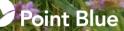
# Restoring Sierra Meadows A Nature-based Solution

Ryan Burnett.

4/22/2025



Conservation science for a healthy planet. Yellow Creek Restored Meadow R. Burnett

## Healthy wet meadows are ecosystem workhorses in the Sierra Nevada

Critical components of watersheds that provide >60% of CA drinking water

Store as much carbon per acre as wetlands, peatlands, tropical rainforest

Among the most biodiverse ecosystems in CA

Single most important habitat for birds in the Sierra Nevada

Climate refugia & resilience to wildfire

Point Blu

# Meadows Need Our Help

>60% degraded reducing important services & exacerbating climate impacts









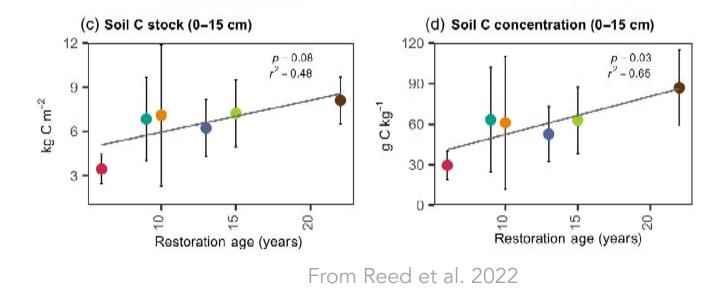
## Increasing Pace, Scale, & Efficacy of Meadow Restoration

## **Sierra Meadows Partnership**

Restore & protect 30,000 acres by 2030 that enhance water, carbon, biodiversity, and cultural benefits

We are more than 1/2 way to our goal!

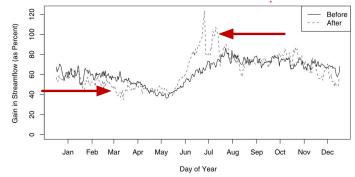
## Restoring Meadows = More Carbon Storage



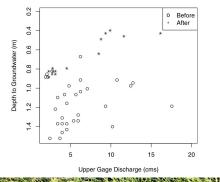


### Restoration of floodplain hydrology can restore ecological function

Increased groundwater storage, flood attenuation, base flow, and improved water quality



Point Blue



Tague et al. 2008

# Healthy Meadows = Biological Diversity Birds, fish, amphibians, mammals, pollinators, plants

Meadows are vital habitat for many imperiled species











# Post-fire Refugia

#### June 2022



June 2024

R



# Culturally Important







## How are We Ensuring Meadows are a Climate Solution Not a Problem?

Restoring Degraded Meadows Increasing Impact & Durability of Actions Engaging Communities in their Stewardship Protecting Meadows from Conversion

