives are more stringent than B.U. standards
6. List with two years of data, delist with 26 years of data

Recommendation

Do not list the 31 water bodies that were **specifically not recommended for listing** by the Lahontan Water Board

