

UC ANR REC System Strategic Framework

December 22, 2020

UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources

Table of Contents

REC System Strategic Framework Team	3
UC ANR REC System Organization	4
Strategic Framework Purpose	5
Strategic Framework Decision Drivers	6
REC System Mission and Vision	12
Mission	13
Vision	14
REC System Strategic Objectives and Goals	15
UC ANR Strategic Objectives	16
REC System Goal Snapshot	17
REC System Goal Summaries	18
Monitoring and Communication Plans	30
Framework Monitoring Plan	31
Framework Communication/Engagement Plan	32
Appendix	33
Goal Summary Components	34
UC ANR Acronyms	35

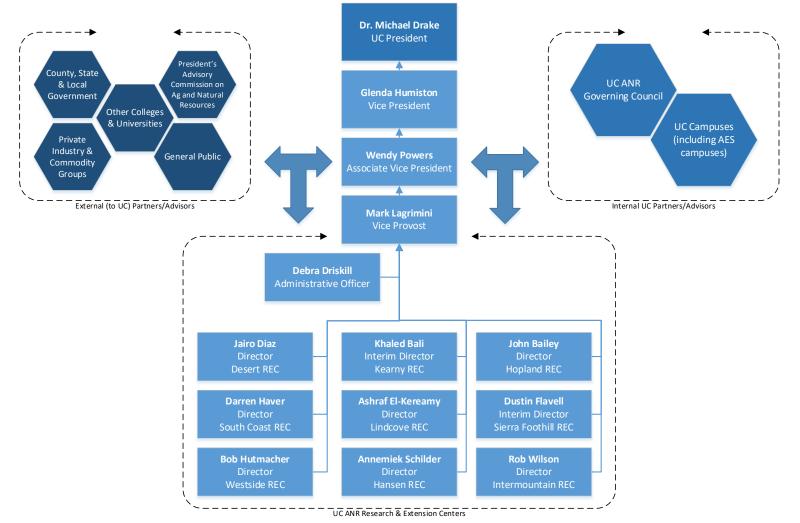
2020 REC System Strategic Framework Team

The 2020 REC strategic framework team was composed of the following 13 individuals:

	Name	Title
Executive Leadership	Wendy Powers	Associate Vice President (AVP)
Exec	Mark Lagrimini	Vice Provost of Research and Extension
	John Bailey	Director, Hopland REC
	Jeff Dahlberg	Director, Kearny REC
s and a second	Jairo Diaz-Ramirez	Director, Desert REC
ctor	Ashraf El-Kereamy	Director, Lindcove REC
Directors	Dustin Flavell	Interim Director, Sierra Foothill REC
REC	Darren Haver	Director, South Coast REC
	Bob Hutmacher	Director, Westside REC
	Annemiek Schilder	Director, Hansen REC
	Rob Wilson	Director, Intermountain REC
ops	Bart Sapeta	Director, Facilities and Capital Planning
ANR	Gabe Youtsey	Chief Innovation Officer

Facilitators: Kathy Eftekhari, Chief of Staff to the Vice President, UC ANR Katherine Webb-Martinez, Associate Director, UC ANR Program Planning and Evaluation

REC System Organization



REC System Strategic Framework Purpose

This strategic framework was developed to guide the University of California Agriculture and Natural Resources (UC ANR) Research and Extension Centers (RECs) in consciously focusing their collective energy and resources on actions that will strengthen the REC <u>system</u> and support its academics and staff. The goals within this framework were developed to 1) support the mission of UC ANR, 2) increase utilization of the RECs, and 3) to enhance financial stability of each individual REC and the REC system as a whole. Through systemness, the REC system aims to enhance efficiency and effectiveness.

The strategic plan *establishes a multi-year framework* that allows the RECs to prioritize programs and resources, effectively communicate, and promote collaboration with key stakeholders within UC, across the state and the nation. It is meant to augment, not replace, individual REC strategic plans.

It is worth noting that all goals within this framework are a subset of Goal 1: *Strengthen Research and Extension Partnerships* within the UC ANR Strategic Plan.

Strategic Framework Decision Drivers



Current Challenges Facing the RECs

This Strategic Framework was developed to address current market and organizational realities that have impacted the future viability of the REC System.

- 1. Due to an ongoing decline in funding, there are fewer UC faculty based at RECs than in the past, fewer campus-based faculty conducting field-based traditional agriculture research, and insufficient funding for infrastructure improvements and deferred maintenance.
- 2. Many researchers within the UC system and beyond are not aware of the REC assets available to them.
- 3. While some of the RECs benefit from strong collaboration with campus faculty, a high level of collaboration is not present at all RECs.
- 4. The subsidized cost of doing research at a REC is high compared to the subsidized cost of doing research at a UC campus (e.g., UC Davis). Grower-owned farms are far less expensive locations for some research.
- 5. Long-term viability of the RECs relies on increased utilization by researchers who have funding to cover research expenditures.

Blue Ribbon Panel Recommendations

In 2019, UC ANR assembled a Blue Ribbon Panel of five external experts to review the REC System. They were asked to identify key capital investments that could best position the REC system in addressing societal challenges of the future through mission-based research. Their high-level recommendations are listed below. These recommendations not only led to the development of this REC System framework, but also strongly influenced the each of the framework goals.

- 1. Capitalize on unique and novel aspects of individual RECs by investing in what sets them apart from campus experimental farms and field research stations across the U.S. (competitive advantage). Maintain no expectation that all RECs are the same in how they operate, the extent to which they integrate research and Extension, or what research audience they serve.
- 2. Where demand is clearly established, make large, strategic investments that emphasize system-based, integrated research opportunities around a couple of large thematic areas (Hubs).
- 3. Based on documented market research with target user groups, invest in infrastructure that facilitates campus collaboration, making it easy to conduct research at a REC. Co-investment into RECs by both UC ANR and campus partners would demonstrate a commitment by campus to securing the future of any REC.
- 4. Enhance collaborations with campuses through strategic discussions and partnerships and a well-structured branding campaign.
- 5. Foster Director creativity by implementing a plan that gives Directors more agency to address deferred maintenance issues so that this is not top of mind for them.
- 6. Each REC should emphasize locally relevant outreach opportunities.
- 7. Based on strategic discussions that result from review of these recommendations, develop a concise description of integrated strategic priorities across the centers, as an addendum to the Strategic Plans for each Center.

Responding to Stakeholder Feedback

Stakeholder input and feedback informed the development of this Framework:

- At the outset of the planning process a SWOT survey was sent to all REC Directors and County Directors to share with their programmatic and administrative staff, and sent to the AES campus Executive Associate Deans to share with their AES faculty and CE Specialists. (April 2020)
- During the planning process input was solicited and provided through a number of mechanisms:
 - 1. A Market Panel of diverse thought leaders (listed on next page) with experience and insight in the areas of applied research and extension provided input on how to expand the REC system's user base. They also participated in the initial REC System visioning. (May 2020)
 - 2. REC Superintendents, Business Officers, and other staff were asked to provide input on framework components by their REC Directors throughout the planning process.
 - UC ANR colleagues from outside the REC system participated in many of the strategic framework workshops, including: Maggi Kelly (Director of UC ANR Informatics and GIS statewide program); Josh Davy and David Lile (County Directors); and Mark Lundy (CE Specialist)
- In addition, all ANR employees, the Market Panel, the UC ANR Governing Council and the President's Advisory Council (PAC) were invited to provide input on the draft Framework. (October 2020)

Market Panel

The following group of diverse stakeholders participated in the REC System visionioning and framework review:

	Name	Title
	Steven Davis	Associate Professor, Department of Earth System Science, UC Irvine
UC (Non-ANR)	Tom Dudley	Research Biologist, Marine Science Institute, UC Santa Barbara
	Peggy Fiedler	Executive Director, UC Natural Reserve System
	Mary Gauvain	Vice Chair, Academic Senate; Distinguished Professor of Psychology, UC Riverside
	Carol Shennan	Professor, Environmental Sciences Department, UC Santa Cruz; UC ANR Governing Council Member
	Josh Viers	Professor, Watershed Science, UC Merced; UC ANR Governing Council
	Ruben Alarcon	Assistant Professor of Biology, CSU Channel Islands
CSU	Val Mellano	Department Chair and Professor, Plant Sciences, Cal Poly Pomona
	Andy Thulin	Professor and Dean, College of Agriculture, Food and Environmental Sciences, Cal Poly
ARS	Dong Wang	Research Leader, USDA Agricultural Research Service
	Peter Henry	Research Plant Pathologist, USDA Agricultural Research Service
Other External	Walt Duflock	Executive Innovation Leader, Thrive AgTech; Strategic AgriFood Accelerator
Other Externa	Jerry Fankhauser	Assistant Director, Florida Agricultural Experiment Station; Blue Ribbon Panelist
	Hannah Bird	Community Education Specialist, Hopland REC
ANR	Stacey Amparano	Community Education Specialist and Farm Smart Program Manager, Desert REC
	Gaby Maier	Assistant CE Specialist in Population and Health Reproduction, UC Davis School of Veterinary Medicine

Reflecting SWOT Analysis

Strengths

- · People (e.g. top talent, labor/services, multidisciplinary expertise)
- Infrastructure (including secure sites and researcher lodging)
- Ability to control/manipulate field trials, not possible on commercial cooperators' farms
- Environmental diversity for research (climate, ecosystems, soils, etc.)
- · Location (close to clientele and strategic distribution across CA)
- Types of research (including field research and long-term research)
- · Foster collaboration and networking within UC and ANR
- Serve as research and extension hubs
- Credibility

Opportunities

- Broaden partnerships with educational institutions and programs
- · Expand partnership with commodity groups and private sector
- Diversify income streams (e.g. repurpose or sell/lease assets and host/charge for non-research activities)
- · Capitalize on our strong reputation and available assets
- Broaden research scope (including new collaborations, new research, commercialization, and long-term research data)
- Broaden services to local communities and agencies
- Enhance staffing and facilities
- Increase visibility to elected officials, policy-makers, and donors
- Broaden collaboration and grants with state and federal agencies
- Expand fundraising and branding / communication
- Establish focused hubs/areas of research

Weaknesses

- · High and increasing cost to use/unaffordable
- Structural/organizational issues
- REC management issues
- Remote locations too far away
- Understaffed and lacking expertise
- Underutilized/people don't know they exist / value not appreciated

Threats

- Declining funding and support for agricultural research
- Increasing costs and regulations
- Scarcity of operational resources (e.g. availability of staff, academics, and water)
- Competition fro external research entities / locations
- COVID-19 pandemic, recession and unpredictable economy
- Leadership and REC management issues
- Underutilization
- Public perception marketing and engagement needed
- Urban encroachment and surrounding land issues

REC System Mission & Vision



REC System Mission

In support of the UC ANR Mission, we provide a unique network of living laboratories generating innovative research, education and outreach to benefit diverse communities across California's agricultural, wildland, and urban environments

REC System Vision

Our Vision:

Be the world's go-to source for the discovery and demonstration of practical solutions to meet the agricultural and natural resource needs of rural and urban communities worldwide

✤ Vivid Description:

Stretching from Oregon to Mexico, from the Sierra Mountains across the Great Central Valley and Coastal Ranges and on to the Pacific Ocean, our nine unique REC locations will leverage California's diverse climates and ecosystems, its 400+ crops, and the strength of the University of California system to attract a global consortium of leading researchers and educators. Together we will advance science-based solutions for both large and small scale agricultural and environmental issues - improving access to nutritious and affordable food, making water cleaner and air fresher. We will engage California's diverse rural and urban communities in hands-on learning to promote science literacy and 21st century life skills. Our work will elevate California's economic prosperity while protecting wildlife, enhancing habitat and making our forests, parks, and communities healthy.

We will create novel partnerships across California and the world to generate resources and opportunities that will enhance our ongoing sustainability. We will create hubs of innovation and invest in facilities and new technology to address changing needs and emerging problems. Our people will be proud to work in the UC ANR REC System, knowing that they contribute to helping the people of California adapt to the most pressing climate, environmental, and food system challenges.

REC System Strategic Objectives & Goals



UC ANR Strategic Objectives

The following five strategic objectives are broad-based, long-term aims that will move UC ANR towards actualizing its vision. All REC System Framework goals support one or more of these objectives.

Executing the Mission:

Research and Extension	Advance and encourage forward-thinking, science-based solutions through discovery and engagement with Californians to address local issues with global impact

In Support of the Mission:

People	Attract, develop, and retain diverse, highly productive, talented, and motivated people who exemplify our core values and thrive in a culture of equity and inclusion, service, innovation, and change
Financial Stability	Ensure financial strength of the University through sustainable and innovative financial models with efficient and effective financial management practices
Operational Excellence	Optimize delivery of programs and services through systemwide implementation of best practices that promote efficiency, effectiveness, health, safety, confidence, and quality
Policy & Advocacy	Advance UC's mission by marshalling the institution's expertise and external partners to effectively advance public policy issues and communicate the value of UC to our stakeholders, California, and the world

UC ANR REC System Goal Snapshot

All of the goals in the REC System Framework aim to accomplish the same high-level objectives:

- Support the Mission of UC ANR
- Increase Utilization of the RECs
 - Enhance Financial Stability

Through systemness we aim to more effectively accomplish these objectives.

Goal			Strategic Objective									
#	Lead	Goal Topic	Research & Extension	Operational Excellence	Financial Stability	People	Policy & Advocacy					
1	Haver	Create Research and Extension Hubs										
2	Youtsey/ Diaz	Support Novel Technology Commercialization										
3	Bailey	Analyze, Allocate & Optimize Resource Allocation										
4	Sapeta/ El Kereamy	Increase Funding for Facilities and Infrastructure										
5	Powers	Optimize REC Operations, Policies and Processes										
6	Powers	Increase Utilization & Visibility of REC System										

Create Research & Extension Hubs

Implementation Lead / Team: Haver / Hub REC Directors

Goal: By June 2025 create scientifically robust hubs of knowledge and outreach addressing pressing agricultural and natural resource needs of California and the world by leveraging the diverse environments and genetic complexities found within the REC system

Opportunity:

The UC REC system houses some of the world's preeminent researchers working in disciplines related to agriculture and natural resources. However, we have a limited number of collaborative research groups across the UC system and national and international scientific communities, and there is currently not a mechanism in place to aggregate and focus our unique assets (knowledge, data, research, equipment, and physical attributes of our locations) to address critical issues. We have not fully leveraged the strengths and unique research environments of the RECS to create areas of specialization. In addition, the RECs function mostly independently from one another, not always taking advantage of synergies that exist. Due to the remoteness of some of the RECs and progressively weakened links to campus academics over time, the RECs are not fully utilized and opportunities for research and collaboration are missed, slowing progress. A coordinated mechanism, such as having specialized research groups and facilities to attract researchers from universities, state and federal agencies as well as industry, is needed.

Proposed Solution:

We will create specialized research and extension hubs within the REC system that focus on high-priority research areas, such as climate change, drought resilience, invasive pests and diseases, urban-rural interface issues, biological pest control, and sustainable/regenerative agriculture. Hubs will provide a stimulating, multidisciplinary environment and cutting-edge facilities to support established ANR affiliated-researchers and to attract new researchers and research collaborations from across the 10-campus UC system, other state, national, and international institutions, and industry. Hubs can be based at a specific REC or may span across multiple RECs in the form of strong, interconnected collaborative research groups and shared expertise and facilities. The genetic complexities of crops and natural ecosystems and diverse physical environments of the RECs offer a unique opportunity for research not found anywhere else in the world. Focus areas for the hubs will be identified through planning workshops that will identify current areas of expertise and opportunities for new collaborations and partners. We will-work closely with UC ANR's Government Relations, Strategic Communications, and Development Services teams to assist with marketing, communication and fund development associated with the hubs. An Academic Coordinator will be hired to identify funding opportunities and work with groups of researchers to apply for large grants to secure specialized equipment and staffing to meet hub goals.

Benefits:

- 1. Shared staffing and unique equipment which would reduce costs and increase efficiencies
- 2. Bolstered research and more rapid progress towards solving dire issues facing agriculture and natural resources
- 3. Expanded outreach and education outcomes

4. New funding opportunities

5. Greater leadership role of the REC System

#	Goal/Key Strategies & Timeline	20-21	21-22	22-23	23-24	24-25
1a	By December 2021, hold planning workshops to identify key research and extension hubs including key collaborators, required					
	personnel, equipment, academic support and financial estimates					
1b	Secure funds and hire an academic coordinator/grant writer to identify new opportunities for grants/collaboration at the specified					
	hubs by Jan 2022					
1c	By June 2023, submit multi-million dollar, multi-disciplinary hub-based grants					
1d	By June 2024, establish field experiments that support hub concept					
1e	By June 2025, expand outreach and extension activities related to respective hubs					

Create Research & Extension Hubs

Goal: By June 2025 create scientifically robust hubs of knowledge and outreach addressing pressing agricultural and natural resource needs of California and the world by leveraging the diverse environments and genetic complexities found within the REC system

Assumptions:

- 1. Researchers will see the benefit of joining our collaborative hubs and assist in securing funds
- 2. Funds are successfully generated for personnel and capital investments at RECs (see also Goal 4)
- 3. Successful marketing of RECs to UC, national and international scientific communities (see also Goal 6)

Metrics and Targets:

- 1. Number of hub-generated refereed journal and extension publications in state, national, and international journals, and other media outlets; target = 10 journal and 30 extension publications by 2025
- 2. Number of multi-disciplinary, multi-million dollar hub-based research and extension grants; target = 2 grants submitted by 2023
- 3. Number of major research and extension projects based at multiple RECs and linked to the Hubs; target = 5 by 2024

Implementation Lead / Team: Youtsey + Diaz / All REC Directors

Goal: By June 2025, implement a fully operational, self-sustaining program to support novel technology development for research, extension and commercialization projects at the RECs that will lead to create new industry-university partnerships and impacts

Opportunity:

The use of novel digital and biological technologies for crop and food production (breeding, farming, processing, distribution/retail) must expand in order to increase profitability and efficiency through automation, precision application, and data-driven decision making. However, development and industry adoption of technology is slow because solutions are highly complex and interdisciplinary and the sectors (technology and agri-business) speak different languages. UC ANR is well-positioned to play a critical intermediary role as a trusted broker, accelerating the development, testing, and integration of novel food and agriculture technologies that solve a range of pressing food system challenges that can be accomplished via externally-funded projects at the RECs.

Proposed Solution:

Create a UC ANR program that includes staff and technology infrastructure that creates new and harnesses existing tech resources (e.g. IGIS, IPM, CSIT) and novel campus partnerships (e.g. AIFS, CITRIS, SDSC) to support research, extension and commercialization projects at the RECs that address critical food and agriculture challenges (e.g. labor, climate, pests, water). To begin, the team will identify and collaborate on specific project opportunities with ANR academics to prove the concept and refine the program needs and plans. This would be followed by expansion to a small, dedicated team with technology skills, tools and expertise to complement ANR academics and manage industry-academic collaborations.

Benefits:

- 1. Increased project activity and revenue to UC ANR and the RECs
- 2. ANR will have a unique resource to attract new projects and partnerships that will create important impacts
- 3. ANR will have the ability to engage completely new partners to collaborate on projects, (e.g. tech companies and campus computer scientists)

Goal: By June 2025, implement a fully operational, self-sustaining program to support novel technology development for research, extension and commercialization projects at the RECs that will lead to create new industry-university partnerships and impacts

Assumptions:

- 1. Able to secure funding and partnerships through more effective collaboration among existing UC ANR teams, novel partners, and technology infrastructure
- 2. The resource/infrastructure/service will be used for UC/non-UC research projects but also for commercialization partnerships with companies
- 3. There is demand by potential new funders: industry, government agencies, and non-profit foundations for novel solutions that leverage technology that UC ANR is uniquely positioned to obtain through more intentional collaboration to seek out funding opportunities

Metrics and Targets:

- 1. Number of commercialization-related projects launched that include a novel technology component. Target = 1-2 in year 1, 3-5 in year 2 and beyond
- 2. Self-sustaining program in place that grows REC revenue 10%, annually, by Jun 2025

Project and Operational	UC ANR DIV IMPACT						REC IMPACT						
inancial Estimates:	20-21	21-22	22-23	23-24	24-25	Total	20-21	21-22	22-23	23-24	24-25	Total	
One-Time Project Costs (Temporary)	0	0	0	0	0	0	0	0	0	0	0	0	
Ongoing Annual Costs (Permanent)	0	TBD	TBD	TBD	TBD		0	TBD	TBD	TBD	TBD		
Annual Savings/Revenue	0	TBD	TBD	TBD	TBD		0	TBD	TBD	TBD	TBD		

- UC ANR DIV Project Costs: None; key strategies will be executed by existing staff.
- UC ANR DIV Annual Costs: Costs may be incurred for new staff, tech infrastructure, and convening tools as projects are implemented.
- UC ANR DIV Annual Revenue/Savings: External revenue will offset annual costs. Project revenue will create new indirect cost revenue to ANR.
- REC Project Costs: None; key strategies will be executed by existing staff.
- REC Annual Costs: Costs may be incurred for new staff, tech infrastructure, and convening tools as projects are implemented.
- REC Annual Revenue/Savings: External revenue will offset annual costs. Project revenue from companies, government grants, and foundation grants will accrue to RECs

REC System Goal 3 Analyze, Allocate, & Optimize Resource Deployment

Implementation Lead / Team: Bailey / Haver

Goal: Optimize strategic resource use by utilizing financial planning tools to inform sound system-wide decisionmaking and transparent communication to stakeholders and funders about future plans and needs by June 2023

Opportunity:

Resource allocations are currently based on historical decisions and patterns which may no longer exist or may not reflect where the REC system can best meet future needs. With state funding decreasing, there is financial pressure to be as efficient as possible with those funds while also developing new revenue sources. Currently there is a lack of a clear process and tools for budgeting both within each REC and more importantly across the RECs as a system. Without an accurate picture of current and future resources, allocation and optimization of funds in a strategic, mission-fulfilling way is very difficult.

Proposed Solution:

Building on the existing six year plan for individual REC central resource allocation, develop and deploy a universal financial planning process across the RECs and across all funding streams, using best financial management practices for business analysis and development. This process and tool must be as easy as possible to use with existing Kuali outputs and accounting methods. Educating decision makers and financial tool users across the system will be needed to effectively develop, adopt, and use it to inform strategic decision making. Facilitated conversations will be used to sort through thorny, sensitive, difficult decisions about system wide resource allocations. Work with RPM, BOC, FPM, IT to ensure inclusive process.

Benefits:

1. Use funds efficiently to maximize ability to meet overall ANR strategic goals and mission

- 2. Better ability to use accurate financial information, both current and future, to inform internal REC decision making and planning process
- 3. Improved transparency of financial projections and logical, fiscally sound planning process and need for donors and fundraising campaigns
- 4. Improved ability to operate RECs as a system, with appropriate processes to make fact-based, mission-driven, future focused decisions about resource allocation and needs, and improved ability to communicate to funders and governmental agencies about needs and plans.

#	Goal/Key Strategies & Timeline	20-21	21-22	22-23	23-24	24-25
3a	Develop financial budget tracking and forecasting tool that meshes with existing system, including a "dashboard"					
	for user-friendly summary information, in order to analyze current and future funding deployment and utilization, and identify gaps and needs across REC system by July 2021					
3b	Educate REC Directors, BOs, Administrators, and Leadership in how to use the tool to ensure adoption and					
	utilization across all RECs by September 2021					
3c	Engage in tough, honest, facilitated conversations about resource and staff allocations to ensure other strategic					
	plan goals are successful in furthering the REC mission and viability by March of 2022					
3d	Make decisions about reallocation of resources across REC system, identifying gaps and 5 year timelines for					
	changes by June 2022					
3e	Have financial plan and resource needs in format ready for funders and stakeholders by December 2022					

REC System Goal 3 Analyze, Allocate, & Optimize Resource Deployment

Goal: Optimize strategic resource use by utilizing financial planning tools to inform sound system-wide decision-making and transparent communication to stakeholders and funders about future plans and needs by June 2023

Assumptions:

- 1. Willingness and agreement across RECs and UC ANR partners to use the new tool
- 2. Willingness of and assistance from FPM, IT, RPM and BOC in developing the tool
- 3. Willingness of and assistance from UCD partner to share their best practices and software choices
- 4. Coordination with capital improvement plan and Goal 4 (Enhance Facilities and Infrastructure) is smooth and fruitful

Metrics and Targets:

- 1. Adoption and active use of financial planning tool; target = 100% adoption and use by nine RECs (by the end of 2022)
- 2. 100% of REC strategic planning goals use the financial planning tool, where appropriate, to inform their development and implementation (by the end of 2022, pending coordination of all goals).

Implementation Lead/Team: Sapeta + El Kereamy / REC Directors

Goal: Support REC programming through facility and infrastructure improvements, and address critical research in the REC system by diversifying and expanding funding sources (\$40-45M impact by 2025)

Opportunity:

Public funding for UC ANR has steadily declined over the past 20 years, making support for the REC system unstable. In the long term, a continued decline in funding will result in a reduced ability to provide adequate support to UC researchers and Extension personnel conducting work at the REC's. Grants awarded to academics and staff provide resources needed for specific activities. However, additional resources are necessary to provide essential infrastructure, equipment, and support personnel. When fixed costs are distributed across more users, all REC users benefit. Current 6-year step down plans will reduce core funding for the RECs risking a negative balance within the next 3 years.

Proposed Solution:

New sources of support to augment public funding and provide greater financial stability. These include a larger pool of public and private research clientele, greater community engagement and use of REC facilities, donors, and partners to deliver the mission. We will think beyond our current scope of stakeholders. Furthermore, we will aggressively seek public and private support for infrastructure to ensure that state-of-the-art facilities and equipment are available to researchers and community members alike. Facilities Planning & Management (FPM) and Resource Planning & Management (RPM) units will partner with Contracts & Grants and Development Services to support REC Directors in approaching private enterprises and nonprofits (e.g., commodity groups) to increase resources for facilities and infrastructure enhancements.

Benefits:

- 1. Preserves central funding support for UC ANR researchers
- 2. Provides resources to maintain long-term research and perennial systems
- 3. Secures resources necessary to address deferred maintenance and improvements necessary for future success/relevance
- 4. Attracts new partners/users by having improved facilities and equipment.

#	Goal/Key Strategies & Timeline	20-21	21-22	22-23	23-24	24-25
4a	Increase state funding allocation by developing and continuously updating Capital Improvement Plan and submitting to UCOP Capital Planning Group annual capital financial requests that address deferred maintenance needs and support facility & infrastructure renewal. Target \$10M per annum. Ongoing. Owner: FPWRPM					
4b	Hire 0.5 FTE in grant writing support if/as funding allows. Actively seek out and apply for grant opportunities that support equipment enhancements and facility improvements by collaborating with FPM, RPM, Contracts & Grants and Development Services units. Ongoing Owners: REC Directors					
4c	Increase donations for capital investment and expand resources available to the REC system by working closely with Development Services to identify prospects, cultivate relationships, and market program impacts. Owners: REC Directors and senior leadership. Ongoing					
4d	Secure portion of patent-and commercialization-related revenue for reinvestment towards facilities and infrastructure upgrades. Owner: REC Directors, Development Services, Chief Innovation Officer. Ongoing					

Goal: Support REC programming through facility and infrastructure improvements, and address critical research in the REC system by diversifying and expanding funding sources (\$40-45M impact by 2025)

Assumptions:

- 1. The economy stabilizes by the end of 2022 and state, donor, federal funds are available for new opportunities
- 2. Funding returns to current levels by FY 2021/22
- 3. UC ANR allocation of UCOP capital improvement funds matches ANR Capital Financial Plan
- 4. REC systems in other states are financially stressed, which allows for UC ANR REC system to attract non-CA researchers who seek out costeffective locations to conduct their work.

Metrics and Targets:

- 1. State funds for deferred maintenance and facilities renewal secured; target = \$10M annually
- 2. Number of new equipment/facility improvement grants; target = submit at least one per REC per year with a 25% success rate (\$100,000)
- 3. Investments from private enterprise to conduct research at REC facilities; target = secure \$500k per year/all RECs
- 4. By 2025 double the amount of donor contributions for capital and equipment improvements over the FY19/20 baseline
- 5. Redirect \$50,000 (patent and commercialization of research income) annually to invest in facilities and infrastructure upgrades.

REC System Goal 5 Optimize REC Operations, Policies and Processes

Implementation Lead / Team: Lagrimini / REC Directors

Goal: By December 2022, optimize policies, processes, and procedures for performing research and extension activities at the RECs to remove barriers permitting us to support existing users, attract new users, and elevate the perceived value of the UCANR REC System

Opportunity:

Currently the RECs solicit, approve, and manage research and extension requests independently following a complex set of UC, UC ANR, and REC policies and processes in order to conduct research and extension activities or allow for facilities usage at any of the nine RECs. For example, each REC manages its own research submission process and facility use agreements. Often this results in inefficiencies and conflicting procedures and processes leading to user frustration and potentially loss of the activity and associated revenue.

Proposed Solution:

The REC system will centralize and streamline business functions to reduce staff effort and reduce administrative costs. We will prioritize programming and critical research, and therefore consolidate functions such as: outreach, event management, website/social media support, labor management, financial planning and budgeting, equipment/depreciation, and coordination with facilities management. To achieve this goal, the REC system will need to partner with other ANR units (FPM, RPM, CSIT and PSU) and UC campuses. This goal will also require partnering with external vendors (i.e. consultants, software companies, etc.).

Benefits:

- 1. Increased financial stability through cost savings by reducing unnecessary processes, thus increasing overall system capacity for research and extension activities.
- 2. Reduced administrative costs will create increased capacity to subsidize researcher costs.
- 3. Decreased barriers to new partners conducting research and extension programs at the REC, leading to increased usage by new parties.

#	Goal/Key Strategies & Timeline	20-21	21-22	22-23	23-24	24-25
5a	By June 2021, develop and implement a centralized research proposal online submission system that is user- friendly and efficient.					
5b	By Dec 2022, develop and implement streamlined and efficient policies for the use of REC facilities by UC and non-UC entities, identify process challenges and develop solutions for easy implementation of partnership models, and implement fees for extension and revenue generation activities at REC facilities.					
5c	By June 2022, identify specialized skill sets that are needed across multiple RECs, and post a list of these services and recharge rates on the web page. Examples include but not limited to, infrastructure maintenance and repair (backflow certification, electrical work), web/social media support, and safety training/tracking.					

REC System Goal 5 Optimize REC Operations, Policies and Processes

Goal: By December 2022, optimize policies, processes, and procedures for performing research and extension activities at the RECs to remove barriers permitting us to attract new users and funded research, and thus elevate the perceived value of the UCANR REC System

Assumptions:

- 1. Acceptance by the UC community of a simplified research project submission and approval process
- 2. Availability of funding to implement the proposed policy and processes structural changes
- 3. Available bandwidth and flexibility of the REC system business office and other ANR units (FPM, CSIT, CS, RPM, and PSU) to take on additional work
- 4. Willingness of UC campuses to aid in identifying tools and best practices for financial planning and facility usage
- 5. Acceptance of more centralized policies and processes by individual RECs as well as the centralized approach being adaptable to unique aspects of individual RECs
- 6. Willingness of REC employees to assist other RECs.

Metrics and Targets:

- 1. Reduce duplication of effort on unnecessary processes; target = 8% average decrease in admin. costs across the REC system by Dec 2022
- 2. Increased use of employee skills across all RECs; target = 10% increase in the dollar amount of salary transfers between RECs Dec 2022
- 3. Increased use of RECs for research and extension activities; target = 5% increase in the dollar amount of R&E income in both 21-22 and 22-23, and an additional 5% for extension usage in 23-24

Implementation Lead/Team: Lagrimini / REC Directors

Goal: Increase visibility of the REC system via targeted outreach and advocacy campaigns among relevant scientific and educational organizations to develop and expand partnerships, encourage new users, and bring new funding by January 2024

Opportunity:

The REC system is under-utilized by researchers on some UC campuses and there is potential to also benefit from greater recognition by other potential users including the CA State University and Community College systems as well as other universities and governmental agencies. This large untapped pool of scientists and educators could benefit from knowing about the RECs and all they have to offer. Increasing visibility of the REC system among these groups will help increase collaboration and utilization by new users for both research and extension purposes, bring new revenue for financial stability, and increase the public value of the RECs by strengthening and expanding the vital role of the REC system in answering key questions for California and beyond.

Proposed Solution:

Develop a key campus-based Lead Scientist (LS) role for each REC to develop tighter linkages with UC campuses. Conduct various methods of outreach (surveys, workshops, personal contacts) to relevant audiences (researchers, commodity groups, agencies, legislators, educators, students) to determine best targets (individuals and organizations) for outreach and collaboration. Use this input to craft and enact targeted outreach plan and use ongoing feedback to continually improve successful approaches. Develop regional networks to foster deeper collaboration. Partner with relevant educators, scientists, industry groups, and various stakeholders to solicit information and develop ongoing relationships. Work to further increase diversity of audiences, academics, and staff. Work in concert with Strategic Communications, Government and Community Relations, and Development Services.

Benefits:

- 1. Greater awareness and utilization of REC system by scientists, educators, and students, as well as relevant non-profit, governmental, and academic organizations leading to increased revenue and improved financial stability
- 2. Greater awareness of the public value and impacts of ANR as a whole

#	Goal/Key Strategies & Timeline	20-21	21-22	22-23	23-24	24-25
6a	By December 2021 Create Research Advisory Committee (RAC) and REC Lead Scientist (LS) in charge of advocating for					
	REC within relevant academic societies, institutes, and educational organizations, and develop systemwide consortium of REC LSs and Directors in semi-annual meetings to share ideas and coordinate planning and actions					
6b	By December 2021 implement targeted survey of relevant individuals and organizations and use results to identify and enact best potential outreach methods to engage desired audiences (sponsorships, advertising, memberships, conference					
	participation, personal contact)					
6c	Starting by December 2021 develop an engagement plan for directors, supporters, and UCANR leadership to engage on a continuing basis through workshops and consultations with universities, industry groups, scientific organizations, legislators, and governmental agencies to get feedback and generate ideas for future direction and potential collaborations					
6d	By June 2022, in partnership with Strategic Communications, develop and disperse concise information packages (printed, digital, online) with asset inventory, climate data, etc. across targeted organizations and individuals to highlight the benefits of the RECs and how to access and use them for educational purposes					
6e	By December 2022, develop initial regional networks (adding to them as new partners come online) of land-based research and extension facilities, both public and private and use these networks to cross-market to various users by placing information about other network members at all partner locations and websites					

REC System Goal 6 Increase Utilization & Visibility of REC System

Goal: Increase visibility of the REC system via targeted outreach and advocacy campaigns among relevant scientific and educational organizations to develop and expand partnerships, encourage new users, bring new funding by January 2024

Assumptions:

- 1. Pricing, along with clear and transparent explanation of costs, for outside collaborators that is not prohibitive for non-UC entities and individuals (see Goal #5)
- 2. There is consistent collaboration between RECs to coordinate activities, learn from others, and build systematic approaches
- 3. UC researchers will have a true desire and motivation to work with broader range of collaborators outside of UC system to benefit entire state and beyond
- 4. Non-UC collaborators will increasingly see the value of collaborating with UC, and more specifically ANR researchers, at the RECs
- 5. There remains an emphasis on education and extension as an important part of the overall mission and programs of RECs
- 6. There is not a significant decrease in the population of REC-relevant educators and scientists

Metrics and Targets:

- 1. Number of projects; target = 15% annual increase over 2019/2020 number of 271
- 2. Number of new projects relative to total projects; target = 10% annual increase over 2019/2020 number of 56
- 3. Number of total users; target = 10% increase over 2019/2020 number of 157 by 2022
- 4. Number of first-time users; target = 10% annual increase over 2019/2020 number of 38 (including those from new hubs)
- 5. REC funding from users; target = 15% annual increase in over 2019/2020 numbers (\$2,133,908)

REC System Strategic Framework Monitoring & Communication Plans



Framework Monitoring Plan

Progress on the goals within the UC ANR REC Strategic Framework will be monitored as follows:

Monthly

- Action plans will be developed and updated in Smartsheet by the Goal Lead or other assigned team member/s
- Goal updates will be provided by Goal Lead/Team at standing REC Directors' meetings

Quarterly

 Accomplishments will be reported by Goal Lead and reviewed by REC Directors at quarterly meetings

Annually

- Goal metrics will be reported on goal scorecards by Goal Leads
- REC Directors will meet to review progress and update the framework
- Progress updates will be provided to senior leadership and UC ANR advisory groups
 - Vice President's (VP) Council
 - Program Council
 - Senior Leadership Team (SLT)
 - Governing Council
 - President's Advisory Commission on Agriculture and Natural Resources

Framework Communication/Engagement Plan

External

Disseminate Framework to external stakeholders (e.g., Governing Council, Presidents Advisory Commission on Agriculture and Natural Resources), provide annual updates and solicit input and participation on strategies (1/21 and ongoing).

Internal

- UC ANR Employee News add REC Framework update section (1/21 and ongoing)
- Virtual Town Hall Meetings Incorporate into communication around ANR Plan (3/21 and ongoing)
- Strategic Plan Accomplishments Document announced via ANR Employee News and posted to the website (quarterly) - add REC accomplishments to this doc
- UC ANR Adventures periodic updates on the process and progress through VP Powers' blog
- REC Directors share/review the plan with their colleagues and direct reports (by 3/21)
- REC Directors set individual staff performance goals linked, as appropriate, to the goals and key strategies (by 3/21)
- Annual retreat Incorporate accomplishments and solicit input with ANR Plan Retreat (Qtr 1 or 2)
- Strategic Plan/REC Framework updates and solicit input at the following regular meetings:
 - VP Council
 - County Directors
 - o Deans Council
 - Program Council
 - REC User Committee

Appendix



Goal Summary Components

Each goal within the framework has a corresponding 2-page summary that outlines the following:

COMPONENT	DEFINITION
Goal Statement	Specific, quantifiable, realistic targets that will move UC ANR towards accomplishing a strategic objective over a specified period of time
Opportunity	Describes the purpose/motivation behind achieving the goal
Proposed Solution	Defines scope and objectives
Benefits	Outlines the benefits that will be derived from achieving this goal
Key Strategies	Key activities/steps required to achieve the goal
Assumptions	Defines processes/events that must happen/ "go right" (usually outside the department's direct control) in order for this goal to be successfully achieved
Metrics & Targets	Outlines how success will be measured with associated desired targets
Implementation Lead/Team	Lists individual/s who will be accountable for progress on this goal

UC ANR Acronyms

ABBREVIATION	FULL NAME
AES	Agricultural Experiment Station
AIC	Agricultural Issues Center
AFRI	Agriculture and Food Research Initiative
AVP	UC ANR Associate Vice President
CalFresh	CalFresh Healthy Living, UC
CAL NAT	California Naturalist Program
CE	Cooperative Extension (or UCCE, UC Cooperative Extension)
CED	Community and Economic Development
CENIC	Corporation for Education Network Initiatives in California
CES	Community Education Specialist
CFR	Consolidated Financial Reporting (System)
CIWR	California Institute for Water Resources
CRM	Customer Relationship Management (System)
CUCSA	Council of UC Staff Assemblies
DEI	Diversity, Equity, and Inclusion
EFNEP	Expanded food and Nutrition Education Program
FTE	Full-time Equivalent (Employee)
HR	Human Resources

UC ANR Acronyms Cont'd.

ABBREVIATION	FULL NAME
IDC	Indirect Cost Recovery
IDM	Identity Management System
IGIS	Informatics and Geographic Information Systems
IPM	UC Integrated Pest Management Program
IT	Information Technology
IWP	Integrated Web Project
MFP	UC Master Food Preserver Program
MG	UC Master Gardener Program
MFP	UC Master Food Preserver Program
NOS	News and Outreach in Spanish
NPI	Nutrition Policy Institute
OAI	UC Organic Agriculture Institute
PAC	President's Advisory Commission on Agriculture and Natural Resources
РМО	Project Management Office
PSU	UC ANR Program Support Unit

UC ANR Acronyms Cont'd.

ABBREVIATION	FULL NAME
REC(s)	UC ANR Research and Extension Center(s)
SAF	Systemwide Assessment Funds
SAREP	Sustainable Agriculture Research and Education Program
SWOT	Strengths, Weaknesses, Opportunities, and Threats Analysis
SWP/I	Systemwide Programs and Initiatives
UC ANR	UC Agriculture and Natural Resources
UCB	UC Berkeley
UCCE	UC Cooperative Extension
UCD	UC Davis
UCLA	UC Los Angeles
UCOP	UC Office of the President
UCPC	UC Path Center
UCR	UC Riverside
VINE	UC ANR Verde Integration Network for Entrepreneurism
VP	UC ANR Vice President
4H-YDP	UC 4-H Youth Development Program