



TRPA Advisory Planning Commission

April 10, 2024

AGENDA ITEM VI.B

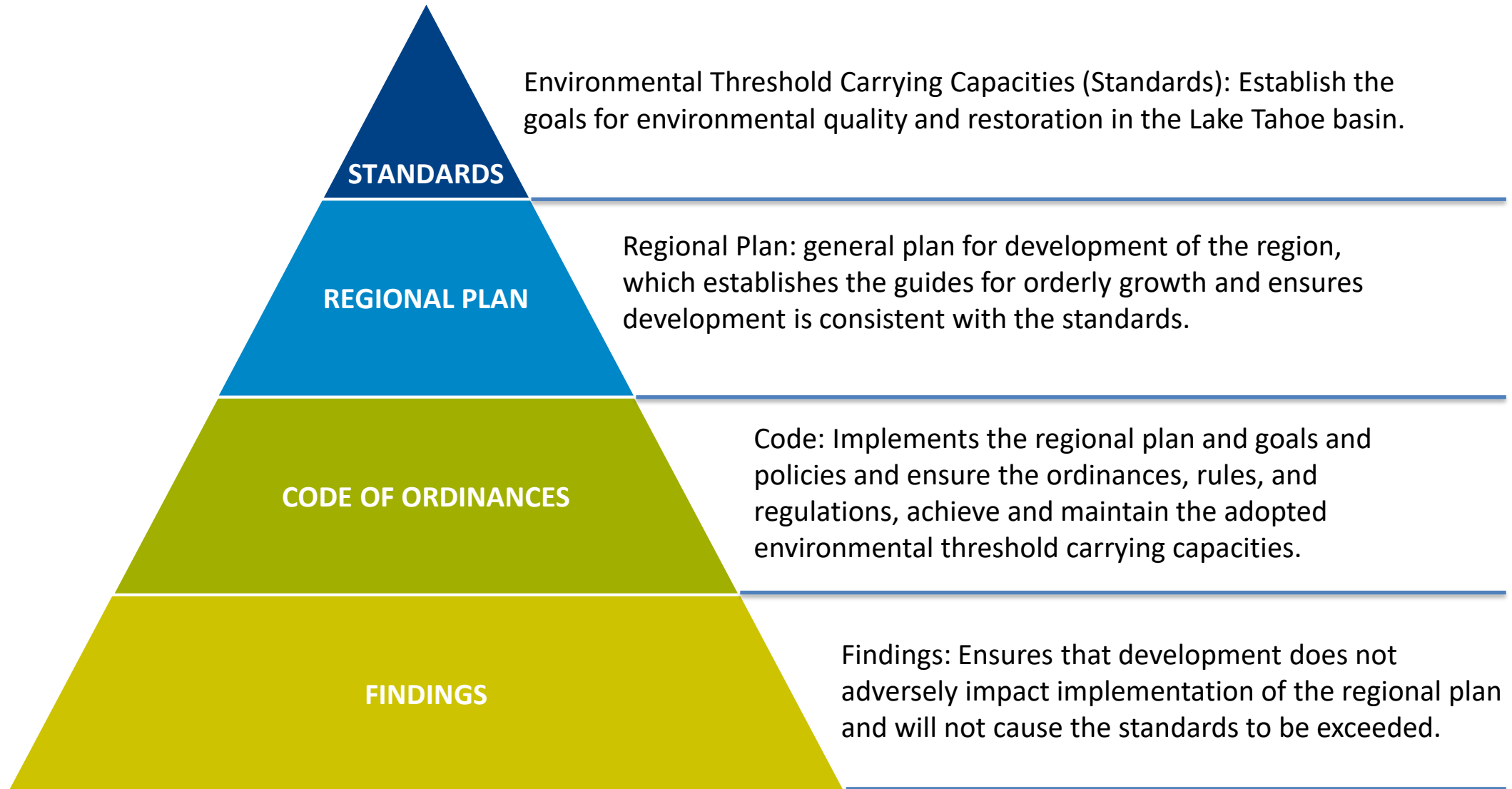
Threshold Standards Update

Dan Segan

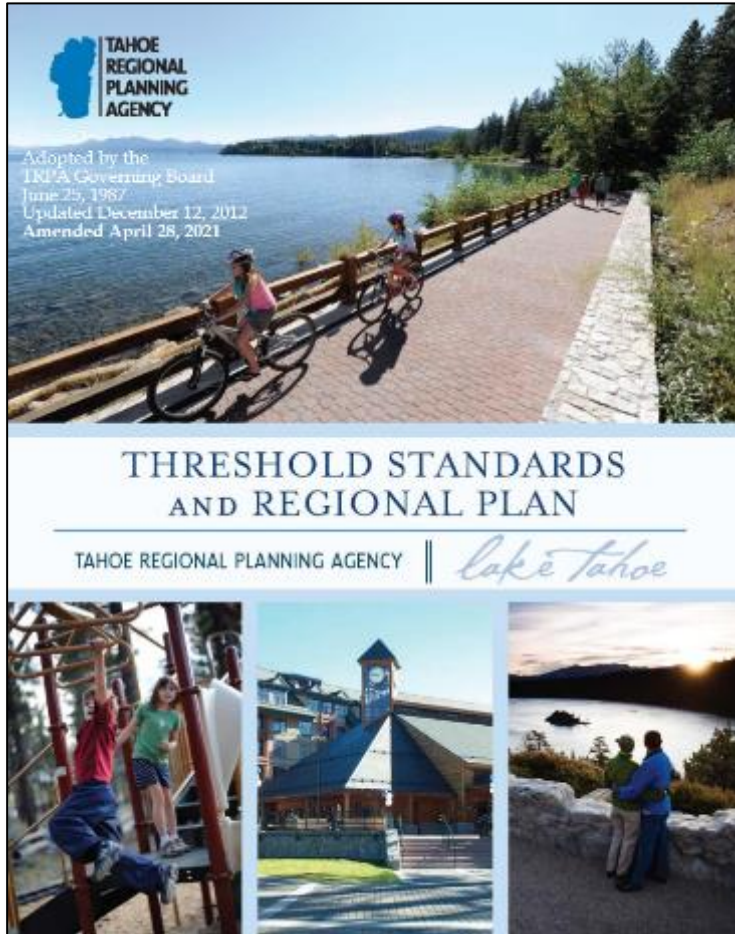
Chief Science and Policy Advisor

775-589-5233, dsegan@trpa.gov

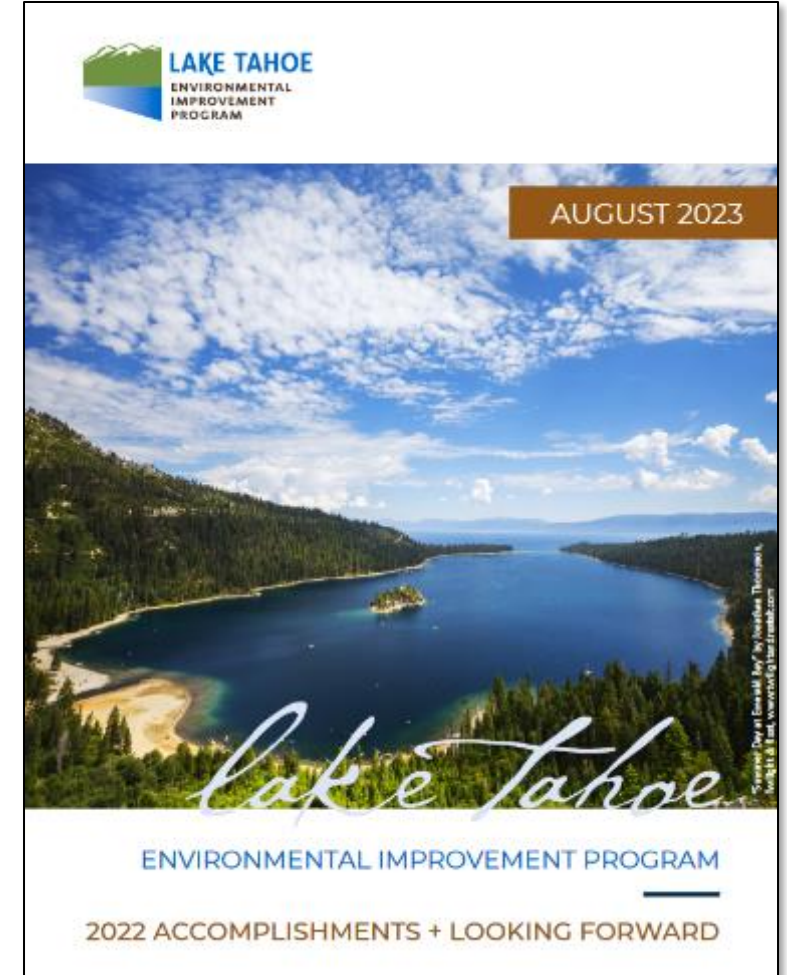
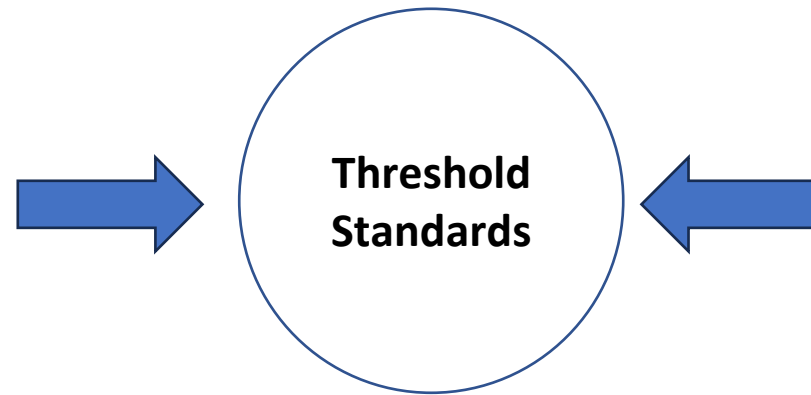
Threshold Standards



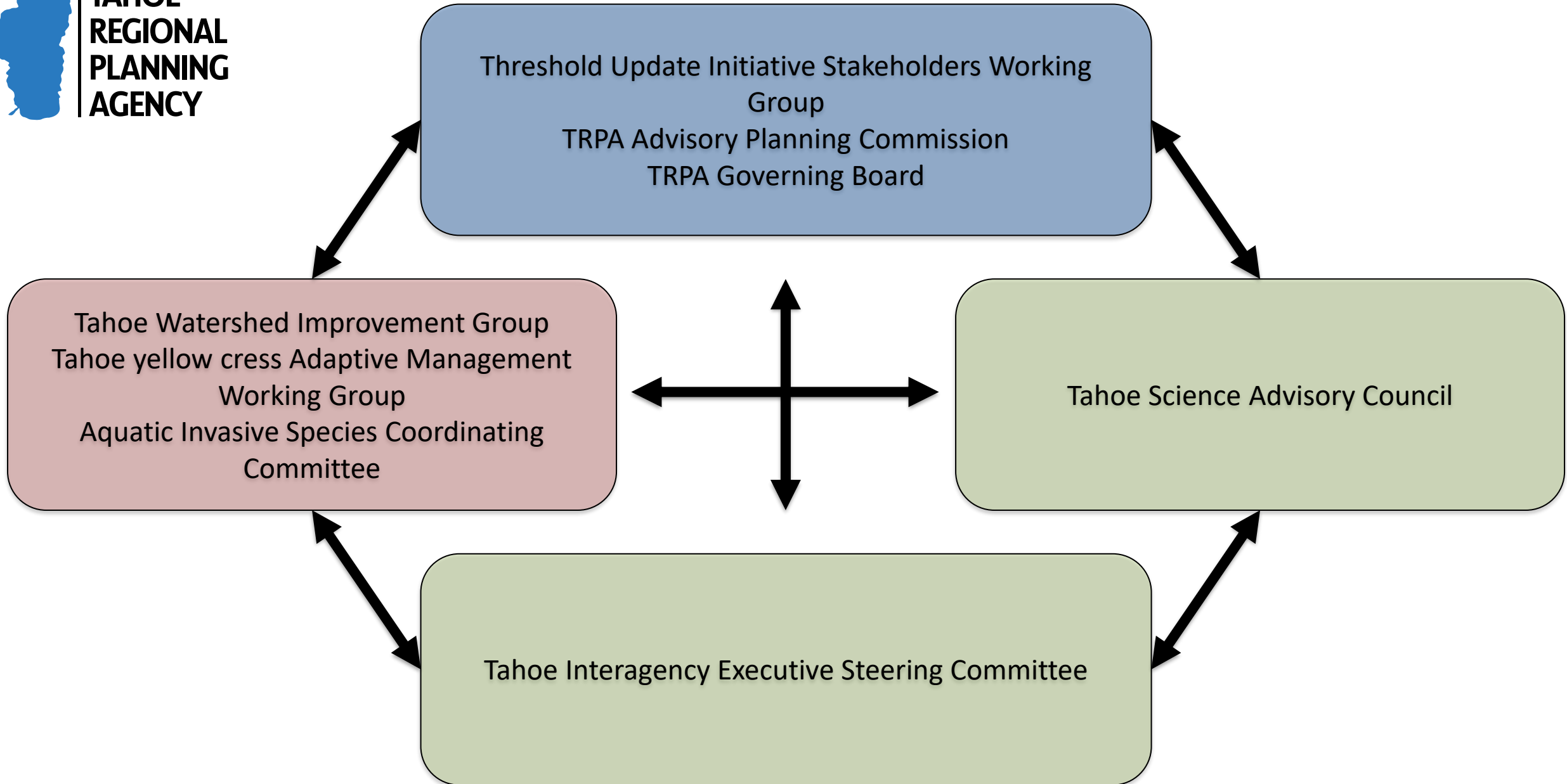
Implementing the Compact



Regional Plan



EIP



Best Practice



Specific

The standard establishes a specific numeric target, and benchmark/baseline values are documented where necessary.



Measurable

The standard has clearly defined indicator(s) that link to the standard, and there are practical ways to objectively and accurately measure progress towards attainment.



Outcome-based

Standards establish a desired condition for an environmental end state. Standards do not establish a means to achieve the desired outcome.

Stream Environment Zone (SEZ)

Peer Review

“In summary, the present approach to evaluating the condition and the improvement in SEZ’s is an overly blunt instrument with no apparent scientific basis beyond “more is better.” The science has truly advanced in the last 40+ years”

– 2015 Peer Reviewer

SEZ Baseline



Lake Tahoe Basin Stream Environment Zone (SEZ)

Baseline Condition Assessment

Tahoe Regional Planning Agency

Funded through a United States Environmental Protection Agency Wetland Development Grant

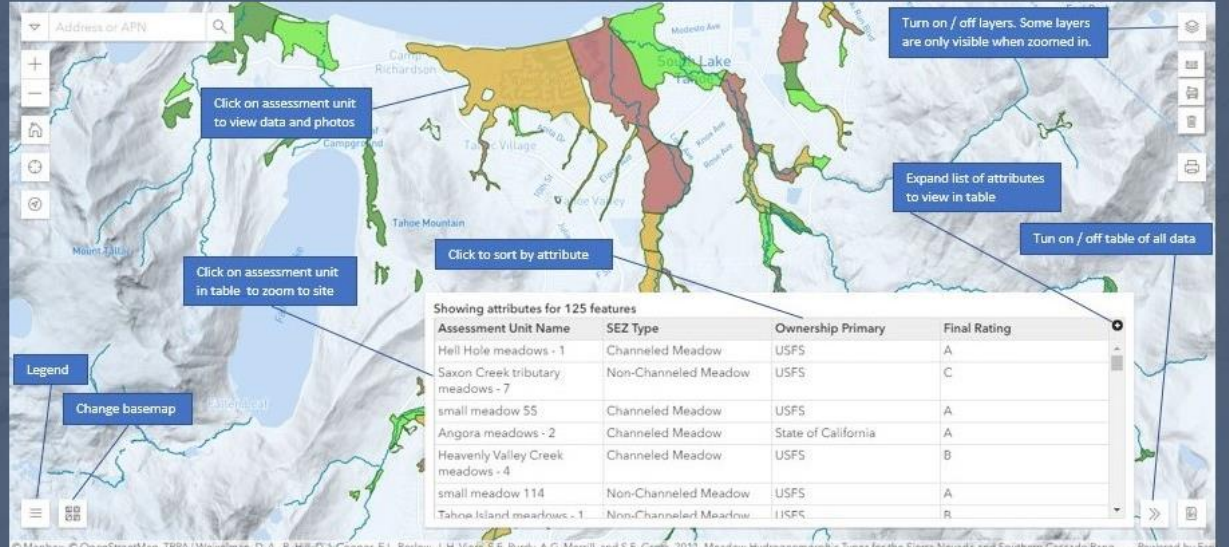
FINAL (December 2020)



SEZ Area: Site A		SEZ Type: Meadow, Non-Channeled		
Year: 2014	SEZ quality: 67	×	Acres: 10 =	SEZ condition index: 670
Year: 2018	SEZ quality: 75	×	Acres: 10.5 =	SEZ condition index: 788
				SEZ index change: 118



The Stream Environment Zones of Lake Tahoe



Showing attributes for 125 features

Assessment Unit Name	SEZ Type	Ownership Primary	Final Rating
Hell Hole meadows - 1	Channeled Meadow	USFS	A
Saxon Creek tributary meadows - 7	Non-Channeled Meadow	USFS	C
small meadow 55	Channeled Meadow	USFS	A
Angora meadows - 2	Channeled Meadow	State of California	A
Heavenly Valley Creek meadows - 4	Channeled Meadow	USFS	B
small meadow 114	Non-Channeled Meadow	USFS	A
Tahoe Island meadows - 1	Non-Channeled Meadow	USFS	B

Use this application to visualize **CURRENT CONDITIONS** of stream environment zones, **SEARCH** for a meadow or stream, **FILTER** monitoring attributes, **EXPLORE** monitoring data such as streambank erosion and channel incision, **LOCATE** where you are, and **TRACK** where you've been.

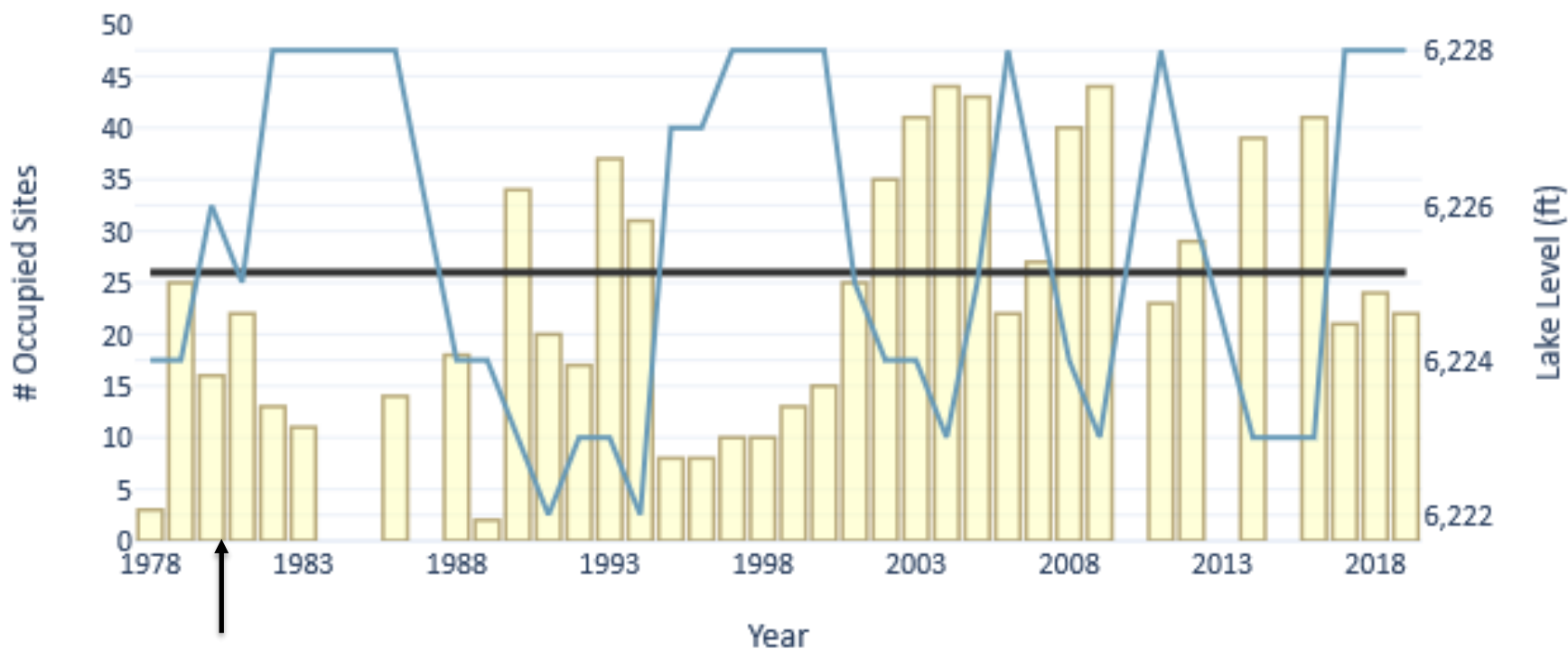
Proposed Standard

- Enhance the quality and function of meadows and wetlands from 79% to 88% of the regional possible SEZ condition index score.

Tahoe Yellow Cress (*Rorippa subumbellata*)

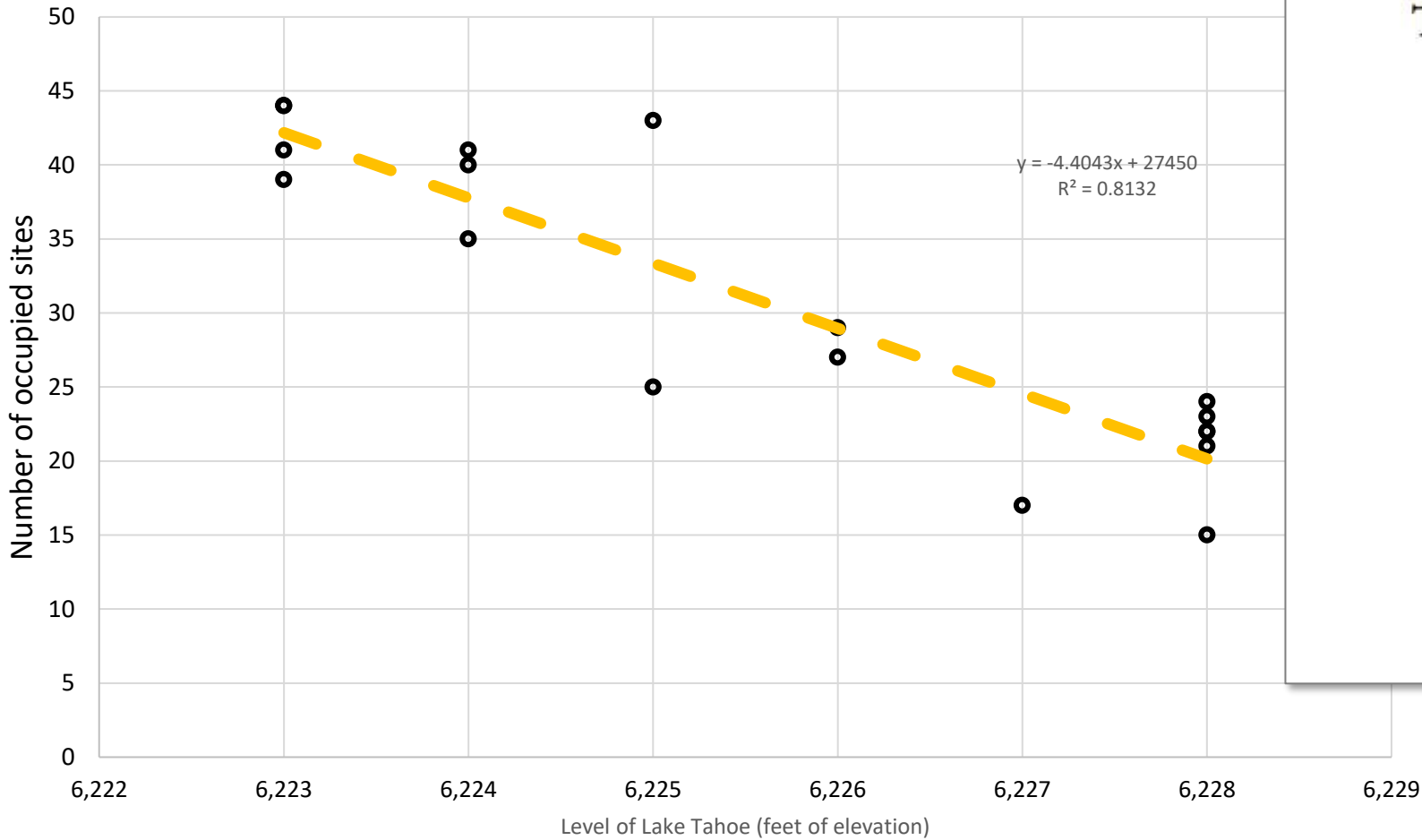
Influence of Lake Level

Tahoe Yellow Cress



26 site goal was first three years of survey data from approximately 34 sites during 1979-1981

Lake Level



CONSERVATION STRATEGY FOR

TAHOE
(

Conservation Strategy for Tahoe yellow cress (*Rorippa subumbellata*)



Prepared by
Alison E. Stanton
and the
Tahoe yellow cress
Adaptive Management Working Group
and
Executive Committee

For the
USDA Forest Service Pacific Southwest Research Station
Domestic Grant
13-DG-11272170-010

Tahoe Yellow Cress

October: Maintain a minimum of *Rorippa subumbellata* occupied survey sites as established in the Table below

Proposed: Maintain at least the number of occupied *Rorippa subumbellata* survey sites for each lake level as established in the Table below:

Lake Level (feet of elevation)	Occupied survey sites
Low (<6,225)	35
Transition (6,225- 6,227)	26
High (>6,227)	20

Aquatic Invasive Species

AIS Control Standards

WQ9) Reduce the abundance of known aquatic invasive species.

WQ10) Reduce the distribution of known aquatic invasive species.

WQ11) Abate harmful ecological impacts resulting from aquatic invasive species.

WQ12) Abate harmful economic impacts resulting from aquatic invasive species.

WQ13) Abate harmful social impacts resulting from aquatic invasive species.

WQ14) Abate harmful public health impacts resulting from aquatic invasive species.

AIS Program

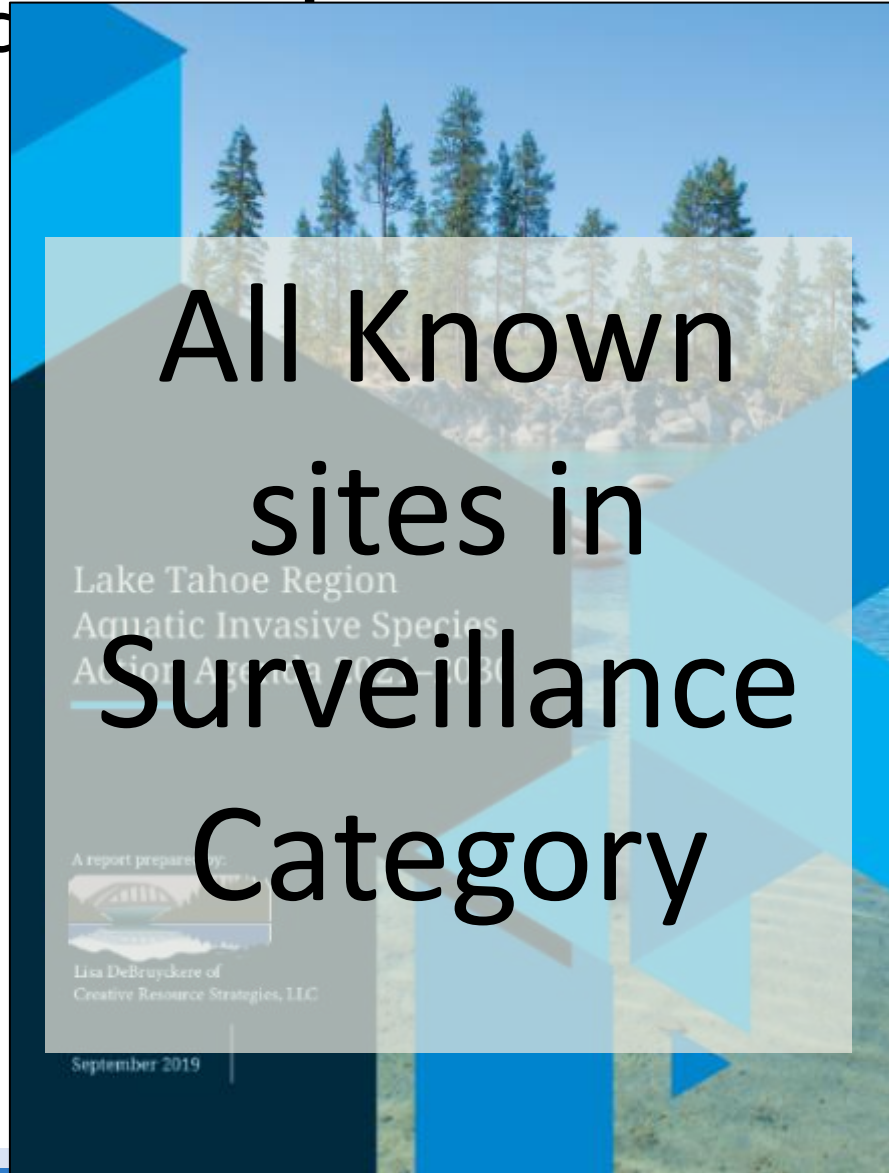
Prevention



Control




Proposed Threshold Standards

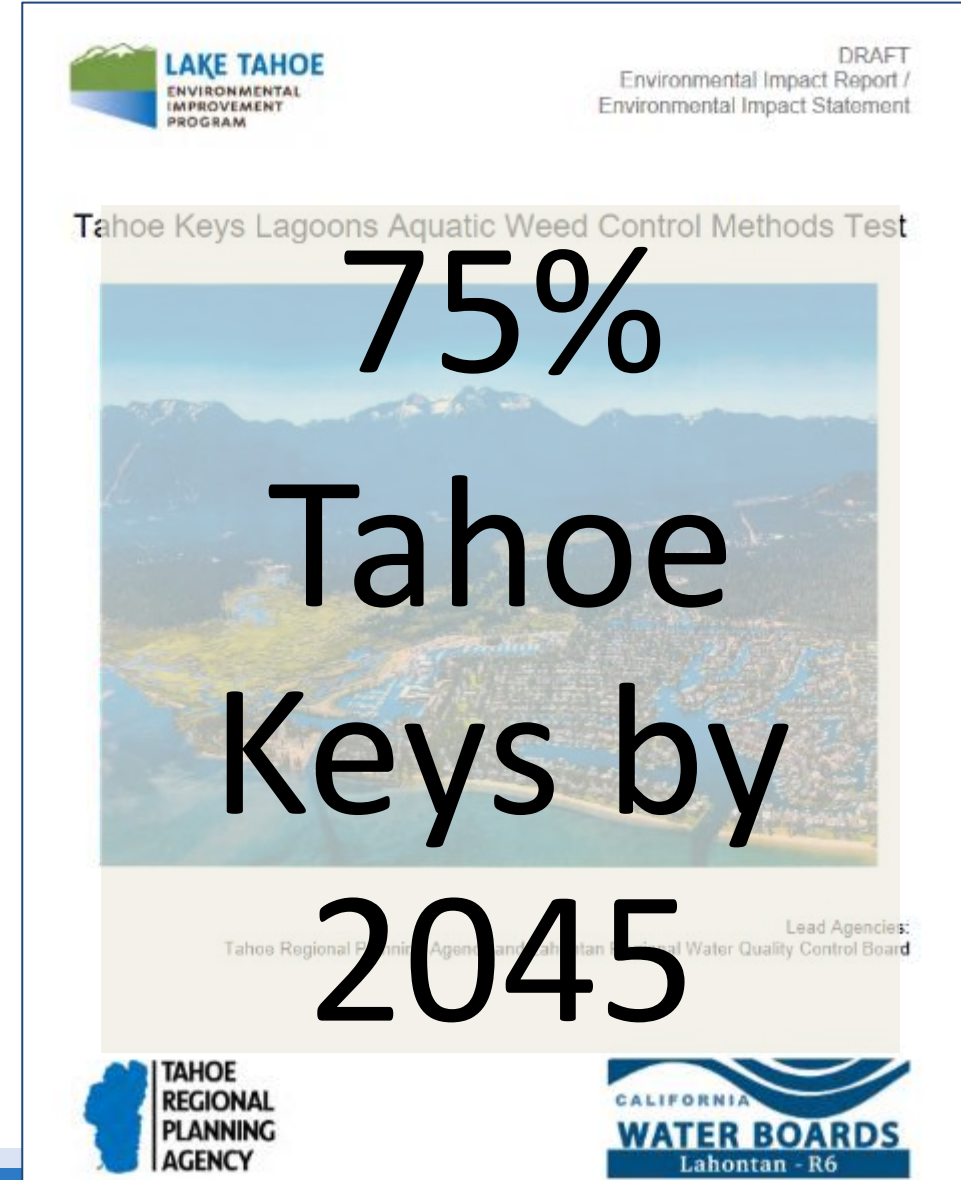


All Known sites in Surveillance Category

Lake Tahoe Region
Aquatic Invasive Species
Action Agenda 2022-2031

A report prepared by:

Lisa DeBruyckere of
Creative Resource Strategies, LLC

September 2019



75% Tahoe Keys by 2045

LAKE TAHOE
ENVIRONMENTAL
IMPROVEMENT
PROGRAM

DRAFT
Environmental Impact Report /
Environmental Impact Statement

Tahoe Keys Lagoons Aquatic Weed Control Methods Test

Lead Agencies:
Tahoe Regional Planning Agency and Lahontan Regional Water Quality Control Board

TAHOE
REGIONAL
PLANNING
AGENCY

CALIFORNIA
WATER BOARDS
Lahontan - R6

Questions Raised during October APC

- 1) Why recommend standards for some AIS but not others?
- 2) What happens to the AIS for which no threshold standard has been recommended?
- 3) Is a target date of 2045 for attainment of the Keys standard appropriate?

Threshold Update Initiative Stakeholder Working Group

Why recommend standards for some AIS but not others?

1. Have we defined the issue we would like to solve?
2. Have we quantified the extent of the issue problem?
3. Can the desired end-state or the solution be defined?
4. Is there a viable management pathway to deliver the solution we desire?



What happens to the AIS for which no threshold standard has been recommended?

Goals and Policies of the Regional Plan




FI-1.9

PROHIBIT THE RELEASE OF NON-NATIVE AQUATIC INVASIVE SPECIES IN THE REGION IN COOPERATION WITH PUBLIC AND PRIVATE ENTITIES. CONTROL OR ERADICATE EXISTING POPULATIONS OF THESE SPECIES AND TAKE MEASURES TO PREVENT ACCIDENTAL OR INTENTIONAL RELEASE OF SUCH SPECIES.



Is a target date of 2045 for attainment of the Keys standard appropriate?

TAHOE KEYS LAGOONS AQUATIC WEED CONTROL METHODS TEST
YEAR 1 PRELIMINARY RESULTS



PROPERTY OWNERS ASSOCIATION
356 ALA WAI BOULEVARD SOUTH LAKE TAHOE CA 96150
530-542-6444 TAHOEKEYSPOA.COM

FEBRUARY 10, 2023



AIS proposed standards

1. No active aquatic invasive plant infestations in Lake Tahoe, adjacent wetlands, and tributaries, not including the Tahoe Keys.
2. Reduce average aquatic invasive plant abundance in the Tahoe Keys by a minimum of 75% from the 2021 baseline year

Proposed Revision to Keys Standard

October: Reduce aquatic invasive species abundance in the Tahoe Keys by 75% by 2045

Current: Reduce average aquatic invasive plant abundance in the Tahoe Keys by a minimum of 75% from the 2021 baseline year

Redline: Reduce **average** aquatic invasive **plant** abundance in the Tahoe Keys by **a minimum of 75% by ~~2045~~ from the 2021 baseline year.**

Explanation

Reduce ¹average aquatic invasive ²plant abundance in the Tahoe

Keys by ³a minimum of 75% ⁴by ~~2045~~ ⁵from the 2021 baseline year.

- 1 Include “average” to buffer against anomalous years
- 2 Clarify that the target is invasive plants
- 3 Clarify that reductions $> 75\%$ would attain target
- 4 Remove date until established by plan
- 5 Specify the baseline year for measuring progress

Required Motions

1. A motion to recommend approval of the required findings (Attachment B) including a finding of no significant effect.
2. A motion to recommend adoption of Ordinance 2024-___, amending Ordinance 2019-02 (Attachment A), updates to the threshold standards for 1) Stream Environment Zone (SEZ) restoration, 2) Aquatic Invasive Species control, and 3) Tahoe Yellow Cress conservation.