

Environmental Farming Act Science Advisory Panel
California Department of Food and Agriculture
STRATEGIC PLANNING SUMMARY

Developed at October 26th and January 18th, 2018 Science Panel Meetings

LENS/INQUIRY TO BRING TO EACH TOPIC:

- *How can we scale up climate adaptation?*
- *How can we increase recognition and reward for Climate Mitigation efforts?* How can recognition for being a leader in Climate Adaptation, (from large buyers and brands (especially Europe and Asia), increase marketability? CA products are clearly differentiated internationally v. the rest of the Nation.
- *How do we bring innovation to fruition by bringing balance to discordant and complimentary regulations?* Ag regulatory processes are hard to manage – they must overcome property boundaries to act collectively (e.g. WQ and GW recharge are complementarity, but regulated discordantly).
- *Which models bring us more equity in the food and agriculture system?* Is there equity? How do we achieve?
- *Social Science: What will truly drive behavioral change?* (i.e. demonstration or incentives)
- *How do we build a network of farms, keep alive and highlight Healthy Soils and SWEEP, tell the story of change and adaptation?* What is the role of Ag in climate adaptation?

2018 TOPICS IN TENTATIVE ORDER OF PRIORITY:

- I. Eco-system Services and Co-benefits of Ag Lands
 - Define ‘Eco-system Services’ and ‘Co-benefits’ for California Agriculture
 - Utilize and go into more depth on current research (pollinators, hedgerows, habitats e.g. Hydrologic cycle).
 - There are quantifications and opportunities to understand beyond C-sequestration.
 - How can CDFA help share existing data? – can CDFA help share data/resources and their implications for a cropping system.
 - Can CDFA be a resource for quantification (e.g., X acres of a crop – what are its benefits e.g., GHG, pollinator habitat)
 - Quantify benefits
 - Share knowledge from previous work in a format useful to the counties (previously initiated work can be re-visited and framed to show desirable outcomes). This is what is needed by Ag Commissioners.
 - Identify remaining data needs to achieve outcomes and determine next steps and deliverable based on previous work.
 - How do we Monetize?
- IA. Native Plant and Species Conservation on Working Lands
 - Because SGMA land can be fallowed – an opportunity is created to work on wildlife habitat and pollinator plant conservation through incentives and community benefits.
 - There is opportunity to partner with non-profit organizations for raising money for projects.
 - Planning ahead for fallowed land should be a priority.
 - Explore permanent and temporary measures
 - Timing is good for this with SB5 – conservation and parks programs may develop after money comes in from bill – now is a good time to plan ahead (including urban, rural, parks).

- Qualitative and quantitative methods for measuring multiple benefits need to be employed (e.g. GHG, sequestration, maintain soil C stocks, water quality).
 - Use existing programs and data.
- Keep food safety issues in mind
- Identify RCIS overlap

II. Education and Outreach (Demonstration Projects)

- What are the existing demonstration projects? Emphasis SWEEP and HSP
- Conduct an Ag Press Tour (or multiple) to leverage demonstration projects
- What is a long-term mechanism for trials and testing (demo) through existing agricultural organizations and networks? How do we be more thoughtful with the suite of demonstration projects?
- How to do outreach through the panel on key outcomes/learnings from demonstration projects?
- How do we ensure Post-analysis? i.e. Quantitative and Qualitative follow up to demo projects – did they drive change or did incentives?
- How do we use analysis to drive future decisions?

III. State-wide Inventory of working lands that can contribute to GW recharge

- Bring together organizations in one place to represent what they are doing here, including GSAs
 - Can we inform the GSPs? Have a map in one place
 - DOC
 - DWR
 - Suscon
 - AFT also getting involved
 - UC –soil mapping
 - CA Economic Summit – land use plans take into account this piece
- Conduct a GIS Project to highlight:
 - Working lands near rivers
 - Crops that can withstand changes
 1. ID locations with potential
 2. Do targeted outreach
 - Collect documents and data that is already out there showing opportunities?
 - Disseminate data to convince growers that their land is key for recharge
 - Incentivize recharge.
 - Can CDFA assist and outreach and play a policy and legal advising role?
 - Ties into SGMA and ILRP and SWEEP – address the specific opportunities that can play into recharge and nutrient density
 - Explore how the different programs complement working lands:
 - Show the 4 tiers: 1. Quantity, 2. Quality 3. Surface, 4. Ground

IV. 2050 Ag Study

Different scenarios for what CA Ag look in 2050 – need to look for \$ so EFA SAP would frame the project that would get funded

- Technologies
- Labor
- Policies
- Behavior
- Crop change

- Climate Change
- Regulations
 - Look at LBNL how climate change will impact them
 - Guess speaker
 - Ag innovation center
 - UCANR – Innovation Officer – talk at EFA SAP
- Explore how to incentivize/guard listed technologies that tie into climate change mitigation and resilience (e.g. N-sensors).
- Understand impact of labor issues/availability on incentives for new technologies (sensors/imagery etc. Labor availability is an important driver; reduced labor is a pressure for automation).

V. Bio-based Farm Products

- Nexus with HSP
- Food Waste - Explore existing state-wide programs for reducing or composting on-farm
- Is there a need for increased incentives?
- Are there potential un-intended negative impacts?
- Keep the panel updated!

NEXT STEPS:

1. Release for public comment
2. Create Calendar for working through topics and for associated activities