



# Santa Cruz County

Climate Action and Adaptation Plan (CAAP)

## Santa Cruz County CAAP Summary: Fish and Wildlife Advisory Commission February 2, 2023

[Santa Cruz County CAAP Website \(arcgis.com\)](https://arcgis.com)

# Addressing Climate Change

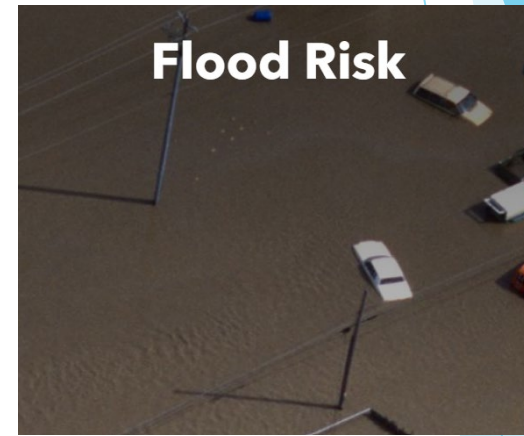
Climate Change is a threat to every ecosystem within the county.

- Increasing drought conditions impact species that rely upon adequate stream flows
- More intense rain events can flood and overflow infrastructure like wastewater systems and fuel tanks
- More frequent and more intense wildfires destroy wildlife habitat
- Rising CO2 levels lead to ocean acidification, harming animals at the base of the ocean food web<sup>1</sup>
- Decreasing levels of fog could reduce the range that Coastal Redwoods are able to inhabit<sup>2</sup>

**No community can address it alone,  
which is why every community must.**

1 - [What is Ocean Acidification? \(noaa.gov\)](https://www.noaa.gov)

2 - [The Pacific Coastal Fog Project | U.S. Geological Survey \(usgs.gov\)](https://www.usgs.gov)



# Climate Action and Adaptation Plan (CAAP)

On December 13, 2022, the Board of Supervisors approved the CAAP, which contains 29 strategies to mitigate and adapt to Climate Change. Now that the strategies are approved, the implementation processes will be determined.

Many of these strategies have the potential to align with the goals of the FWAC, creating an opportunity to provide feedback.

## Example of Strategy and Objectives:

A **Strategy** is the over arching goal. These will be reevaluated every 4 years. Within each Strategy are **Objectives**, which are more specific ways to achieve the goal. These will be reevaluated every 2 years

### Example Strategy:

Better protect and manage local county aquifers

### Example Objective:

- Identify parcels owned or managed by the County that can be used for recharge projects.

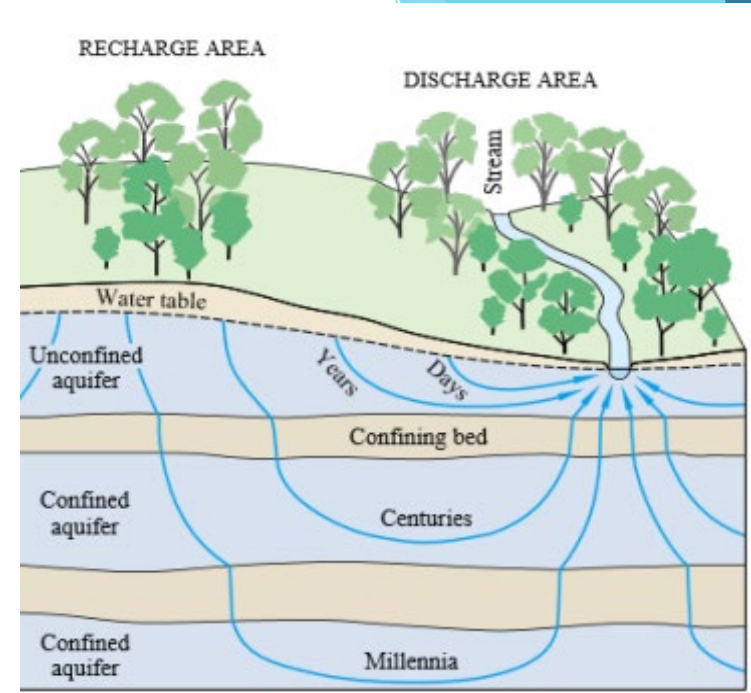
# Potential areas for collaboration:

## Water Strategy:

### W-1: Better protect and manage local county aquifers

- Identify parcels owned or managed by the County that can be used for recharge projects.
- Explore feasibility of developing storm water solutions for select existing public and private sites with high amounts of impervious surface.

These types of projects could improve water quality and quantity in local watersheds, if placed well.



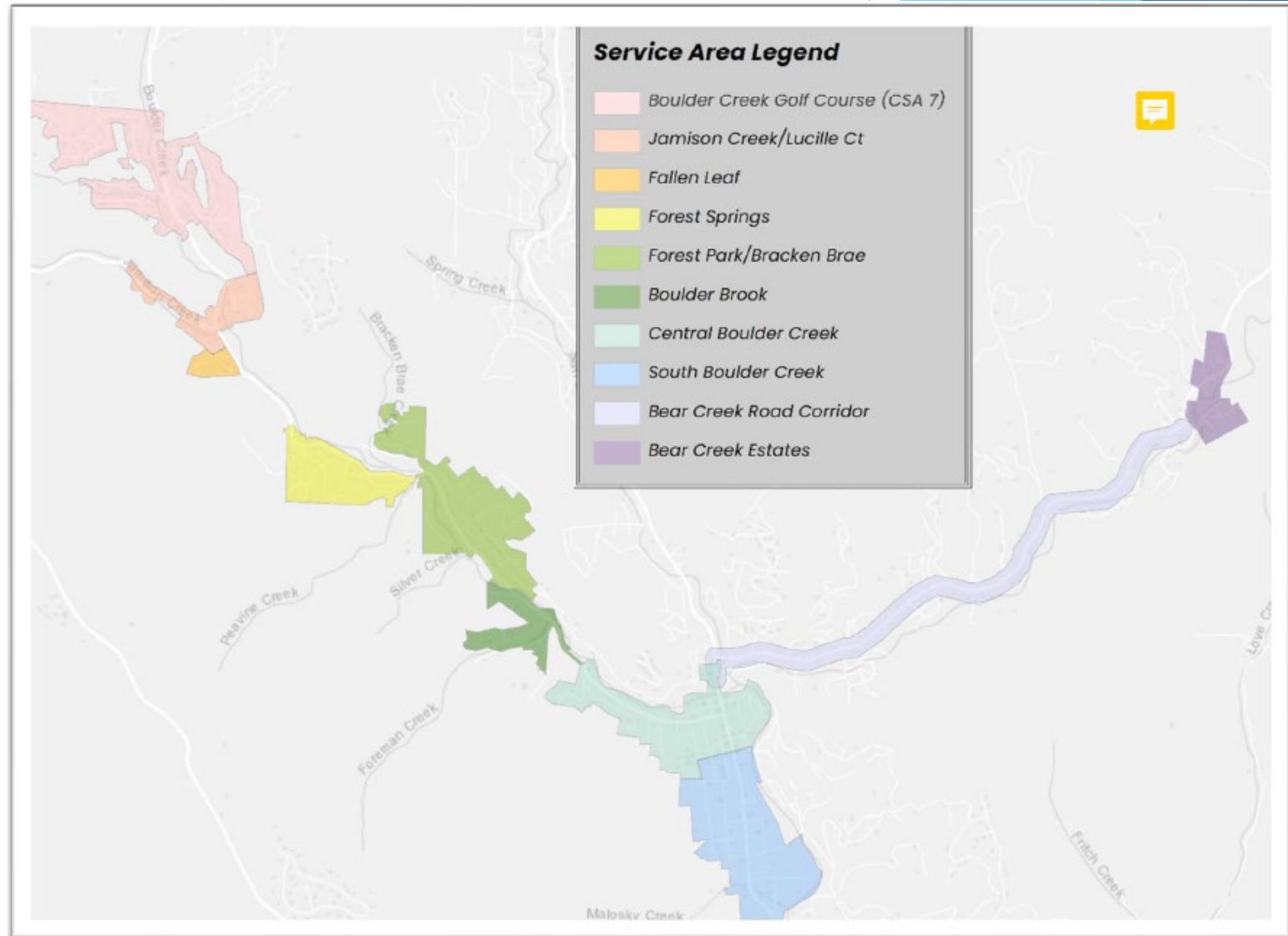
# Potential areas for collaboration:

## Water Strategy:

W-2: Increase the use of reclaimed wastewater and stormwater for irrigation and general use

- Continue evaluation of Boulder Creek Water Quality and Recovery Project

This project could reduce nitrate loads in SLR. The recycled wastewater would also replace an existing stream diversion, improving flows.



# Potential areas for collaboration:

## Natural and Working Land Strategy:

### NWL-2: Increase Urban Tree Canopy

- Identify climate appropriate and resilient tree species, required vegetative management practices and opportunities for implementation.
- Update Significant Trees Protection Ordinance, 16.34, to establish an in-leu fee to mitigate for trees lost through violations or because of development where on-site replacement of trees is not an option

Commission may be able to suggest appropriate tree species for the region.

Commissioners could coordinate shared effort to update the Significant Tree Ordinance.



## Potential area for collaboration:

### Transportation Strategies:

- T-1: Reduce vehicle miles traveled (VMT) through higher density zoning for housing development along transit corridors and optimize use of remote work
- T-4: By 2040, increase use of public transportation, walking, or bicycling for commute trips by 15%
- T-3: Eliminate fossil fuel use from passenger and commercial vehicles.

There are two primary reasons why these transportation strategies may align with FWAC goals.

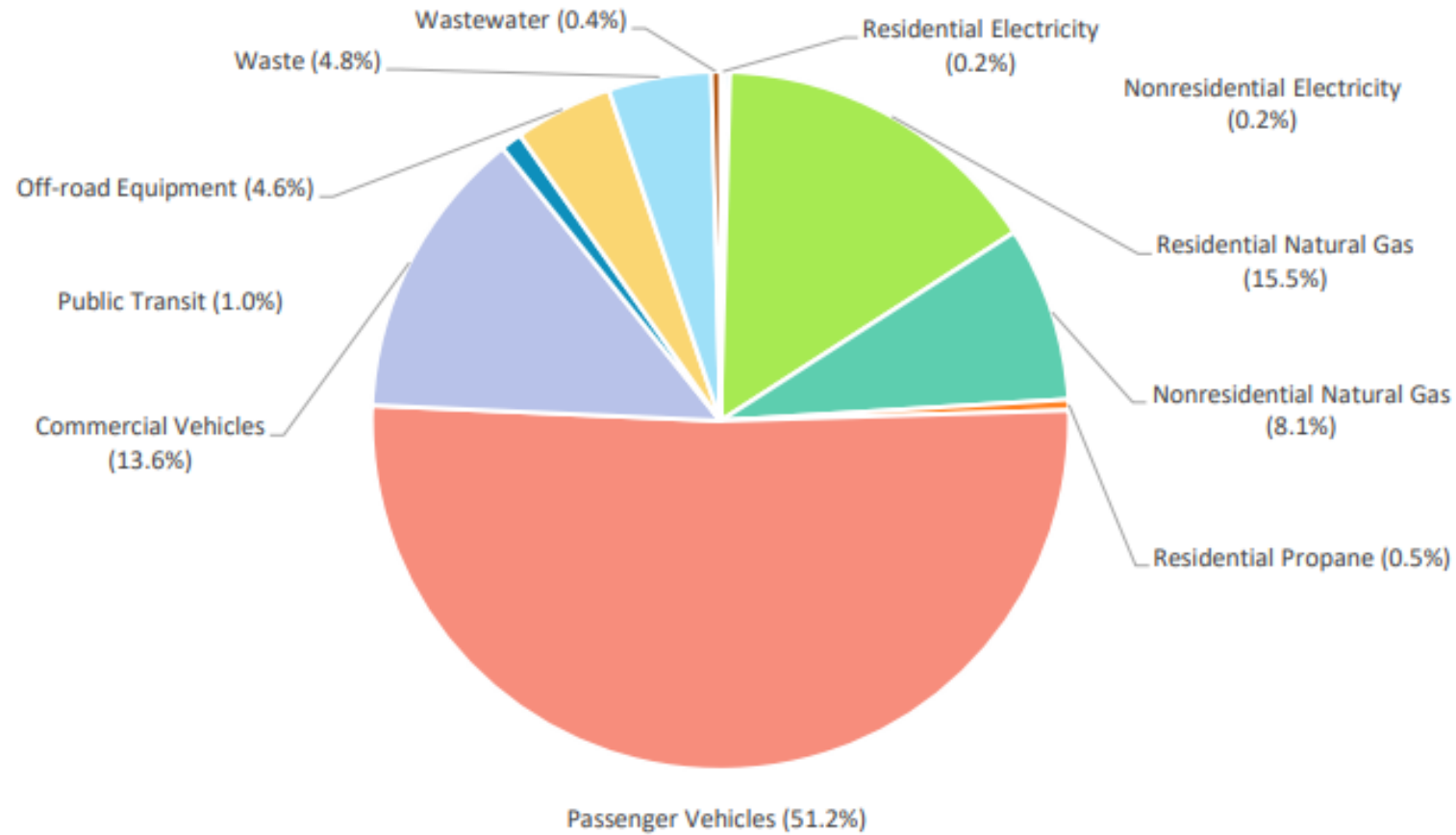



# Why focus on vehicles?

Transportation accounts for nearly 65% of the county's Green House Gas (GHG) emissions, with passenger vehicles alone accounting for over 50%.


These strategies have the greatest potential to reduce emissions in these categories.

**Figure 4. GHG Emissions by Category**





To provide a sense of scale for the emissions from a passenger vehicle, a mature tree will absorb 48lbs of CO<sub>2</sub> every year<sup>1</sup>. The average US vehicle emits over 10,000lbs of CO<sub>2</sub> every year<sup>2</sup>.



Offsetting the emissions from a single passenger vehicle would require over 200 mature trees.

- 1) [The Power of One Tree - The Very Air We Breathe | USDA](#)
- 2) [Greenhouse Gas Emissions from a Typical Passenger Vehicle | US EPA](#)

# In addition to GHG emissions, passenger vehicles are one of the biggest sources of pollutants in local water ways.

Fuels and lubricant oils are not the only source of water pollution. Particulates are released from combustion, friction braking, and tire wear. Brake and tire particulates can be highly toxic to aquatic species. *(see Items of Interest in agenda)*

Reducing VMT would reduce the prevalence of these particulates.



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Electric Vehicles do not eliminate brake and tire particulates

**Thank You!**

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