# Soil for Water final evaluation

**Welcome!**

We'll get started soon!

NCAT NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY

SOUTHERN SARE Sustainable Agriculture Research & Education

jg | RESEARCH & EVALUATION

# Knowledge System Mapping Goals

1. Visually generate regenerative grazing network in Virginia
2. Evaluate changes in atitudes, behaviors, and knowledge
3. Capture lessons learned from the project

# Before: Defining "Regenerative Grazing"

*"Land stewardship with animals that heals the land, enriching soils and protecting waters."*

Healing for self-renewal, self-regulating; systems thinking

**improves/maintains/rebuilds soil health**

Resilience- "weather the weather"

producer mindset

Vast majority of VA producers likely not familiar with term

important to build common definition

**Rest and recovery of pasture**

**producing optimum forage with minimal inputs**

*"A philosophy of coexistence, as opposed to exploitation"*

**Soil for Water** definition: grazing that improves soil health

**Mimicking socioecological systems**

Diversity

regeneratively managing the primary resource: The Soil

# After: Defining "Regenerative Grazing"

+

Social
Cultural
Economic
considerations

**Intentional grazing** with regular rotations for **benefits to soil, forages, livestock, wildlife, and water quality.**

Ecological farming

**A continual process and journey, not a destination.** Considers:
- quality of life for people, animals, and the ecosystem
- soil health
- returns on investment
- farm profitability
- community well-being
- natural resource protection and restoration
- the needs of present and future generations as a holistic approach to management.

Utilizing livestock movement and forage rest periods in a way to **promote diversity above and below ground, building soil health** and **increasing ecological synergy**.

**adaptive management** of **variable densities** of livestock and **long recovery** periods to achieve **intentional disturbance** to **increase biodiversity and soil health**

system that **continuously builds soil health** with **balancing economic and cultural values** to sustain the system.

Grazing that leaves the land and soil better than it started while also emphasizing the economic and social wellbeing of the farm and community.

Short duration graze followed by long term recovery.

**A continual process and journey** that considers:
- ecosystem dynamics
- soil quality/health
- livestock care
- farm profitability
- climate resilience
- holistic thinking.

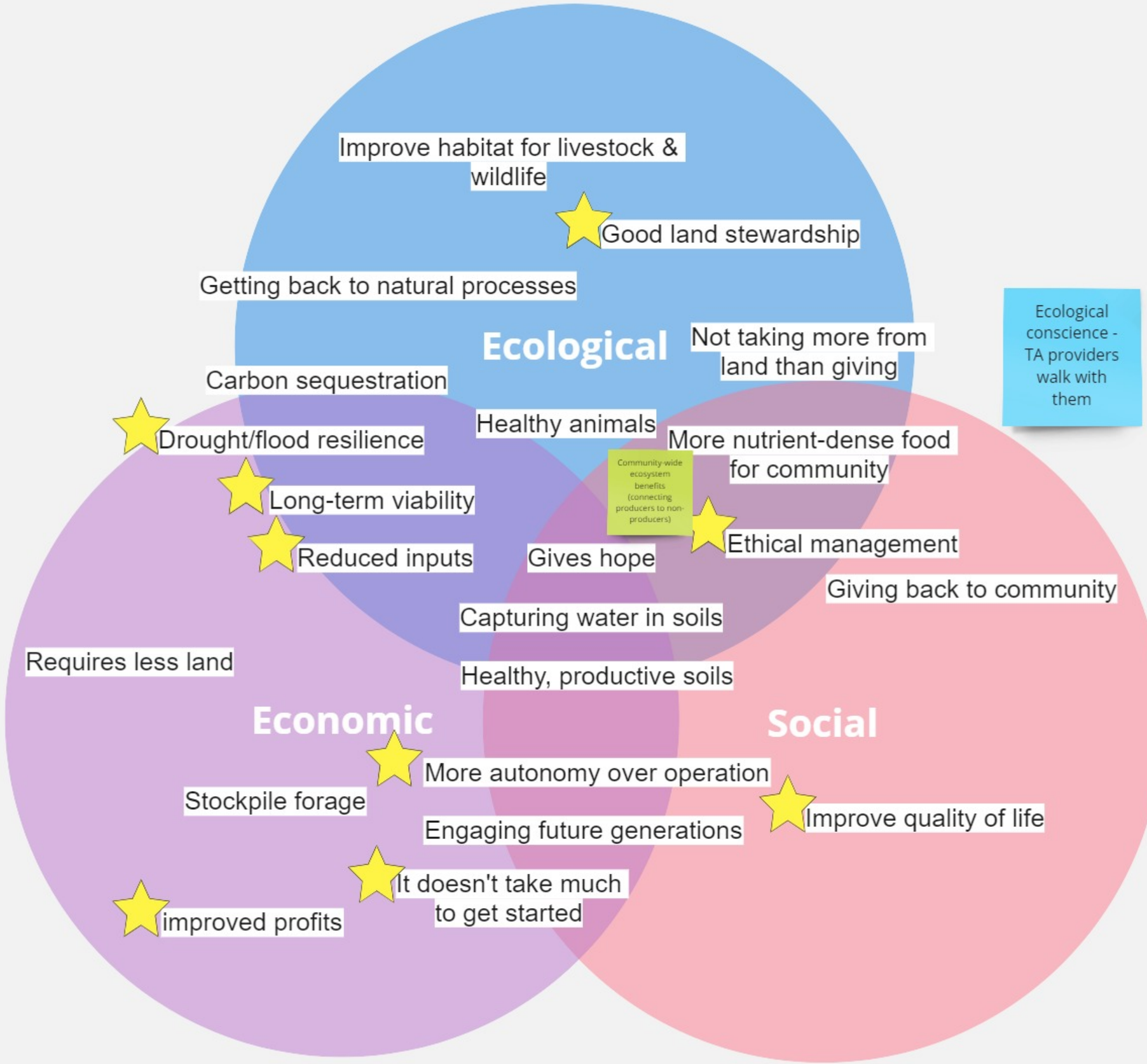
Producer mindset - "ecological conscience" - adaptive, systems-focused, active decision-making

It's a path not a destination - not prescriptive or punitive

Producer autonomy

Words and definitions matter - what is regenerative versus other words (sustainable, ecological)?

# Motivations for adoption of Regenerative Practices



## Biggest Barriers to Adoption

Fear of the unknown

Perception that it's a lot of work

Reliance on off-farm jobs for livelihood and healthcare

Reluctance to change from conventional

Very little support from agencies and institutions that have pushed conventional for decades

Labor and time commitment--upfront investments

How has your understanding of barriers evolved?

Reluctant to change practices when selling into low-bar commodity chain (beef)

Lack of resources for underserved producers

Lack of local/regional processing for direct-to-consumer or more local markets

Hard to keep product segregated to maintain value-add of regenerative practices

Input companies have profit motive which means using more inputs, not fewer as in regenerative

Hard to reach producers who don't farm as primary occupation - night meetings used to work but less so now

Extension is more focused on programming from input suppliers

How has project addressed barriers?

Create case studies that explain how to overcome barriers

Capacity building - dedicated track at conferences for regenerative grazing

# Facilitators of adoption

| Item | Overall Rank | Rank Distribution |
|---|---|---|
| Mentorship by experienced regenerative grazier | 1 | |
| On-farm learning opportunities (e.g. pasture walks) | 2 | |
| Hands-on learning opportunities (e.g. workshops and trainings) | 3 | |
| Trusted educator/messenger | 4 | |
| Participation in grazing groups | 5 | |
| Scientific research and evidence on the benefits of regenerative | 6 | |
| Promotion by agencies (e.g. NRCS, Extension) | 7 | |
| Promotion by universities, research groups | 8 | |

Lowest Rank — Highest Rank

Cost share

TA

Case studies - financial return on investment

Access to up front capital & resources

Market assistance and resources to diversify/sell direct

How has your understanding of facilitators of adoption evolved?

TA provider support - walking along the path with producers

Needs to be flexible, non-prescriptive

Need a shorter, clearer definition to call people in

Local purchasing for food banks and other local institutions - supported by grant funding and public dollars

Resources to support training and outreach that doesn't just come from input suppliers and conventional system

Avoid co-ops!/ conventional mindset

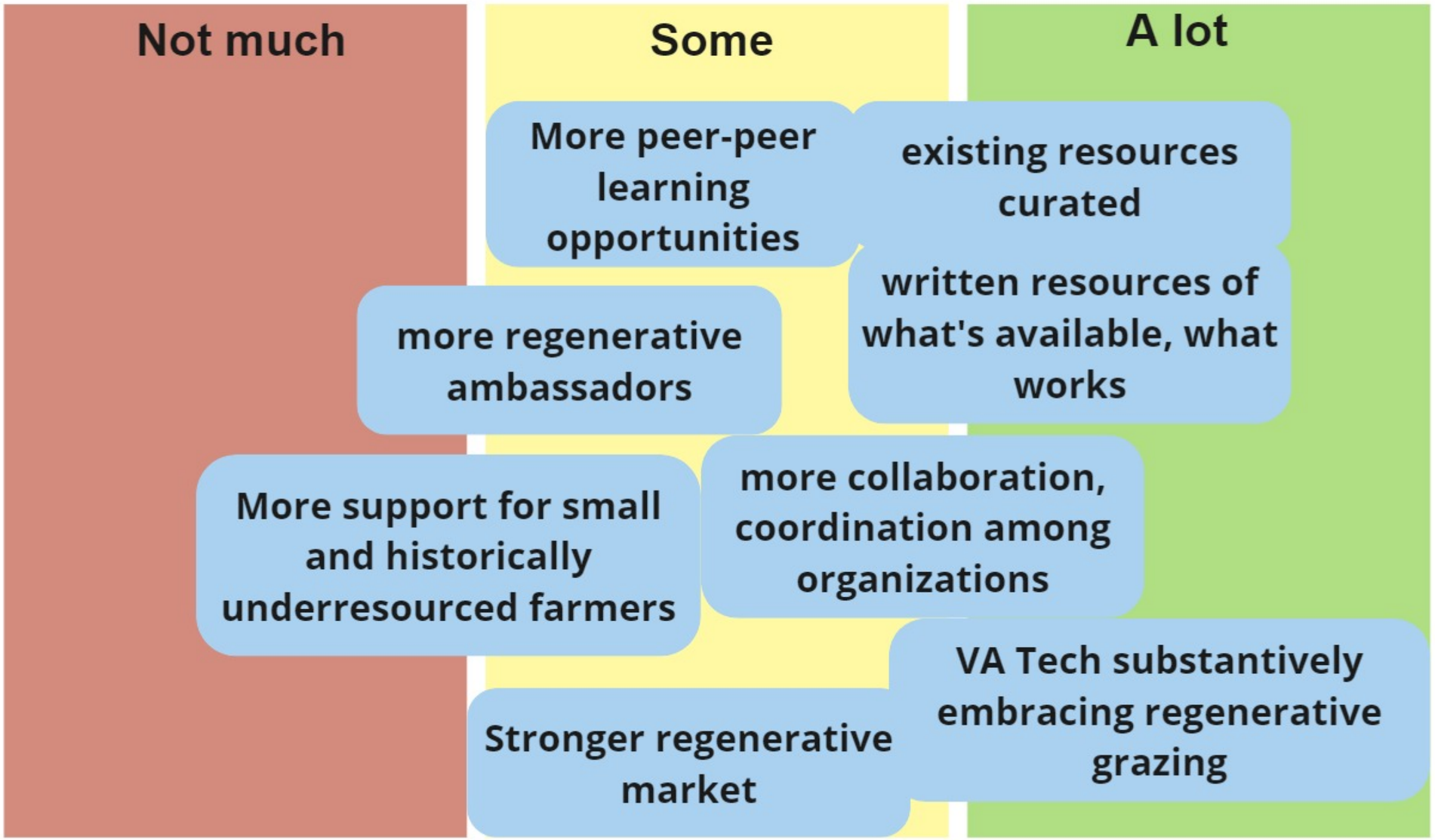
How has project supported facilitators?

Conference sessions and resources focused on regenerative grazing

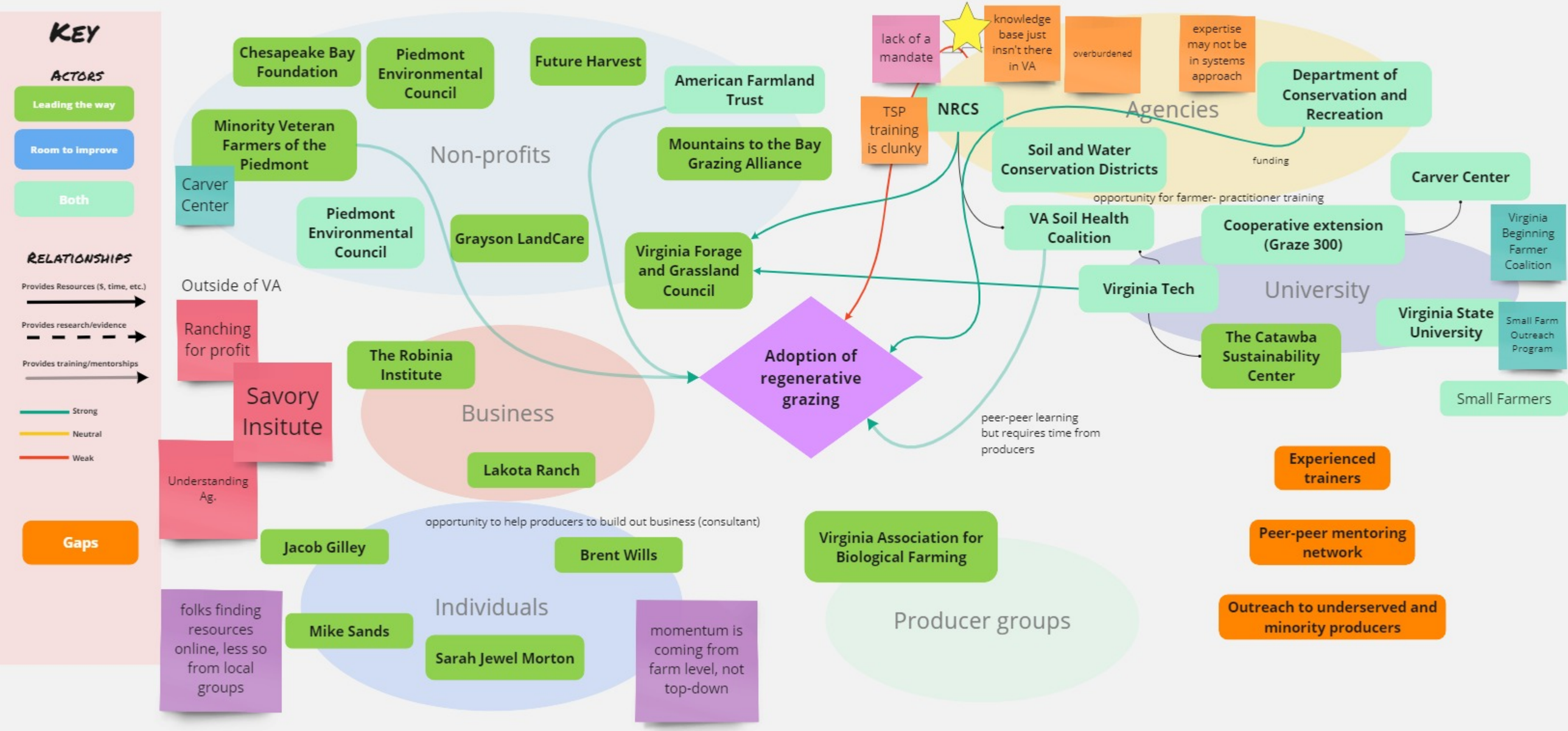
Uplifting organizations and building partnerships focused on producer engagement

Train the trainer events - extension, NRCS agents

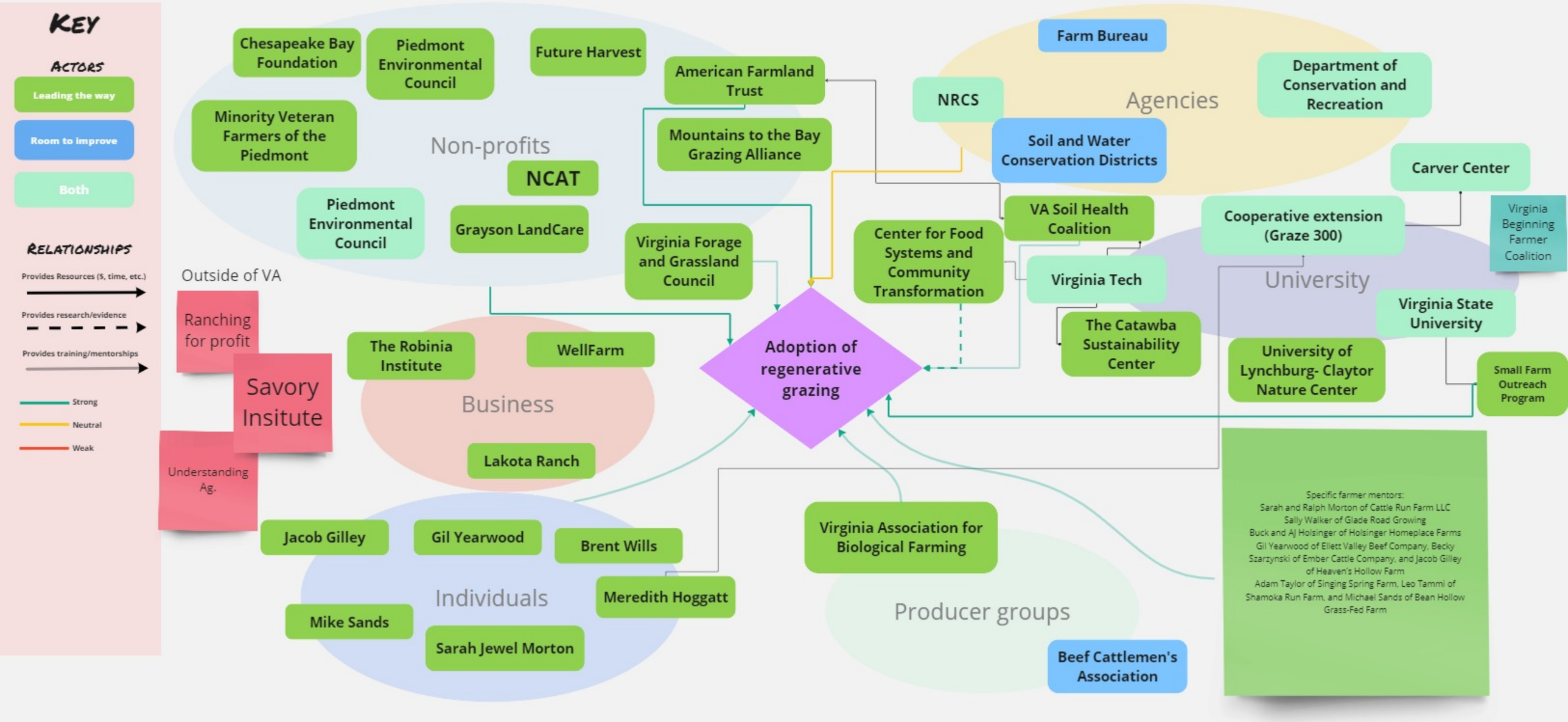
# Progress on Priorities from First Mapping



# BEFORE


KEY
ACTORS
Leading the way
Room to improve
Both
RELATIONSHIPS
Provides Resources ($, time, etc.)
Provides research/evidence
Provides training/mentorships
Strong
Neutral
Weak
Gaps
Chesapeake Bay Foundation
Piedmont Environmental Council
Future Harvest
American Farmland Trust
Minority Veteran Farmers of the Piedmont
Mountains to the Bay Grazing Alliance
Carver Center
Non-profits
Piedmont Environmental Council
Grayson LandCare
Outside of VA
Ranching for profit
Savory Insitute
Understanding Ag.
The Robinia Institute
Business
Lakota Ranch
Jacob Gilley
opportunity to help producers to build out business (consultant)
Brent Wills
Individuals
folks finding resources online, less so from local groups
Mike Sands
Sarah Jewel Morton
momentum is coming from farm level, not top-down
lack of a mandate
knowledge base just insn't there in VA
overburdened
expertise may not be in systems approach
TSP training is clunky
NRCS
Agencies
Department of Conservation and Recreation
funding
Soil and Water Conservation Districts
Carver Center
opportunity for farmer- practitioner training
VA Soil Health Coalition
Cooperative extension (Graze 300)
Virginia Beginning Farmer Coalition
Virginia Forage and Grassland Council
Virginia Tech
University
Virginia State University
Small Farm Outreach Program
The Catawba Sustainability Center
Small Farmers
Adoption of regenerative grazing
peer-peer learning but requires time from producers
Experienced trainers
Peer-peer mentoring network
Outreach to underserved and minority producers
Virginia Association for Biological Farming
Producer groups

# AFTER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Jacob Gilley
Gil Yearwood
Brent Wills
Meredith Hoggatt
Individuals
Mike Sands
Sarah Jewel Morton
Virginia Association for Biological Farming
Producer groups
Beef Cattlemen's Association
Specific farmer mentors:
Sarah and Ralph Morton of Cattle Run Farm LLC
Sally Walker of Glade Road Growing
Buck and AJ Holsinger of Holsinger Homeplace Farms
Gil Yearwood of Ellett Valley Beef Company, Becky Szarzynski of Ember Cattle Company, and Jacob Gilley of Heaven's Hollow Farm
Adam Taylor of Singing Spring Farm, Leo Tammi of Shamoka Run Farm, and Michael Sands of Bean Hollow Grass-Fed Farm

# What's next?

Are you interested in continuing to collaborate w/ your state beyond the project?


## How can the work continue?

- Continued farmer-farmer network buuilding
- on-farm experiments and workshops
- Consistent marketing/ messaging
- Expand Soil for Water or similar programs
- intentional, continued organizing that doesn't ask too much of producers/leaders
- Grazing schools
- Funding and partnership opportunities to expand on grazing schools
- Dedicated cohorts

## Who needs to be involved?

- New and beginning farmers
- Soil Health Coalition
- NCAT as partner
- Western VA

# Thank you!

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Send any additional thoughts/feedback to Erika or Lee

# Virginia: final knowledge systems mapping summary

**Definition of regenerative grazing**

- Similar definitions re: ecological processes, land stewardship, soil health, resilience, etc. though After had more nuance related to social, economic, and cultural benefits (economic, social wellbeing of the farm and community)
- After: also more emphasis on regenerative being a journey not a destination/continual process, that it is not prescriptive or punitive but rather generates producer autonomy
    - There's no manual/standard/codebook for regenerative which can both be difficult for producers to wrap their head around but is very freeing
- Regenerative as a term having "explicit sensibility around systems"
- Discussion about the fact that words and definitions matter, but they also get co-opted and/or have associations with them
    - Regenerative/ sustainable is often associated with "hippie" culture
    - Discussion about regenerative ag being under the banner of the ever-growing world of sustainable agriculture
    - Need for a simple, brief definition to convey concepts
        - Working with nature vs. against it—life versus death

**Barriers to adoption**

- Before: top 3 barriers: high initial investment cost, it is perceived as labor-intensive, lack of hands-on training and/or mentorship opportunities
- After: additional barriers: lack of downstream infrastructure (processing) and consumer markets to support adoption, goes against big money aimed at keeping things the same, fear of the unknown; it's an "all-in" investment, whereas a lot of producers rely on off-farm jobs for healthcare, income
- Project worked to address barriers through case studies that explain how others have successfully overcome barriers, developed a dedicated track at conferences for regenerative grazing
- Consistent with first mapping: major barrier is the fact that adoption entails a paradigm shift/a substantial change in producer mindset and focus—orientation toward environment, ecology, systems thinking and decision-making
- Discussion about how extension itself is often funded by big ag---potential opportunity is to encourage different funding sources that would be more supportive of regenerative
    - VA's train the trainer events helping here

**Facilitators of adoption**

- Top 3: mentorship, on-farm learning, hands-on learning
- Additional: technical assistance, cost share and access to upfront capital
- In VA, Guille Yearwood invested a lot of time and energy toward mentorship, has reached a lot of folks
- Noted a need for agency folks to "Walk alongside" the path with producers—they often have a lot of learning to do themselves to be able to promote regenerative

- Project supported facilitators through regenerative conference sessions, partnerships, and train the trainer events
- Institutions/agencies falling toward bottom of ranking—reflection on importance of partnerships, programming to reach producers, get information out in a way that meets them where they are at; uplifting partners (like AFT) that have the skillset to translate between research and practice
- Mention of some young, local extension agents who are interested in promoting regenerative/partnering with producers in meaningful way---while not reflective of extension as a whole, there is promise there and it's effective at supporting regenerative

**Progress on priorities**

- Not much: more support for small, historically under-resourced farmers
- Some: more regenerative ambassadors, more peer-peer learning opps, stronger regenerative market, more collaboration, coordination among organizations
- A lot: curation of existing resources, written resources of what's available, what works, VA Tech substantively embracing regenerative grazing

**Map**

- New actors:
    - Businesses: WellFarm
    - Individuals: Gil Yearwood, Meredith Hoggatt
        - Producers: Sarah and Ralph Morton, Sally Walker, Buck and AJ Holsinger, Becky Szarzynski, Adam Taylor, Leo Tammi, Michael Sands
    - Producer groups: Beef Cattlemen's Association
    - Agencies: Farm Bureau
    - Universities: University of Lynchburg Claytor Nature Center
- Several producers and their farms added to the map as farmer mentors
- More university actors categorized as "leading the way"
- More partnerships across non-profits, university, agencies, producers
- Gaps noted in first map have seen attention/progress:
    - Experienced trainers
    - Peer-peer mentoring network
    - Outreach to underserved and historically marginalized producers
- Opportunity: focusing on young and beginning farmers—there aren't the same types of barriers that have to be overcome and new farmers will naturally be going to workshops, taking advantage of learning opportunities
    - Leveraging universities
- Likely, there are also some farmers in VA who are already doing these types of practices but not calling it regenerative/aren't looped in yet

**What's next**

- Discussion about accessibility of workshops/training events
- Keeping the farmer-farmer network building momentum going
- Tap into on-farm experiments and workshops (e.g. safe to fail trials)

- Consistent marketing/messaging
- Intentional, continued organizing that also avoids asking too much of producers
- Interest in leveraging existing grazing schools in VA, learning from AR's experience
    - Tapping into funding to expand model
- Who needs to be involved:
    - New and beginning farmers
    - Entities/producers in Western VA
    - NCAT as partner
    - Soil Health Coalition (VA tech)

**Overall observations**

- The number of regenerative grazing mentors in VA has significantly expanded, providing producers with quality peer-peer learning opportunities, ongoing support
- Partnerships across non-profits, agencies, producers, universities have expanded/strengthened, with universities playing a more significant role in promoting regenerative
    - VA Tech now leading player in regenerative grazing resources
- VABF conference has leveraged partnerships to develop regenerative-specific conference tracks
    - Significant in expanding knowledge/interest/network around regenerative
- Agencies continue to fall short in terms of supporting/promoting regenerative, but there are more local agents who are moving the needle/interested in regenerative
    - Opportunity here to partner on training opportunities for both producers and agents
- Interest/opportunity in reaching young, new/beginning producers
- Interest in leveraging experiences/tools from other states:
    - AR's grazing school model
    - TX's Safe to Fail trials