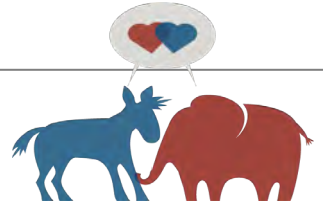
Citizens' Climate Lobby

The Growing Climate Solutions Act

[presenters]
[group presenting to]
[date]

Citizens’ Climate Lobby

Bipartisan



We work with both Republicans and Democrats to promote durable solutions

Solution focused

We support legislation that will have a big impact in slowing climate change ...

Such as the Growing Climate Solution Act

- which is bipartisan, bicameral

Passed in the Senate 92-8

34 Cosponsors in the **House**:

Spanberger (VA7), Bacon (NE2), Pingree (ME1), Curtis (UT3), Tonko (NY20), Fitzpatrick (PA1), Axne (IA3), Fortenberry (NE1), Brownley (CA26), Stefanik (NY21), Houlahan (PA6), Wittman (VA1), Deutch (FL22), Katko (NY24), Maloney (NY18), Kelly (PA16), Luria (VA2), Hollingsworth (IN9), Cooper (TN5), Mace (SC1), Wild (PA7), Costa (CA16), Cartwright (PA8), Bustos (IL17), Courtney (CT2), Bishop (GA2), Kind (WI3), Miller-Meeks (IA2), Schrier (WA8), Baird (IN4), Timmons (SC4), Napolitano (CA32), Hill (AR2), Herrera Beutler (WA3)

Such as the Growing Climate Solution Act

- which is bipartisan, bicameral, and widely supported

Organizations supporting the GCSA:

- Agricultural Organizations (inc. AFBF)
- Agricultural Companies
- Environmental Organizations (inc. CCL)
- Food Companies

So what does the Growing Climate Solutions Act do?

It makes Carbon Markets more transparent, credible, and accessible

SUPPLIERS

Farmers, ranchers, and foresters sequester carbon in soil and/or trees

earn carbon credits →

VERIFIERS

Independent third parties verify that the carbon has been sequestered

verified carbon credits →

BUYERS

Companies or individuals pay for the carbon sequestered, usually to offset their own emissions

← $$$

So how is carbon stored?

Basic idea of carbon sequestration in soil and trees:

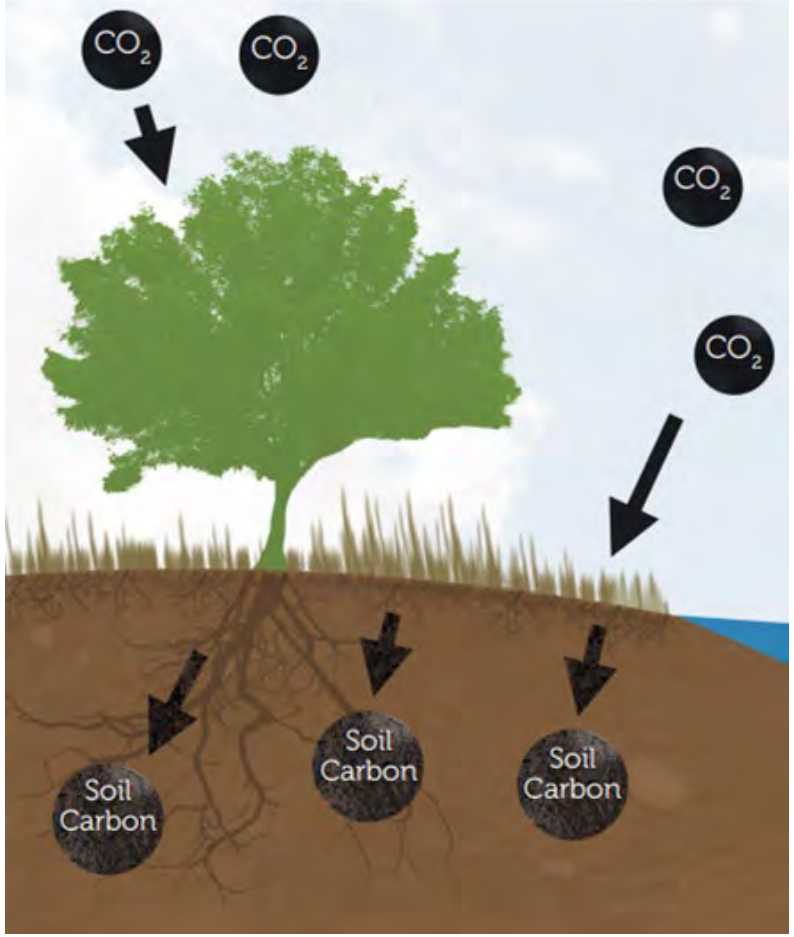
- Plants take carbon dioxide from the air

  & turn it into plant tissue including the wood in trees.

- The plants feed carbon compounds to soil bacteria and fungi.

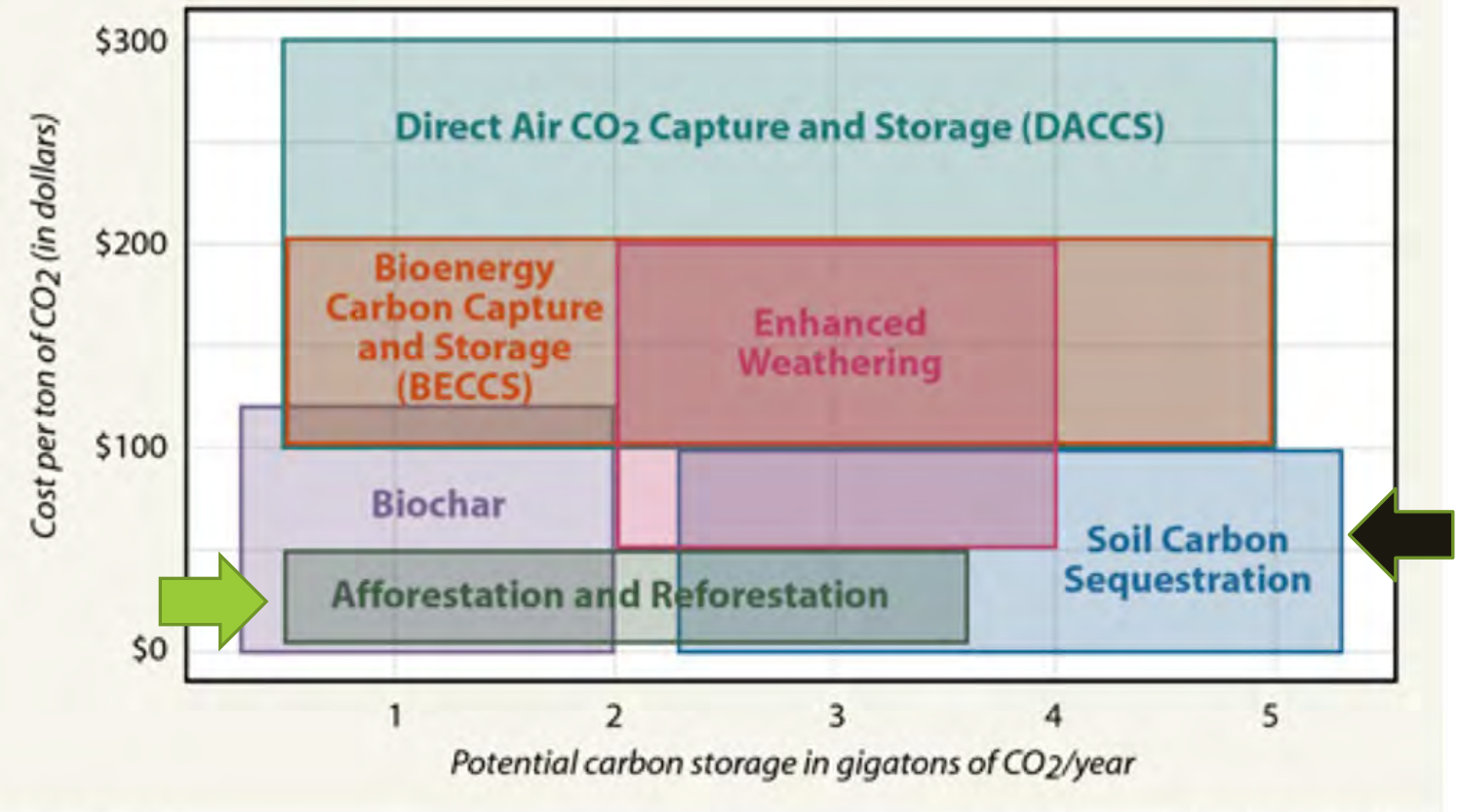
- And the plants die and partially decompose.

- So the carbon ends up in the soil where it is stored unless disturbed or washed away.



These are the most cost-effective means of removing CO_2

from the atmosphere



SOURCE: IPCC

InsideClimate News

To meet the goals of the Paris climate agreement and keep global warming under 1.5 degrees Celsius, the world will have to increase the amount of carbon dioxide pulled from the atmosphere, the IPCC reports. It compared the costs and storage potential of six key methods of carbon dioxide removal. Soil carbon sequestration is one of the cheapest with the most potential.

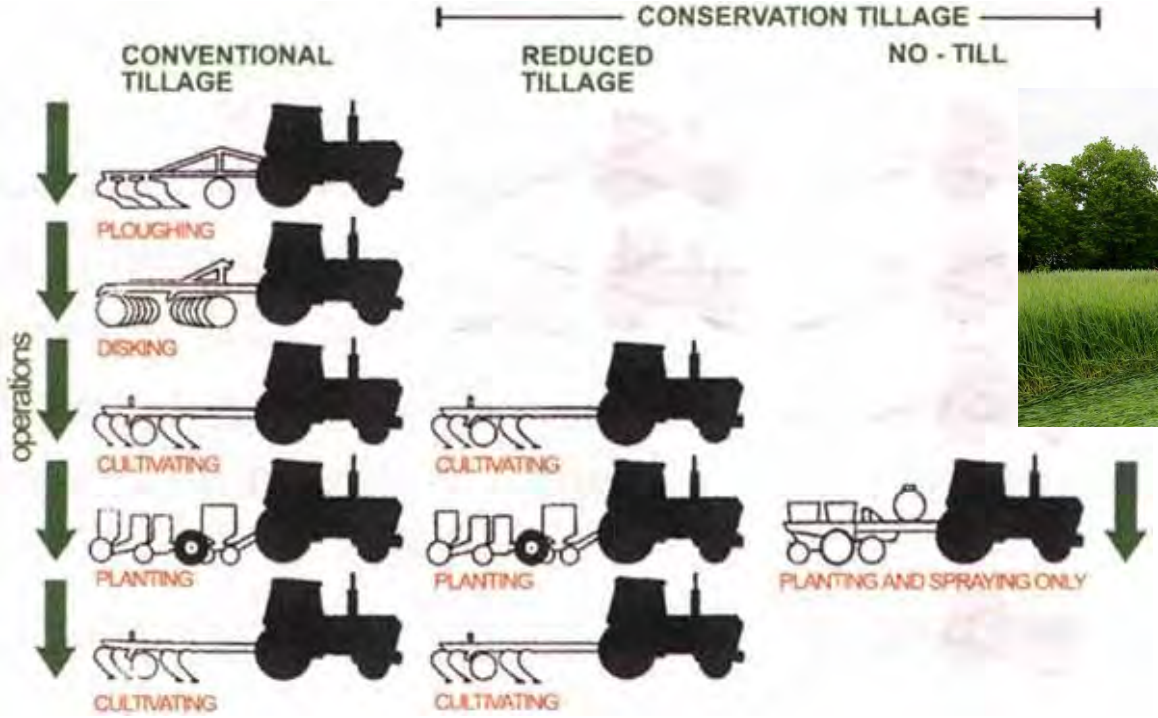
What types of practices are expected to earn farmers carbon credits?

Cover crops

- Keep soil covered so doesn't wash away
- Roots in the ground, when cash crops aren't there, feed the bacteria and fungi and so keep the soil healthy

What types of practices are expected to earn farmers carbon credits?

No-till



Or crimper can kill some cover crops; plant at same time

Conventional tillage burns more fuel and opens up the ground which allows more decomposition of stored carbon; both release carbon dioxide

Soybeans planted into rye residue

What types of practices are expected to earn ranchers carbon credits?

Silvopasture

Rotational Grazing

What types of practices are expected to earn foresters carbon credits?

Avoiding conversion of forests

Improved harvesting methods e.g. selection cutting that results in mixed-age stands; thinning of diseased trees

Reforestation

So what marketplaces are buying and selling the credits?

Some will actually "stack" credits, e.g. ESMC

Soil carbon sequestration

Nori

Indigo Ag

Truterra

Regen Network

Bayer Carbon Initiative

CIBO Technologies

Soil C sequestration + GHGs + other services

Ecosystem Services Market Consortium

Soil & Water Outcomes Fund

Forestry +

CARB (California's offset market)

Note: Most are still doing pilot studies to determine the protocols they will use to verify that goals are met

Ecosystem Services and other co-benefits

Improvement of water and air quality

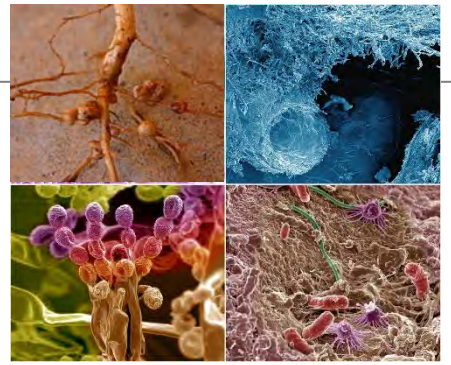
- Reduces erosion
  - and therefore sediment and dust
- Reduces leaching of nutrients
  - and therefore HABs

Improvement of climate resilience

- Continuous cover and increased soil organic matter (soil carbon) can
  - increase filtration when rains too much (can prevent flooding)
  - retain water when rains too little (so water available to plants during drought)

Ecosystem Services and other co-benefits

Increase of biodiversity



- In soil, which makes soil more productive

- Creates more wildlife habitat

Ecosystem Services and other co-benefits

Increase of financial resilience

- Reduces input costs per yield
- Can be maintained in the long-term, with steadier yields and profits

The Growing Climate Solutions Act can help farmers help us

Questions? Comments?

Extra Slides

In case you would like to include them

GCSA: Activities expected to be credit-earning

(A) land or soil carbon sequestration;

(B) emissions reductions derived from fuel choice or reduced fuel use;

(C) livestock emissions reductions, including emissions reductions achieved through feeds and feed additives;

(D) on-farm energy generation, including fuel switching;

(E) energy feedstock production;

(F) fertilizer use emissions reductions;

(G) reforestation;

(H) forest management, including improving harvesting practices and thinning diseased trees;

(I) avoidance of the conversion of forests;

(J) grassland management, including prescribed grazing; and

(K) such other activities, or combinations of activities, that the Secretary, in consultation with the Advisory Council, determine to be appropriate.

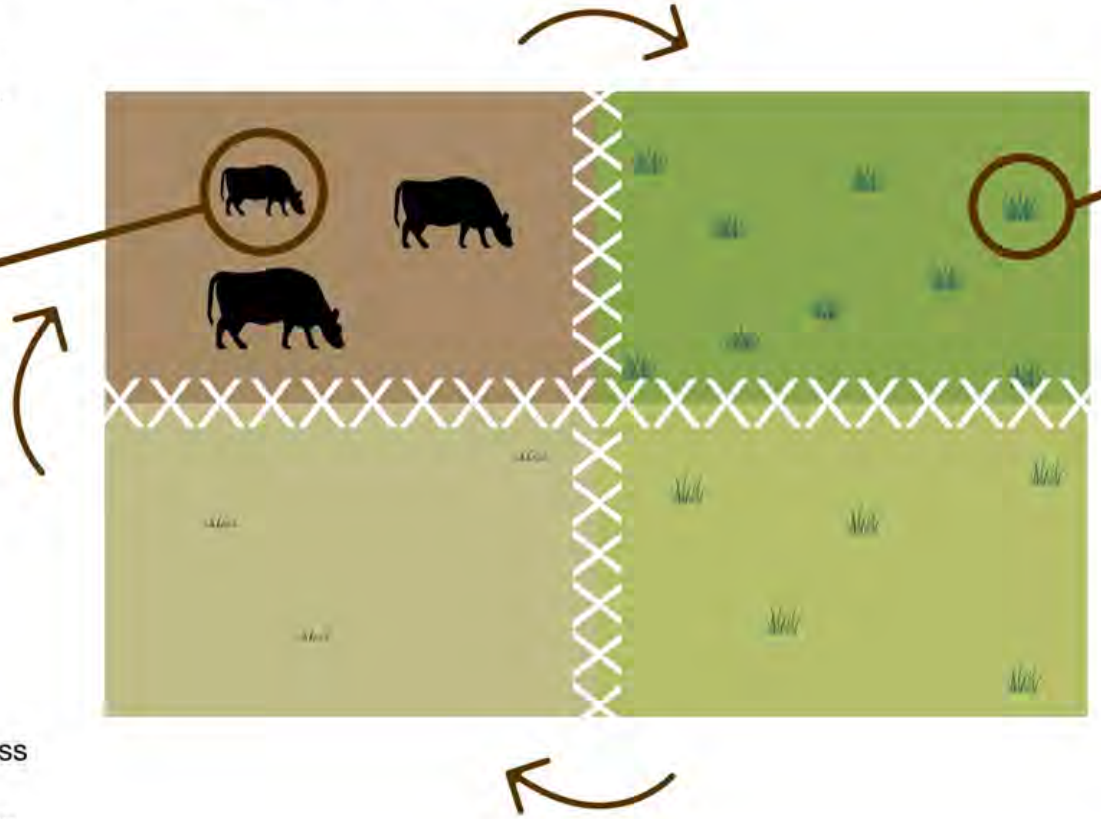
What is Rotational Grazing?

Large pastures are broken into sections called paddocks. Livestock are moved between paddocks when 50% to 70% of cover has been removed.

Paddocks not currently being grazed are left to rest for a period of 25 - 30 days. This allows plant life to come back to grazing height and develop deeper root systems.

Deeper root systems allow plants to draw more nutrients from the soil. They also helps reduce field erosion which can lead to desertification.

Pastured animals are less suseptable to diseases like footrot, pinkeye and worms.



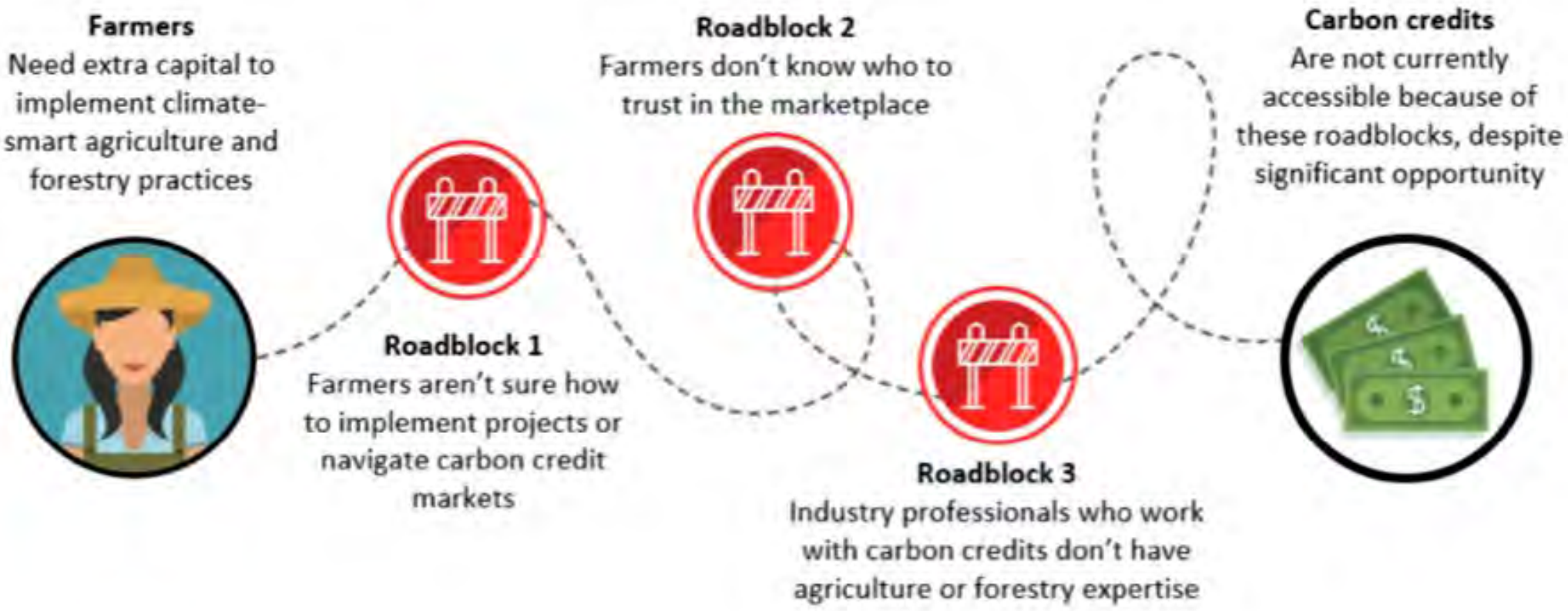
Healthier livestock means less dependence on expensive, potentially harmful antibiotics.

Increasing the yeild of pasture land helps reduce dependence on grains and feeds, which can be expensive and laborsome to grow.

Graphic by Alexandra Kanik

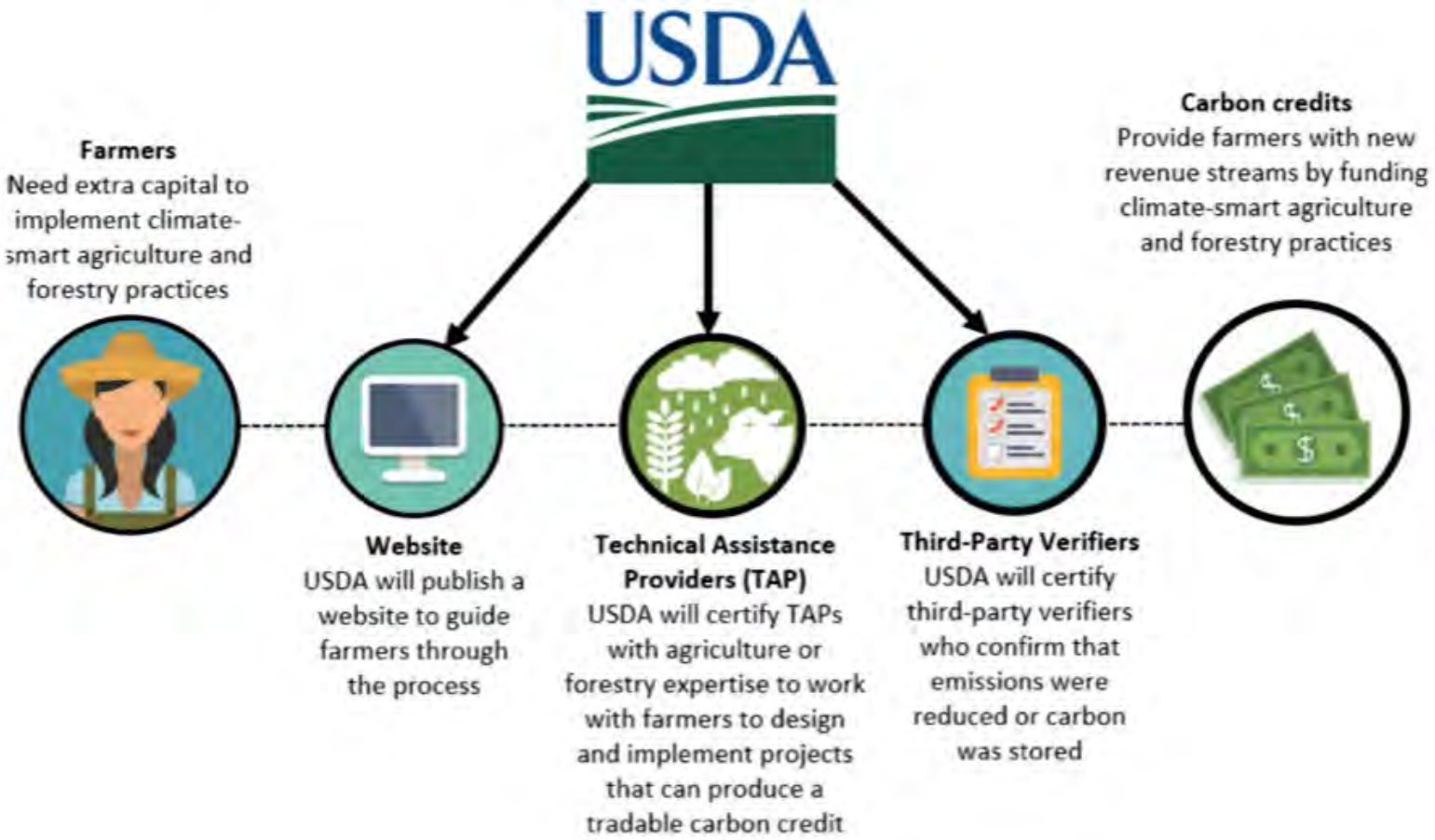
Farmers, Ranchers, and Foresters currently face roadblocks

Today: Roadblocks stop farmers and foresters from earning income from climate-smart agriculture and forestry.



The GCSA reduces these roadblocks

The Growing Climate Solutions Act helps farmers and foresters navigate carbon markets, incentivizing carbon sequestration and bringing dollars to producers.



So what can you do?

Ask your Members of Congress to cosponsor the Growing Climate Solutions Act

[contact information for MoCs]

[OR]

Find out farmers' and foresters' views of climate-smart farming/forestry & the GCSA

[get materials from BCL-Ag]

[or whatever your ask is]