

# Final 2019 Threshold Evaluation

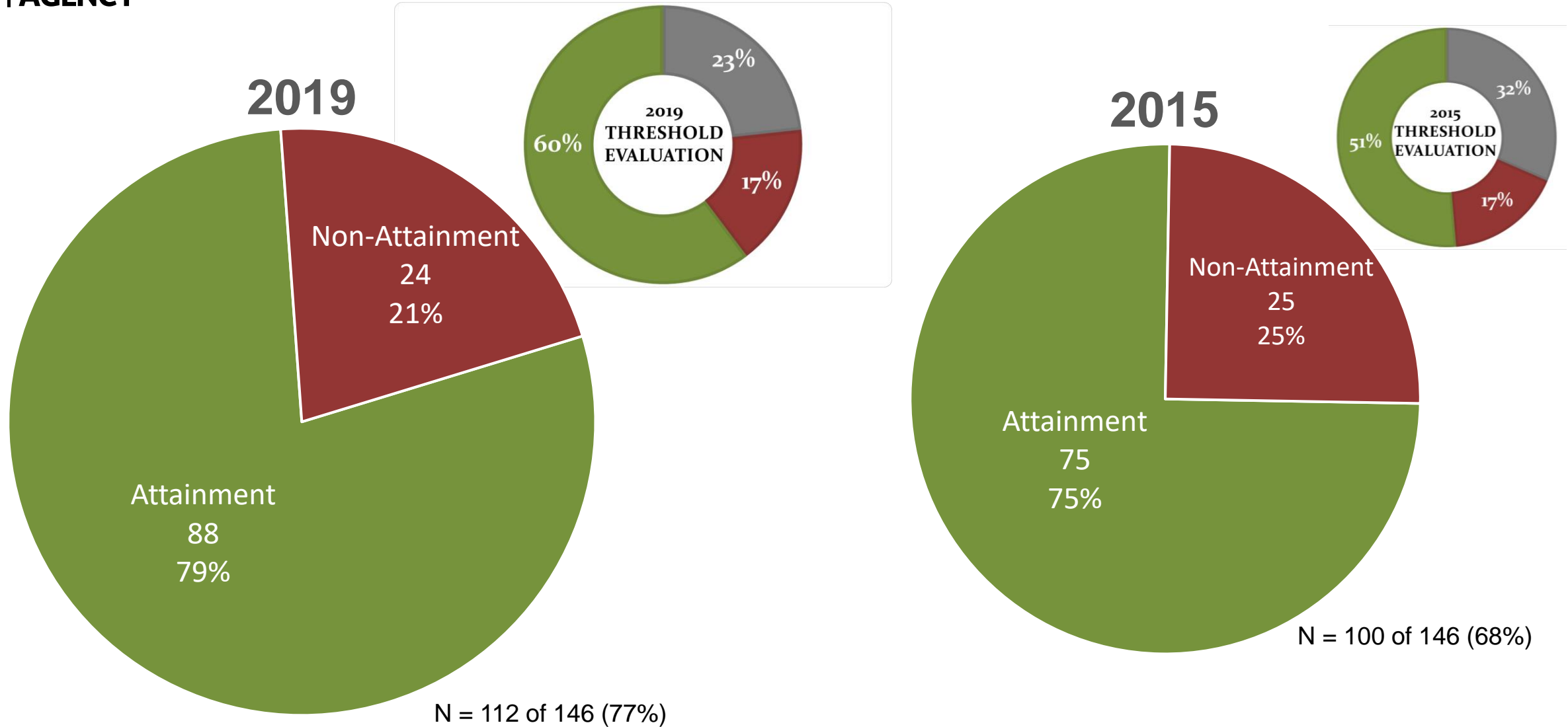
GOVERNING BOARD  
TAHOE REGIONAL PLANNING AGENCY  
JUNE 23, 2021

**Ken Kasman**  
TRPA Research & Analysis Division Manager  
775-589-5253  
kkasman@trpa.gov

# Summary of Evaluation Findings

- The 2019 Threshold Evaluation is the 7<sup>th</sup> comprehensive evaluation since the Regional Plan was adopted in 1987
- The evaluation shows the Tahoe Region is making incremental progress toward achieving our shared goals
- 79% of the standards evaluated are in attainment
- 96% of standards are stable or improving
- The growing challenges of managing for climate change are visible in the air quality and water quality thresholds, two areas the region has invested heavily, and those gains are being influenced by climate change

# Threshold Status Summary

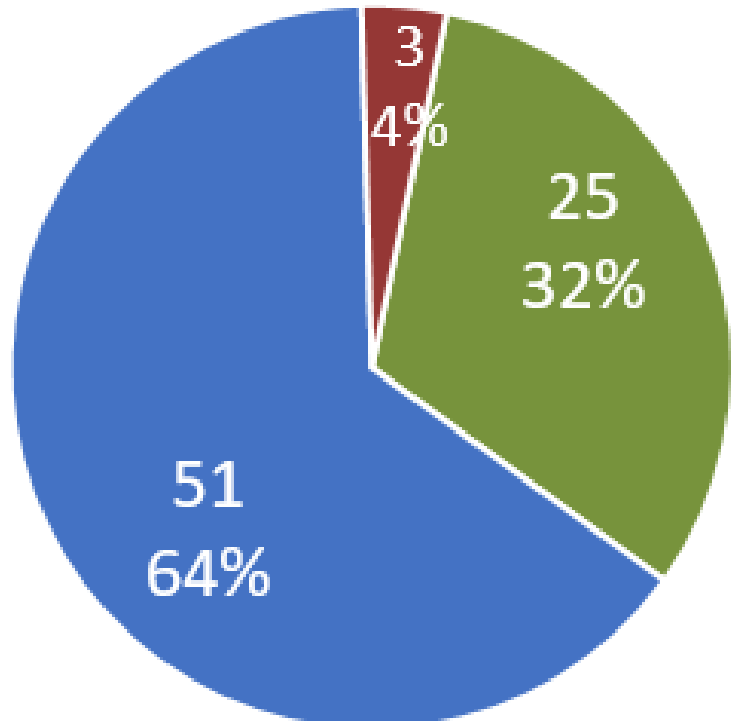


# Attainment Changes

- Seventy-three standards that were in Attainment in 2015 remained in Attainment in 2019
- Nineteen standards that were Non-Attainment in 2015 remained Non-Attainment in 2019
- Thirty-two standards that were not evaluated in 2015 were also not evaluated in 2019
  
- ▲ Seven standards moved from Non-Attainment in 2015 to Attainment in 2019
  - Highest 24-hour measurement for PM<sub>10</sub> concentration – Air Quality
  - Excellent/good/marginal stream habitat condition - Fisheries
  - Cumulative noise in high-density residential area - Noise
  - Waterfowl population sites – Wildlife
  - Relative abundance of red fir forest- Vegetation
- ▲ Nine standards not evaluated in 2015 were in Attainment in 2019
- One standard that was in Attainment in 2015 was not evaluated in 2019 (VMT – Air Quality)
- ▼ One standard that was in Attainment in 2015 moved to Non-Attainment in 2019
  - Tahoe Yellow Cress – Vegetation
- ▼ Four standards not evaluated in 2015 were Non-Attainment in 2019

# Threshold Trend Summary

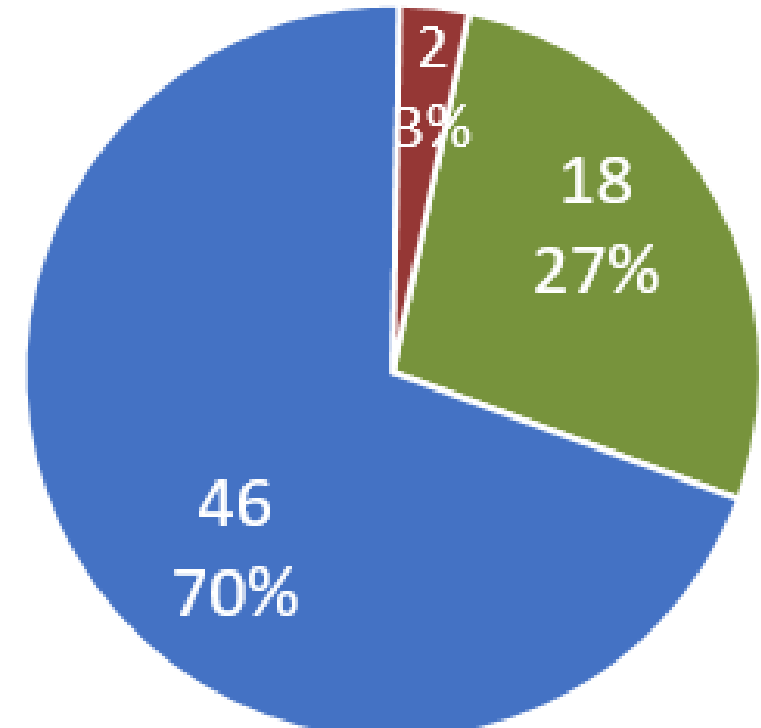
2019



■ Improving ■ Little or no change ■ Declining

N = 79 of 146 (54%)

2015




■ Improving ■ Little or no change ■ Declining


N = 66 of 146 (45%)

# Trend Changes

 Fifty-one standards are “Little or No Change” – often the goal (e.g., non-degradation)

 Twenty-five standards are “Improving”

- Six standards in Air Quality
- Eight standards in Water Quality
- Three standards in Soil Conservation
- Three standards in Fisheries
- Three standards in Wildlife
- Two standards in Scenic Resources

 Three standards are “Declining”

- Highest 24-hour measurement for PM<sub>10</sub> concentration – Air Quality
- Highest 24-hour measurement for PM<sub>2.5</sub> concentration – Air Quality
- Phytoplankton Primary Productivity (Pelagic) - Water Quality

- No trend determined for 67 standards
  - 30 are implemented policies; 37 due to insufficient data or no target established

[View More Details in Data Center](#)  
[Provide Feedback](#)

[Evaluation Overview](#) > [Air Quality](#) > [Carbon Monoxide \(CO\)](#)

## HIGHEST 8-HOUR AVERAGE CONCENTRATION OF CARBON MONOXIDE

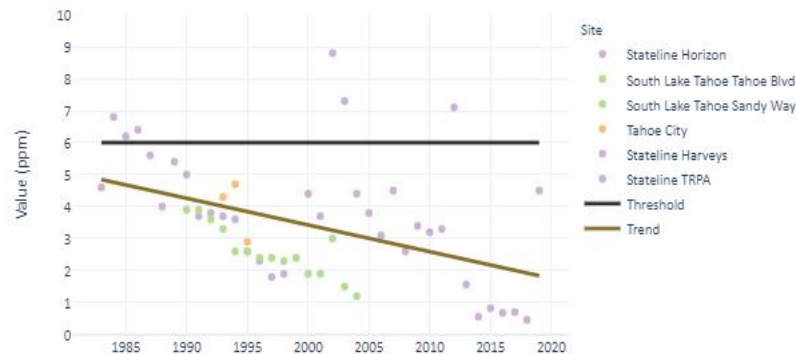
This indicator addresses the highest carbon monoxide concentrations averaged over every eight hours for the calendar year. Carbon monoxide (CO) is a tasteless, odorless, and colorless gas. It is a public health concern because elevated concentrations affect human and animal health by reducing the supply of oxygen to body tissues. The primary anthropogenic sources of CO in the Tahoe Region are on-road motor vehicles, residential wood burning, motorized watercraft, and off-highway vehicles. Wildfires are a natural source of CO. Policy and management actions implemented through the [Regional Plan](#) to control CO emissions focus on reducing private automobile use through improvements to public transportation and bike/pedestrian trail infrastructure. Vehicle emission standards enacted by state and federal governments also reduce CO emissions in the Region, mainly by requiring improvements in engine and exhaust technologies. Several sites have monitored CO through the years, and TRPA currently monitors CO at the Stateline, Nevada location.



### Status

### 2019 Evaluation

Carbon Monoxide - 8 hour Average Concentration



**Status**  
Considerably Better Than Target

**Trend**  
Moderate Improvement

**Confidence**  
High

[View Evaluation](#)



[↑ View in Threshold Dashboard](#)

This indicator addresses the highest carbon monoxide concentrations averaged over every eight hours for the calendar year. Carbon monoxide (CO) is a tasteless, odorless, and colorless gas. It is a public health concern because elevated concentrations affect human and animal health by reducing the supply of oxygen to body tissues. The primary anthropogenic sources of CO in the Tahoe Region are on-road motor vehicles, residential wood burning, motorized watercraft, and off-highway vehicles. Wildfires are a natural source of CO. Policy and management actions implemented through the [Regional Plan](#) to control CO emissions focus on reducing private automobile use through improvements to public transportation and bike/pedestrian trail infrastructure. Vehicle emission standards enacted by state and federal governments also reduce CO emissions in the Region, mainly by requiring improvements in engine and exhaust technologies. Several sites have monitored CO through the years, and TRPA currently monitors CO at the Stateline, Nevada location.



### 2011 EVALUATION



**Status** Considerably Better Than Target

**Trend** Rapid Improvement

**Confidence** Moderate

### 2015 EVALUATION



**Status** Considerably Better Than Target

**Trend** Moderate Improvement

**Confidence** Moderate

### 2019 EVALUATION



**Status** Considerably Better Than Target

**Trend** Moderate Improvement

**Confidence** High



# Document Management

## EVALUATION HISTORY

Threshold Indicators are evaluated every four years to assess the environmental health of the Tahoe Region relative to the adopted standards. In the evaluation process, a "Public Draft" is made available for comment and if necessary, changes are made to the evaluation before the "Final Issued" version is issued by the TRPA Governing Board. Links to those documents are provided below.

Currently viewing 1 of 1 Threshold Indicator Updates

[← Reset](#) [Download Table](#)

| Update Details       | Update Type          | Evaluation Year      | Date Saved   |
|----------------------|----------------------|----------------------|--|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | From: <input type="text"/><br>To: <input type="text"/> |
| <a href="#">View</a> | Public Draft         | 2019                 | 03/22/2021 8:06 PM                                     |

# Threshold Update

- Water Quality
- Stream Environment Zones (Soil Conservation)
- Recreation
- Vegetation Preservation



# TRPA Governing Board

*June 23, 2021*

## GB Comment/Questions

AGENDA ITEM 6D

Issuance of the Final 2019 Threshold Evaluation



# TRPA Governing Board

*June 23, 2021*

## Public Comment

AGENDA ITEM 6D

Issuance of the Final 2019 Threshold Evaluation



# TRPA Governing Board

*June 23, 2021*

## Required Motion

AGENDA ITEM 6D

A motion to adopt Resolution 2021-\_\_\_\_ issuing the Final 2019 Threshold Evaluation Report