



STOPWASTE

at home • at work • at school

Carbon Farming: Building Healthy Soil and Reversing Climate Change

October 20th, 2020

Presented by:

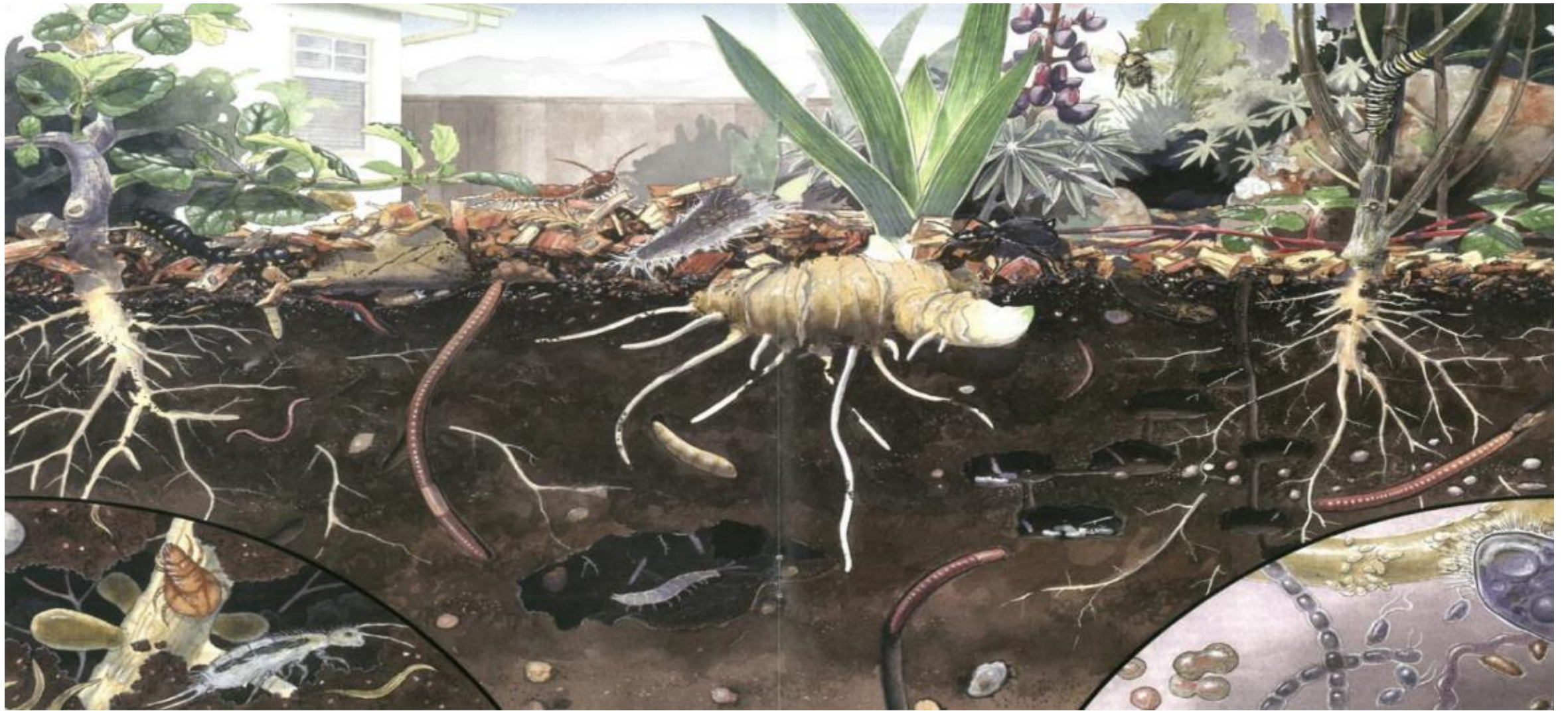
Trevor Probert, StopWaste

Tonight's agenda

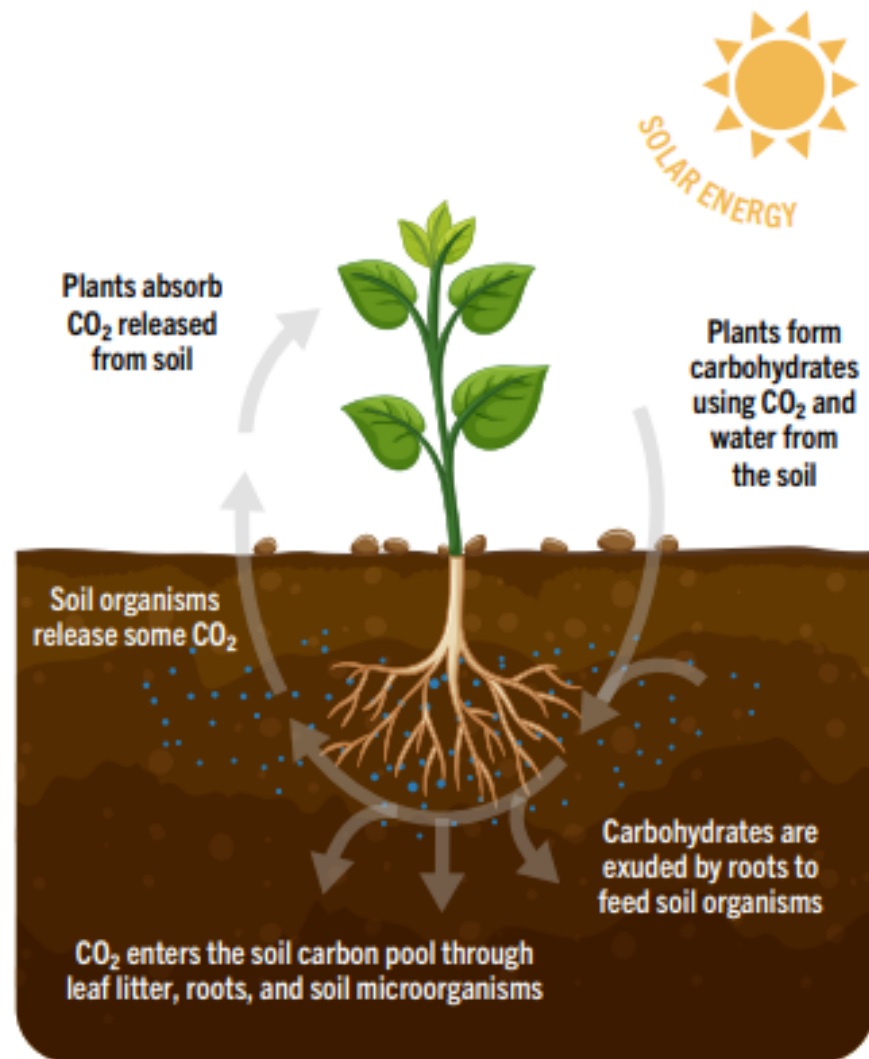
- What is carbon farming?
- Carbon farming practices
- Soil activities for home
- Urban farm soil testing
- StopWaste resources
- Q&A



“Serengeti in the Soil”



Carbon farming



- **Maximize carbon entering the soil, minimize carbon leaving the soil by:**

- Apply compost and mulch
- Minimize bare soil and maximize soil cover
- Maximize living roots
- Minimize soil disturbance
- Maximize biodiversity
- Avoid synthetic fertilizers, pesticides, and herbicides

Carbon farming practices for home gardeners

- Compost and worm castings
- Mulch
- Sheet mulching
- Plant deep rooted perennials
- Plant cover crops
- Plant a diversity of species
- No tilling
- No synthetic fertilizers, pesticides, and herbicides

Make and use compost



Make and use worm castings



Apply mulch as a soil cover



Scavenger Hunt - Fungal mycelium



Sheet mulching new and established gardens

Basic Sheet Mulch Recipe

3 inches Mulch

1.5 inch Compost

2 layers
(b-flute) Cardboard

Grass



Plant deep rooted perennials



Plant cover crops



Plant a diversity of species



No synthetic fertilizers, pesticides, and herbicides

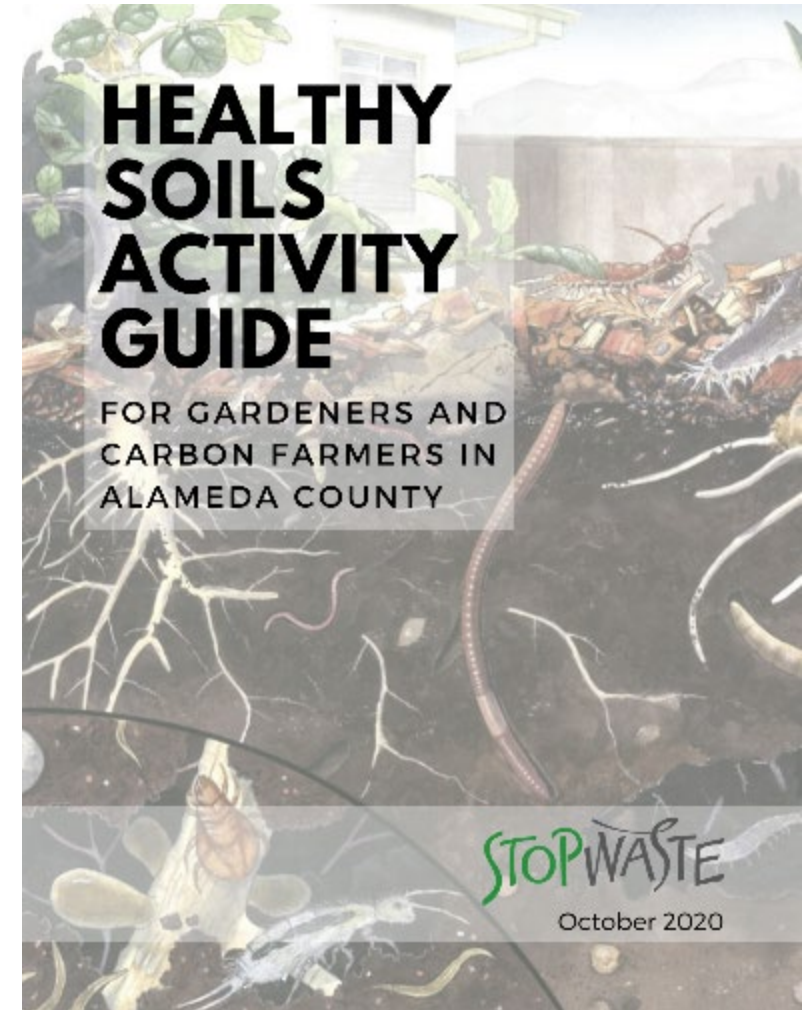


No till



Soil activities for home gardeners

- The Nitty Gritty
- The Worm Count
- The Slake Test
- 8 total activities in StopWaste's Healthy Soils Activity Guide



The Nitty Gritty – Visualize your soil type



The Worm Count – Measure your organic matter



The Slake Test – Examine your soil stability



Urban farm partnerships with StopWaste

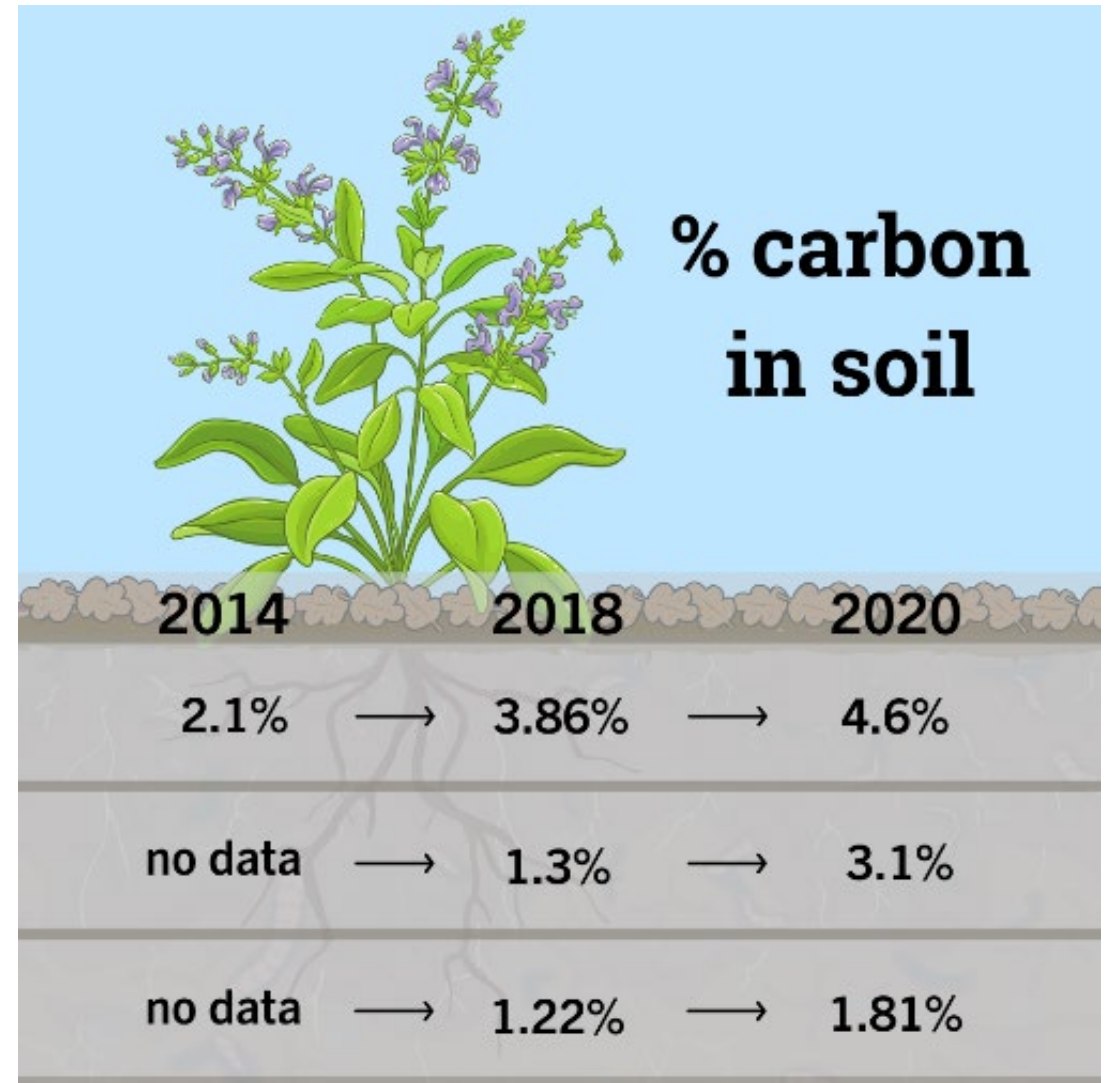
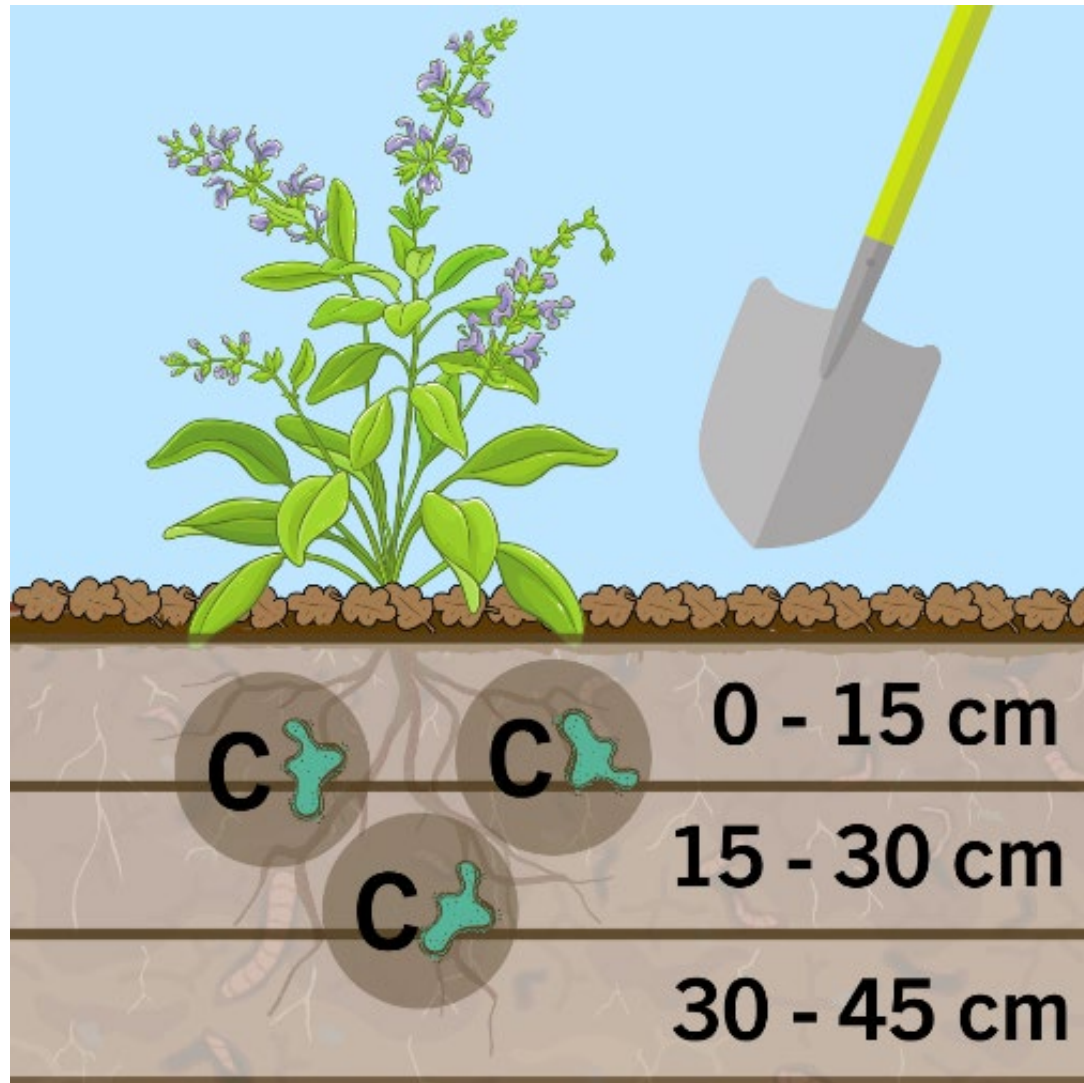
- Farm2Market, Alameda
- Fremont LEAF, Fremont
- Eden Garden, Livermore
- City Slicker Farms, Oakland
- Mills College Community Farm, Oakland
- Phat Beets Produce, Oakland
- Oakland LEAF, Oakland
- Wente Restaurant Garden, Livermore*



Soil testing to measure carbon



Carbon Farming at Fremont LEAF



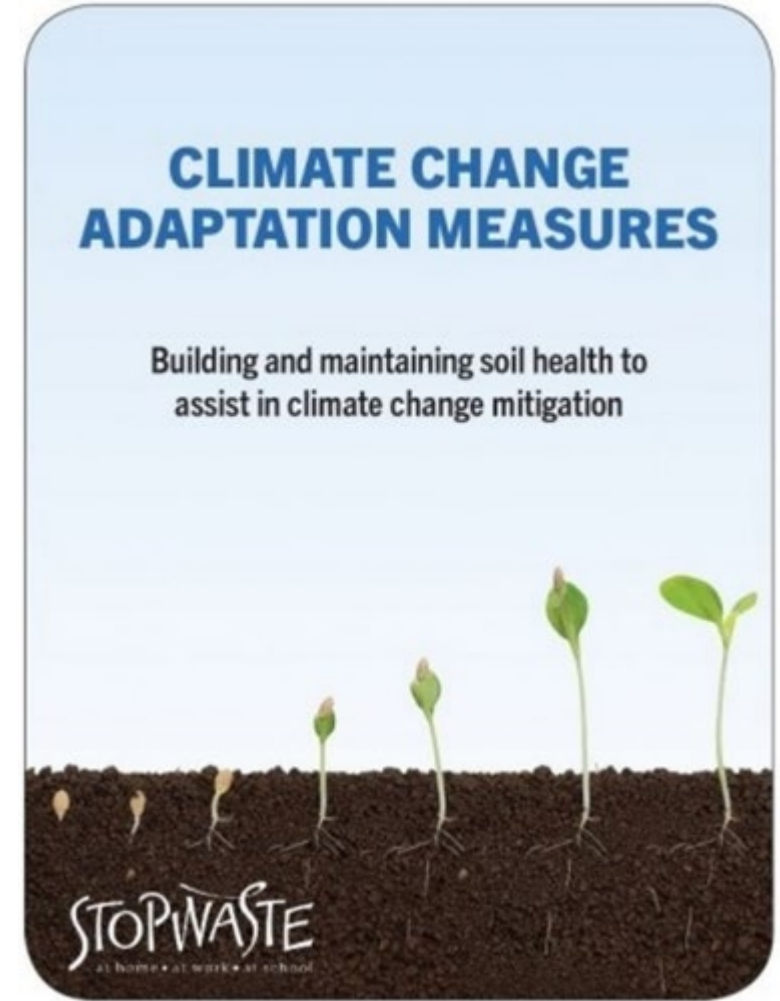
Thought experiment...

- 2374 acres of land available for carbon farming (35% total land)
- Alameda could store up to **111,000 Mg CO₂e** per year
 - (data from Fremont LEAF)
- Equivalent to removing **up to 24,000 cars' emissions** every year



Carbon Farming in Alameda

- Alameda CARP (Climate Action and Resilience Plan) includes carbon farming as an action item
- Alameda Master Street Tree Plan update will include compost application in tree wells
- SB 1383 (Short-lived Climate Pollutants Strategy)
 - Starting Jan. 2022 – Alameda procures ~9,000 cubic yards of compost* per year
 - 9,000 cubic yards = 1 inch application over 26 acres
- Alameda may restart “compost give back” program for residents



StopWaste resources

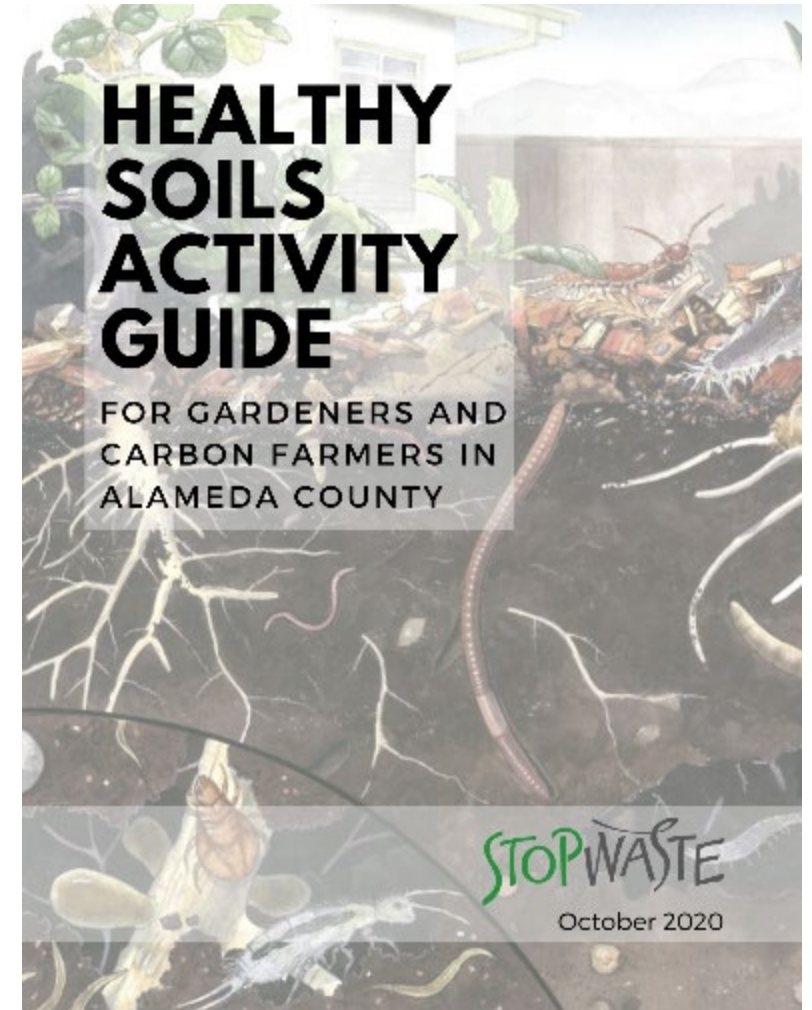
- Healthy Soils Activity Guide (and videos)
- “Tools For Building Healthy Soil” Brochure
- “Now That Your Lawn Is Gone” Brochure
- Bay Friendly Gardening Guide
- www.StopWaste.org/gardening
- www.LawntoGarden.org
- “East Bay Garden Friends” facebook group

Next StopWaste webinars:

Symphony of the Soil film screening, Thurs Nov. 19th 6:00 – 8:00 pm

Worm Composting, TBD Winter

Register on our website!





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Thank you!

www.stopwaste.org/gardening

Trevor Probert

tprobert@stopwaste.org