

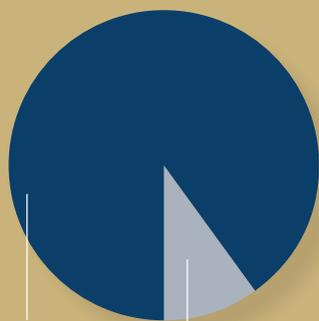
# What causes weed growth in the Tahoe Keys?



Aquatic invasive weeds cover over **90%** of the **172** acres of the Tahoe Keys

Over  
**90%**  
of nutrients

that feed weed and algal growth in the Tahoe Keys come from the existing weeds and sediment layer.



90%  
existing  
weeds and  
sediment  
layer

10%  
stormwater  
runoff

Source: 2019 water quality  
baseline data, ESA

Invasive weeds were first spotted in the Tahoe Keys decades ago. These weeds were not native to Tahoe, and they had no natural competition. They quickly grew and spread, generating a vicious cycle of growth and die back that feeds further expanding growth with each year.

## Why are weeds choking the Tahoe Keys?

The shallow, warm water in the Tahoe Keys create favorable conditions for the growth of aquatic weeds. Scientists collected over a million data points in 2019 to learn more about weed growth in the Tahoe Keys. The results show that the majority of nutrients that spur weed growth come from the weeds themselves.

- The weeds get nutrients from the deep bottom layer of muck that has accumulated from decades of weed decomposition.
- This weed dieback happens annually and continues to accumulate vast amounts of decomposing weed substrate.
- Some of the nutrients from decaying plants are also released into the water where they can stimulate harmful algal blooms (HABs).

## What else affects weed growth in the Tahoe Keys?

- Studies show that stormwater runoff contributes approximately 10% of the nutrients that drive weed growth.
- The Tahoe Keys Property Owner Association (TKPOA) and partners are implementing measures to reduce stormwater runoff and improve water quality including:
  - Ban on fertilizers containing phosphorus.
  - Installation of best management practices (BMPs) that capture and treat stormwater.
  - Homeowner, property manager, and landscape contractor education.
  - Water quality monitoring.
  - Enforcement.

Eliminating all nutrients from stormwater runoff could not address the far more significant source of nutrients coming from the weeds themselves and the decomposing muck layer.

## What is being done to control weeds in the Tahoe Keys?

- TKPOA uses harvesters to remove weeds, but it cannot keep up with rapid weed growth.
- Innovative weed control methods such as Laminar flow aeration, and Ultraviolet light, bubble curtains, and bottom barriers are also being tested.
- The Tahoe Keys Control Methods Test focuses on finding what combination of control methods will make the biggest impact on controlling the weeds.