Partnerships with the CSU System; Research and Community Engagement Connections

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CSU-WATER Conference
SDSU Apr 23-24 @ SDSU

Relevant CSU-WATER projects

1. ***Academics & Community-Engaged Research***: "Actionable Research" via the CA Strategic Growth Council

2. ***Water Policy Impacts on Farmers***: Share findings from a survey of 300+ farmers expressing concerns about water policies & economic impacts

3. **Delta Stewardship Council's "Science for Communities"**: Program is driven by community-delivered issues

4. ***People & Place***: *The Climate Resilient Human Dimension of California 30x30 Coastal Systems (Proposal near completion)*

Actionable Research and Community/Academic Collaborations

A project funded by the CA Strategic Growth Council (SGC)

Our Team

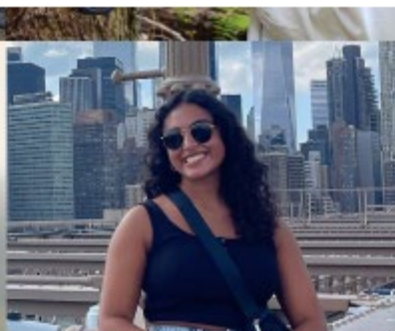Dr. Steve Blumenshine - CSU-WATER (Co-PI)

Dr. Chris Halle - SSU Center for Environmental Inquiry (Co-PI)

Dr. Claudia Luke - SSU Center for Environmental Inquiry (Co-PI)

Jessica Bremner - CSU-LA (faculty expert)

Aliyah Habib - UCSB (student researcher)

Jase Trovao - CSU-WATER (project manager)

Research Question & Project Framework

How can community-engaged academic research funded by SGC lead to more actionable outcomes?

Project impact:

1. How the findings can advise on funding academics for community-engaged research

2. Learn about how academics' comm-based research **developed collaboration and built relationships**, as well as lessons learned around **integrating stakeholder input and feedback** into the research process

3. Discuss how CA department and agency staff can **apply and/or build on this research**

SGC's
Participatory Research to Policy Model

Objective 1: Best Practices

Literature Review	+	Interviews	+	*EPIC-N

Best Practices
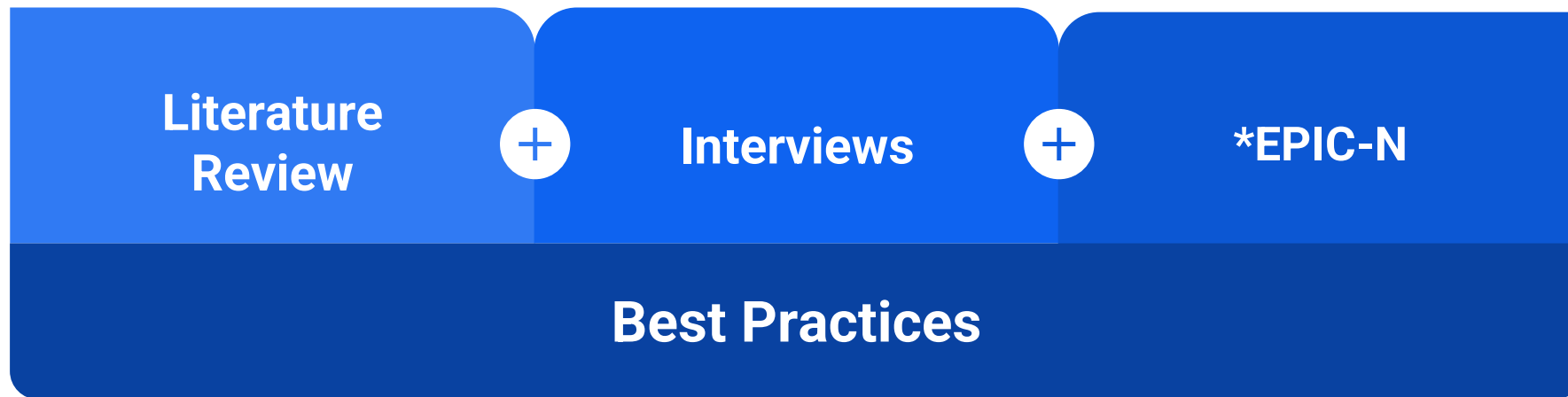
*The EPIC Model is simple but powerful. It brings together the **greatest resources in academia** — professors, students, laboratories, research libraries, existing curriculum — and creatively draws them together to tackle the biggest **challenges faced by local communities**. The results are immediate, lasting, and transformative: solutions that might never be imagined through traditional structures

Interviews: Overview and Key Takeaways

Interviews provided a foundation and fact-finding for case studies

Key Takeaways:

- Success through Relationships

- Funding Relationships

- Student Engagement

- Pre- and Post-award Challenges

- Institutional Support

Objective 2:
Case Studies

Latino Policy & Politics Institute	UCLA
Center for Environmental Inquiry	Sonoma State
Big Chico Creek Ecological Reserve	Chico State
Initiative for Climate Leadership and Resilience	Cal Poly San Luis Obispo
Arizona State University Project Cities	Arizona State University
UniverCity Alliance	UW Madison

Objective 2: Key Lessons

Focus on **community relationships**

An **"action focus"** can help ensure that communities are positively engaged

Focus on **measurable change**, not on predisposed framework *(Ripple Eff Mapping)*

Funding agencies play a part in changing academic and community culture

Proposal evaluation training is a serious issue

Engaging undergraduate students versus educating graduate students can require differing approaches

Dedicated university staff required to maintain relationships

Objective 3: Toolsets Overview

Purpose

Document toolsets for state staff and academic researchers to enhance likelihood of community-based participatory research impacts and community improvement

Toolsets Documented
- Self-Assessment Rubric for the Institutionalization of Service-Learning by Andrew Furco
- Cal-Adapt Tool
- ARIS (Advancing Research Impact in Society)
- CAPECA (Community-Academic Partnerships to Advance Equity-Focused Climate Action)
- SGC Technical Assistance Toolkit
- Research Experience for Undergraduates and the CISER Model (REUs)
- EPIC-N

Objective 3: Toolsets Findings

Encourage the use of **self assessment rubrics** by universities
Use tools and methods that **focus on relationship building**
Be open to **"non-traditional" grant approaches and training**

Objective 4: Survey Overview

Survey Goals

- **complement interviews and best practices**

- **understand the breadth of researchers' practices**, challenges, and incentives before, during, and after community-based research phases

- **compare results** with literature, best practices, interviews, and case studies

Objective 4: Survey Overview

~80 Respondents

Tenure or Tenure-track Faculty   Non-tenure track Faculty   Research Center Staff   Non-Profit   Other
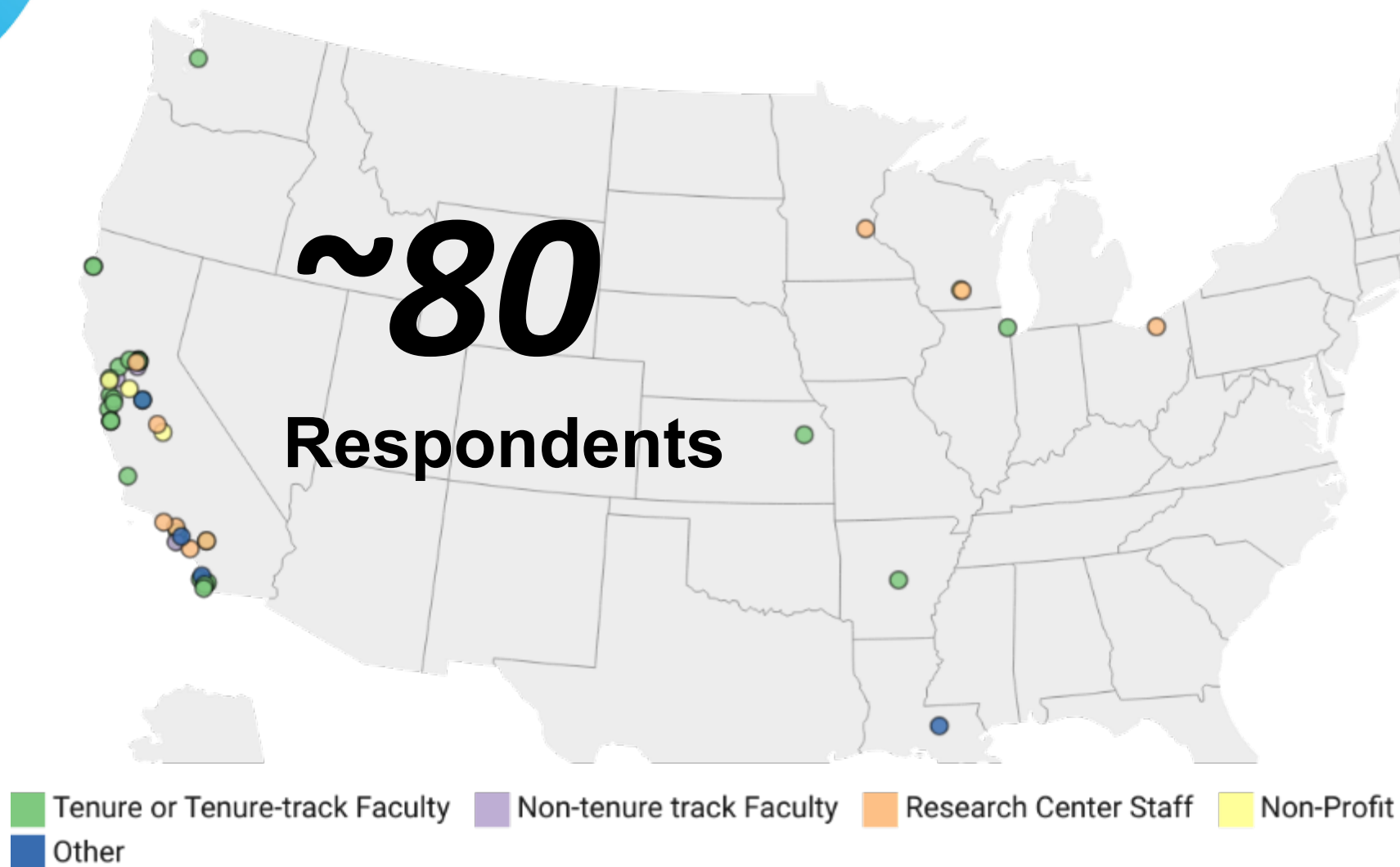
Objective 4: Selected Survey Findings

Researchers need **more support financially and administratively** (maintaining relationships)

Community engaged projects are often also **student-engaged research projects**.

Majority of projects are **not one-off projects**

Use tools and methods that **focus on relationship building**.

No one size fits all approach to community-engaged research

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Recommendations to SGC

Questions & Discussion

Follow Up and Next Steps

- Ground-Truth Recommendations with Community Partners
- Understanding community-engaged research from the community perspective

Water Policy, Farms, Economies

California's Top 10 Agricultural Commodities

California's agricultural abundance includes more than 400 commodities. Nearly half of the country's vegetables and over three-quarters of the country's fruits and nuts are grown in California. California's top 10 valued commodities for the 2024 crop year are:[1]

- Dairy Products, Milk — $8.61 billion
- Almonds — $5.66 billion
- Grapes — $5.64 billion
- Cattle and Calves — $4.98 billion
- Lettuce — $3.67 billion

- Strawberries — $3.46 billion
- Pistachios — $2.05 billion
- Tomatoes — $1.64 billion
- Carrots — $1.57 billion
- Broilers — $1.37 billion

In 2024, California's farms and ranches received $61.2 billion in cash receipts for their output. This represents a 3.6 percent increase in cash receipts compared to the previous year.

Barriers to SGMA Engagement: What Do Farmers Think?

Data collected over Oct 30, 2023 – April 15, 2024

- Received 329 responses: 291 in English, 29 in Punjabi and 9 in Spanish
- Median time-to-completion was 10.5 mins
- Excluding non-farmers, incomplete, and out-of-study area responses, we have **279** responses

Summary of Main Results

iii. **Impacts of SGMA-implementation:**
- Most respondents were pessimistic about effects of SGMA
- Some were just unsure, but some were optimistic

iv. **Procedural fairness of SGMA implementation:**
- Up to 70% do not agree that the process of engaging all farmers was fair

v. **Information about local and state water issues:**
- Up to 60% percent reported they do not have adequate information about SGMA.
- Information sources are different for farmers.
- Districts/GSA and neighbors/community primary sources
- DWR, CA Water Board, County, are not primary sources of information for farmers.

Sample of farmer comments:

Trust and large power differences

There are no farmers among their managers, and they do not understand the difficulties of farmers.

SGMA is aimed at putting farmers like me out of business. They do not have my best interests at heart.

The board [of] directors are self serving and only care about their job.

Small farmers lose out. Large landowners have the power on the Board. They can afford to leave some ground fallow and sell their water rights and recharge. We have clay soil, so we are unable to Recharge. That leaves us with little water in dry years with new pumping restrictions.

Media (& related) Coverage

- Fresno State News; New farmer-focused survey reveals barriers to sustainable groundwater

- Chico State Enterprises: Engaging California Farmers in Groundwater Management

- Ag Alert (CA Farm Bureau); Groups work to widen SGMA engagement

- WaterWrights; The WAVE Study on SGMA

- Valley Ag Voice; SGMA Creates Winners and Losers in Central Valley Agriculture

- CA Ag Network; New Farmer-Focused Survey Reveals Barriers to Sustainable Groundwater

- CBS TV Affiliate (Fresno) Survey shows most valley farmers largely unaware of groundwater act impacts

- Maven's Notebook (water news consoliator & repeater of many of the above)

What is the Science for Communities Workshop?

The Council is organizing this workshop to boost Delta communities' awareness of and access to environmental data and technical tools that are available to them. The workshop will connect those who live, work, and recreate in and around the region with Delta (and other) scientists.

It will foster opportunities for *communities to contribute to science and scientists to contribute to communities*.

Science for Communities Workshop

Info Sheet

Delta Stewardship Council

A CALIFORNIA STATE AGENCY

- Served on 1st two iterations; 2022/2024

- Expanded role for CSU-WATER?

- The goals of this one-day public workshop are to:
  1. **promote** community awareness of and improve access to environmental data and technical tools;
  2. **connect** community-based organizations (CBOs) and interested parties with scientists to share knowledge, data, and tools;
  3. **build** relationships between community-based organizations and scientists; and
  4. **create** partnerships and collaborations for using environmental data to meet community needs.

- Interested in participating as a community partner or scientist? Email sciforcommunities@deltacouncil.ca.gov and take the survey.

People & Place: The Climate Resilient Human Dimension of California 30x30 Coastal Systems
Focus on how adjacent communities interact with, benefit from, impact, and shape the success of 30x30 goals and coastal systems.

Objectives: The primary goals of the project are to:

- Implement **participatory and place-based research to understand community relationships (how diverse communities experience and engage) with conserved and non-conserved coastal systems** and to ground truth findings.

- Identify, document, map, analyze, and disseminate the **social benefits of 30x30 coastal ecosystems - including public health, education, economic opportunity, and cultural revitalization** - by leveraging the community engagement research, robust socioeconomic and demographic data and metrics, and powerful geospatial and statistical tools and dashboards.

- Provide a framework and **actionable recommendations to guide future conservation activities and investments that align ecological conservation with human wellbeing.**

Thank You!

Contact Information

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Questions & Discussion

Ongoing Research Questions:

- What Is Considered Success? (Gathering Data, Identifying Solutions, Obtaining Community Buy-In, Identifying the County Department Interested in Implementation, or Pushing Through Roadblocks to Get the Solution Implemented)

- How Do We Effectively Engage Communications Students?

Impact-Informational

- How to compel/help research faculty get their work in the media?

- How do you see this work/results used in existing/planned agency funding programs?

- What can we do within our academic networks to best advise/connect with agency goals?

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EPIC-N:
Findings

Pre and Post Award Tools

01 UN Sustainable Development Goals Tracker

- Provides a **framework for categorizing and evaluating** community project outcomes.
- EPIC-N encourages its university-community partnerships to **align their projects with relevant SDGs**
- **Clear guidance from funding agencies** is essential when selecting which SDGs and indicators to prioritize

02 Ripple Effects Mapper

- **Participatory evaluation method** used to assess the long-term impacts
- **Combines qualitative techniques**
- Best suited for **projects with broad, relationship-driven goals**

03 Government Performance Action and Learning (GPAL)

- **Data integration** initiative
- **Complements qualitative tools** like Ripple Effects Mapping (REM) by adding a quantitative dimension
- **Enables comparison** of conditions before, during, and after project implementation.