

ARCCA

#MoreThanAVillage: Collaboration and Climate Change Adaptation



15th Annual New Partners for Smart Growth Conference | February 12, 2016

AGENDA

Welcome and Introductions

- Allison Brooks, Bay Area Regional Collaborative

Responding to Extreme Weather Events

- Joe Casola, Climate Impacts Group

Capital Region Business Resiliency Initiative

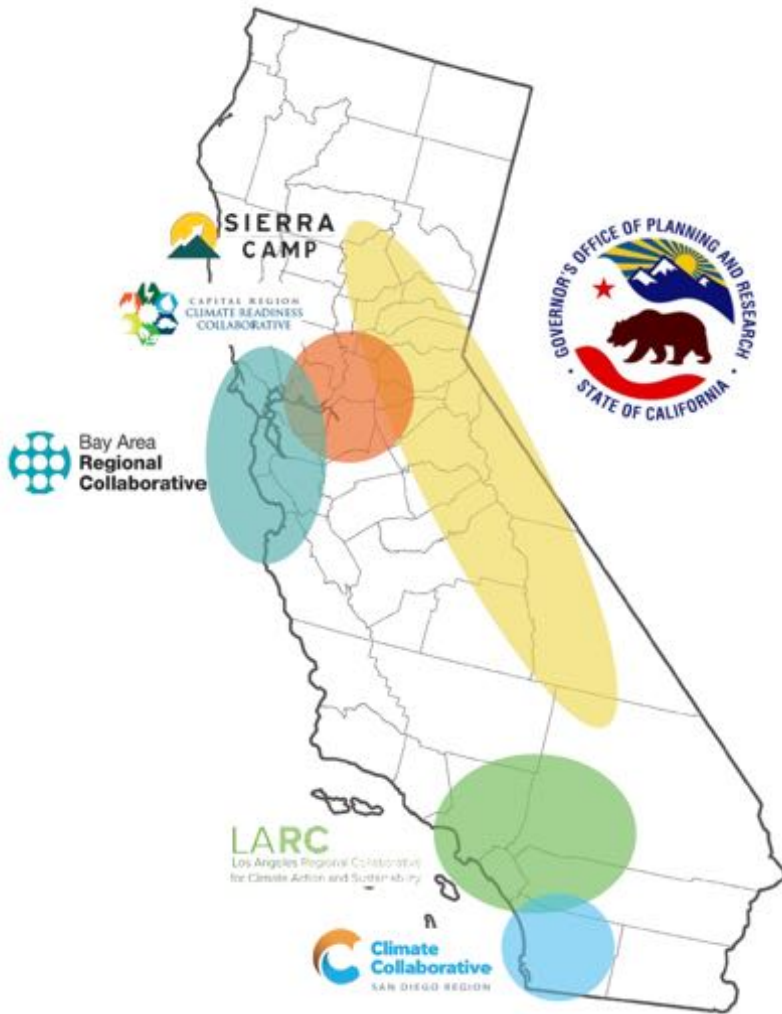
- Meg Arnold, Valley Vision

Planning for Resilience in the Sierra Nevada

- Steven Frisch, Sierra Business Council

Participant Discussion and Design-thinking

ABOUT ARCCA



- Formed in early 2012 in conjunction with the Governor's Office of Planning and Research
- ARCCA member regional adaptation collaboratives have come together to amplify their individual efforts and to advance adaptation efforts across the state of California.

KEY QUESTIONS

1. What about climate adaptation necessitates collaboration?
2. For whatever issue is at stake, who are the key stakeholders and how do you begin to understand their interests to motivate them to come to the table in a collaborative way?
3. How do you define roles and responsibilities that leverage each stakeholder's unique competencies and assets?
4. What is the common set of characteristics that make collaboratives take off?
5. How do you measure progress towards building resiliency?
6. How do you move ahead from planning to implementation?



Responding to Extreme Weather Events

Opportunities for building resilience

Joe Casola

Deputy Director

Climate Impacts Group, University of Washington

New Partners for Smart Growth

#MoreThanAVillage: Collaboration and Climate-Change Adaptation

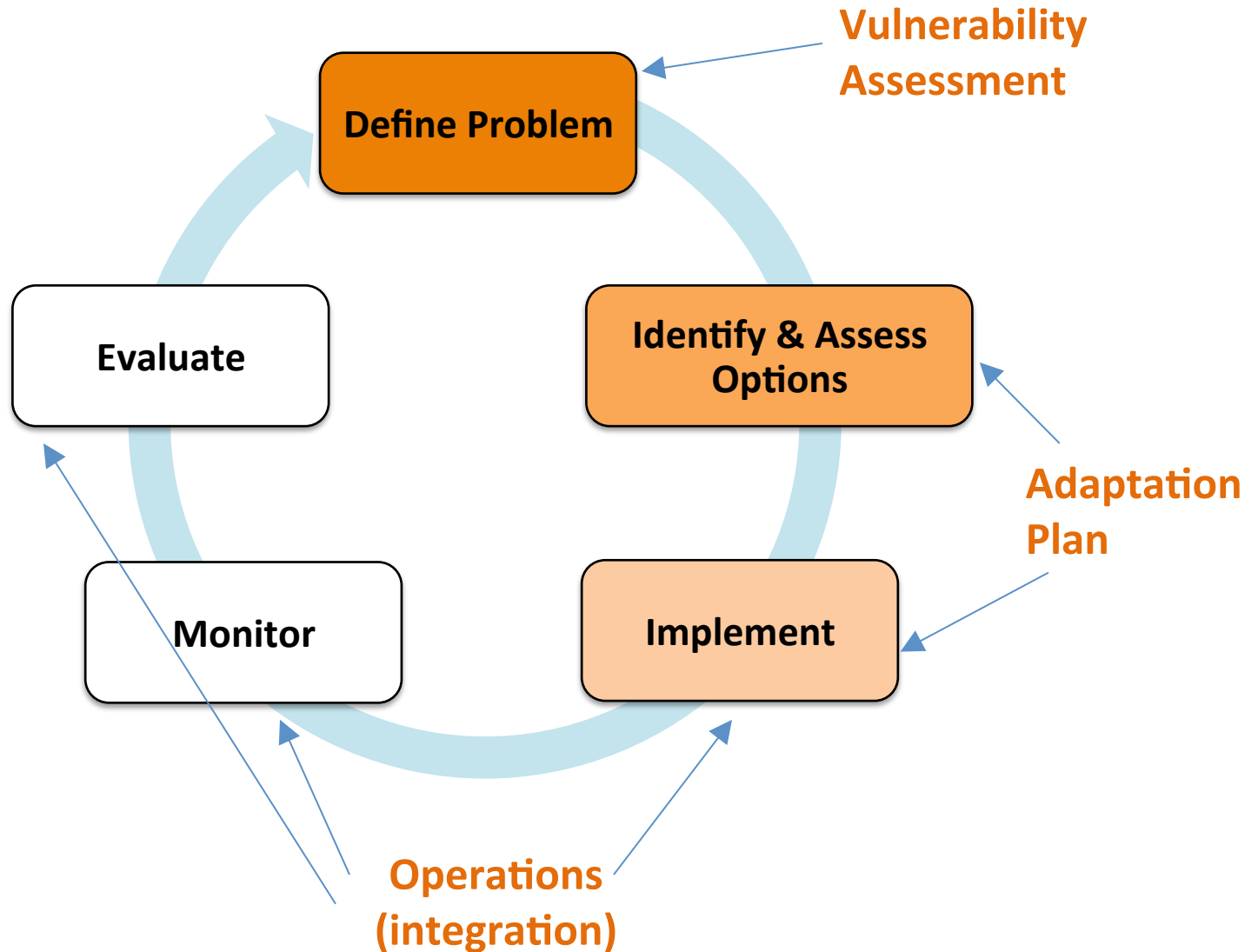
February 12, 2016



*Climate Science in the
Public Interest*

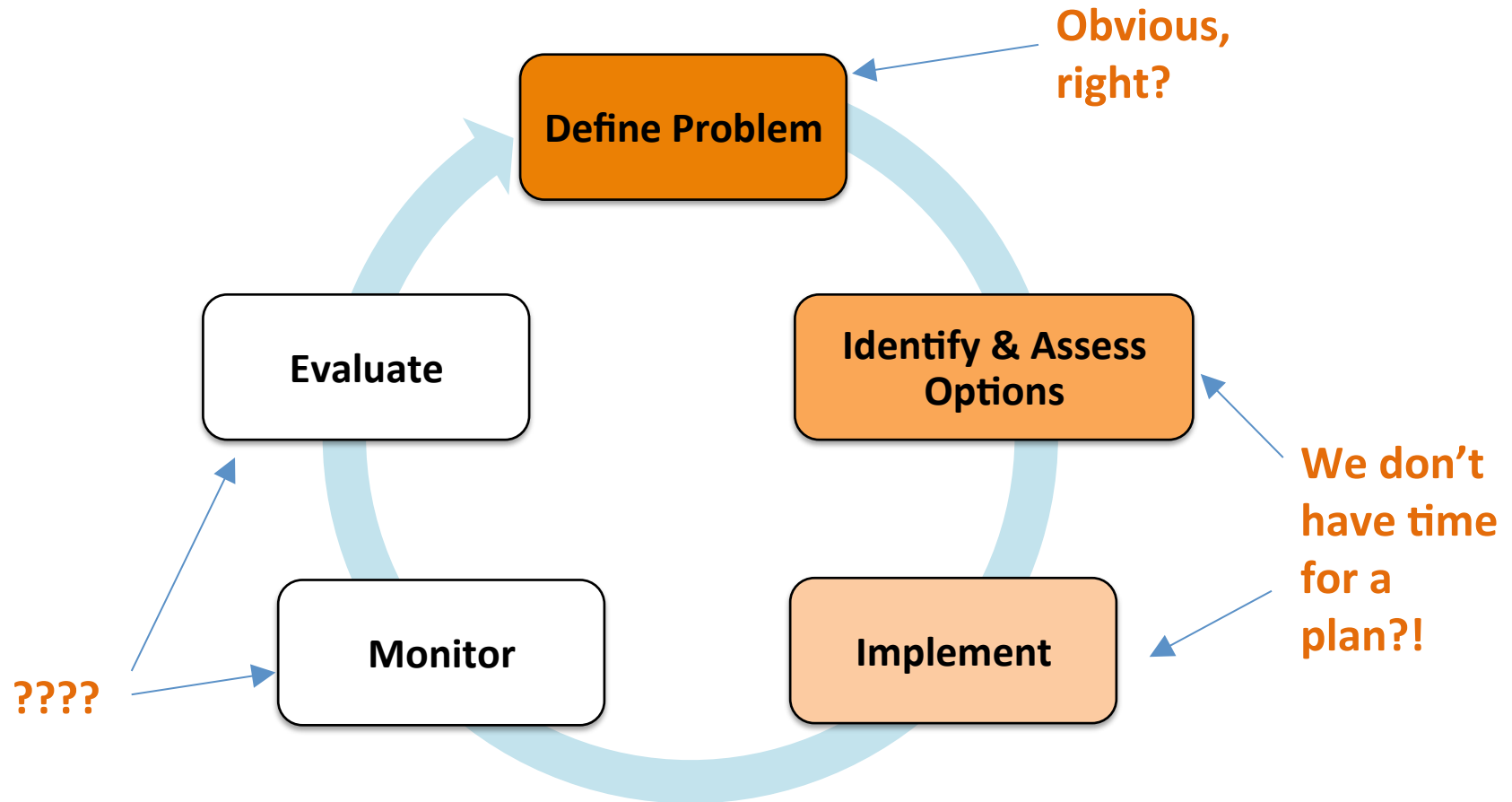


Climate Risk Reduction





How do extreme events fit??





Addressing extreme events in adaptation planning

- **Embracing risk** – these events are going to happen; our predictive information is limited
- **Build on shared experiences**
- **Planning tips**
 - Have a plan!
 - Identify *manageable* drivers of risk
 - Triage and enhance coping when risk reduction is difficult
 - Pursue diverse of approaches, allowing for iteration
 - Create positive feedback loops
 - Stage responses over time

Planning Tips

Example: Wildfire

Contributing factors to fire risk

- Aggressive fire suppression policies
- Cessation of aboriginal burning practices
- Livestock grazing
- Road and rail construction
- High-grade logging





Contributing factors to fire risk

- Aggressive fire suppression policies
- Cessation of aboriginal burning practices
- Livestock grazing

**Which of these are manageable?
And on what SCALE??**

**We can “reverse” some of this...
in some locations...
but it will have to be strategic...
and large fires should still be expected...**

Enhancing coping capacity – a biological example



Arrowleaf balsamroot
(*balsamorhiza saggitata*)



Slide provided courtesy of Susan Prichard

Planning Tips

Example: Flooding



Beaver: a resilience mascot?

Illustrates **Positive Feedbacks**:

- Lodge = reverse channelization; slows down water on the landscape
- Ponding provides food, habitat, protection
- If a flood occurs, more lodge material available
- Lodge maintained “iteratively”
- Simple action → complex response



What I'm leaving out (at a minimum)...

- How to integrate across many systems and decisions?
- Who needs to be involved?
- How to go from theory to practice?
(\$\$, process, technical skills, management)



The Climate Impacts Group
www.cses.washington.edu/cig

Joe Casola
jcasola@uw.edu

W **COLLEGE OF THE ENVIRONMENT**

UNIVERSITY *of* WASHINGTON

CAPITAL REGION BUSINESS RESILIENCY INITIATIVE

Presented by Valley Vision

www.resilientbusiness.org

75,000+ acres burned
1,200 homes and 66 commercial properties
destroyed



Damages top \$1.95 billion
~ Valley & Butte Fires

“Land scarred by wildfires is susceptible to flooding and landslides.”



~ FEMA

“...Sacramento could be under more than 20 feet of water.”



~ The Atlantic

2015 drought costs: \$1.84B, 10,100 jobs



~ UC Davis and USDA

Small business resiliency is essential

23

1. Small business is critical to many regions' economies
2. Businesses without business resiliency plans are the least likely to re-open or recover after a disaster.
 1. Small businesses are the least likely to have put a resiliency plan in place
3. The smallest businesses are **less prepared to rebound** after a disruption
 - More vulnerable to impacts of extreme weather

~25-40% never reopen after a major disaster

Why is business resiliency important?

24

Building small business capacity *before* a time of crisis, to create businesses, and an overall community, better prepared to weather any storm.

Resiliency is about protecting 3 major asset groups:

- People
- Facilities
- Information

Challenge: reach and motivate as many small businesses as possible to take action on their own behalf

- ▣ Speak of resiliency without speaking of climate change

Key Stakeholders

25

- ❑ Business membership organizations
 - ❑ Existing, trusted relationships with many small businesses
 - ❑ Looking to add to membership value proposition
 - ❑ Not necessarily open to taking on the “climate change” topic
- ❑ State, local, federal emergency responders (OES, FEMA)
- ❑ Utility companies
 - ❑ Supporting economic development, managing system load, improving information and education to customers
- ❑ Service providers with risk-based relationships (Lenders, insurers)
 - ❑ Opening conversations about clients’ disaster risk

Measuring impact and outcomes

26

- ❑ Business resiliency is motivated at the individual-business level, and competes with multiple other priorities, including “making payroll”
- ❑ The human species is an optimistic one (“that won’t happen to me!”)
- ❑ Measures of impact must be incentive-based
 - ❑ Voluntary online registry for businesses with resiliency plans
 - ❑ Recognition and awards program for businesses in the online registry – similar to regional “green business” or sustainability awards.

The Business Resiliency Toolkit

27



Funders and Project Advisors

28



Technical Advisory Team: SMUD, Mulvaney's B&L, River City Food Bank, Connect Consulting Services, Association of Sacramento Area Planners

www.resilientbusiness.org resilientbusiness@valleyvision.org (916) 325-1630

The Capital Region Business Resiliency Initiative is a project of Valley Vision, a 501(c)(3) nonprofit organization. valleyvision.org



Contact Info

29

VALLEY VISION



Connect. Partner. Impact.

Business Resiliency Initiative

Website: www.resilientbusiness.org

Email: resilientbusiness@valleyvision.org

Meg Arnold

meg.arnold@valleyvision.org

530-867-1921 (mobile)

Tammy Cronin

tammy.cronin@valleyvision.org

916-325-1630

Valley Vision, Inc.

2320 Broadway, Sacramento

Planning for Resilience in the Sierra Nevada

February 12, 2016



Steven Frisch
sfrisch@sierrabusiness.org

Cap & Trade...

What does it mean for my community?

\$2.237B
Total funding available in
2013-15

25%
Percent of funds allocated
to Disadvantaged
Communities

13
Total state agencies
administering programs

TRANSPORTATION



Affordable Housing & Sustainable Communities*
Housing & Community Development
— \$400M



Low Carbon Transportation
California Air Resources Board
— \$350M



Transit & Intercity Rail Capital*
California State Transportation Agency
— \$265M



Low Carbon Transit Operations*
Caltrans
— \$100M



High Speed Rail*
California High Speed Rail Authority
— \$250M

ENERGY EFFICIENCY



Energy Efficiency in Public Buildings
California Energy Commission
— \$40M



**Low-income Weatherization/
Renewable Energy**
Dept. of Community Services & Development
— \$140M



Agricultural Energy & Operational Efficiency
California Dept. of Food & Agriculture
— \$25M



Water Energy Efficiency
Dept. of Water Resources
— \$60M

*Ongoing appropriations for
Transportation programs

NATURAL RESOURCES



Sustainable Agriculture Land Conservation
Dept. of Conservation
— \$5M



Urban Forestry & Forest Health
Cal Fire
— \$92M

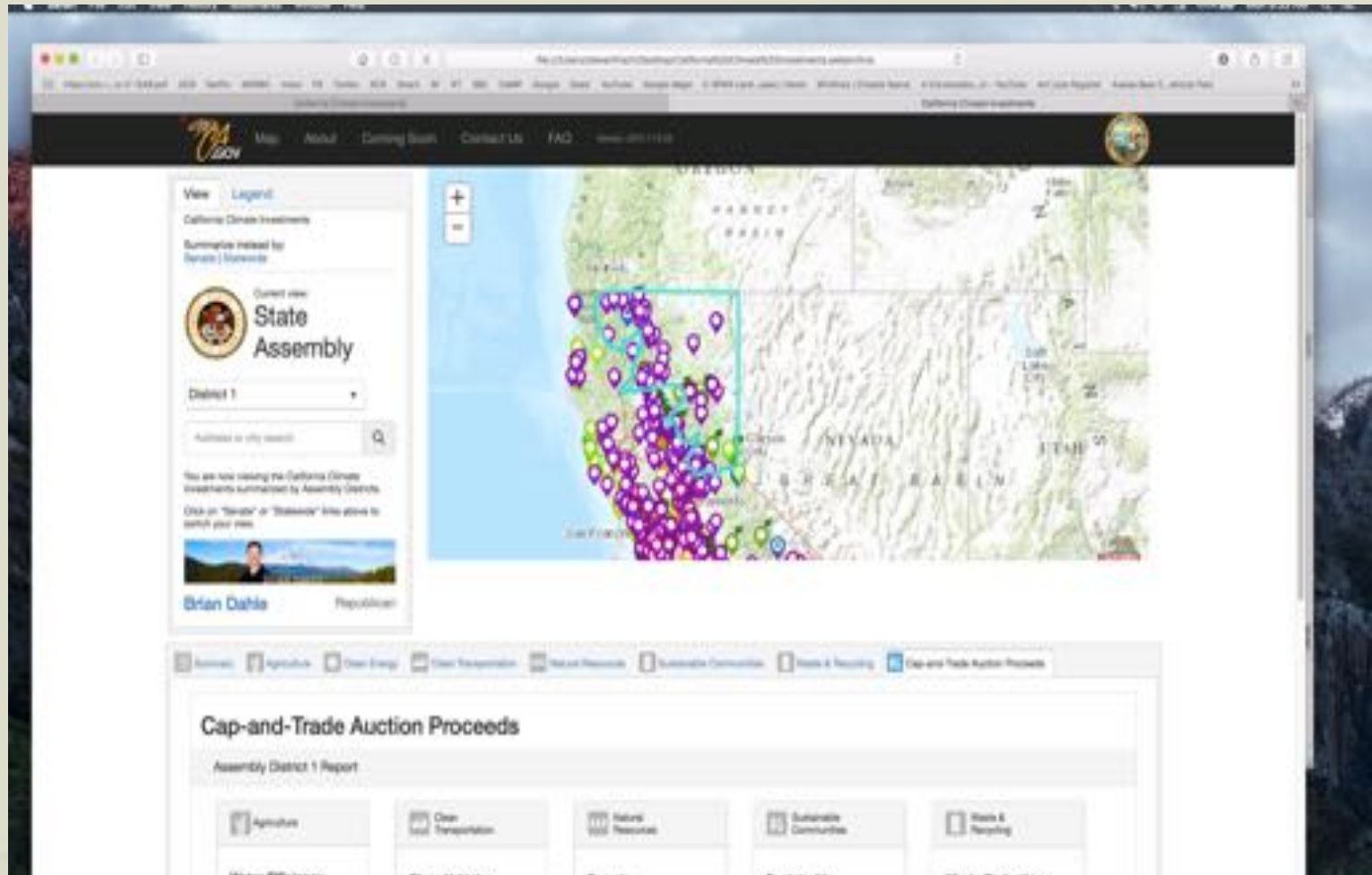


Wetlands & Watershed Restoration
Dept. of Fish and Wildlife
— \$65M



Waste Diversion
Cal Recycle
— \$60M

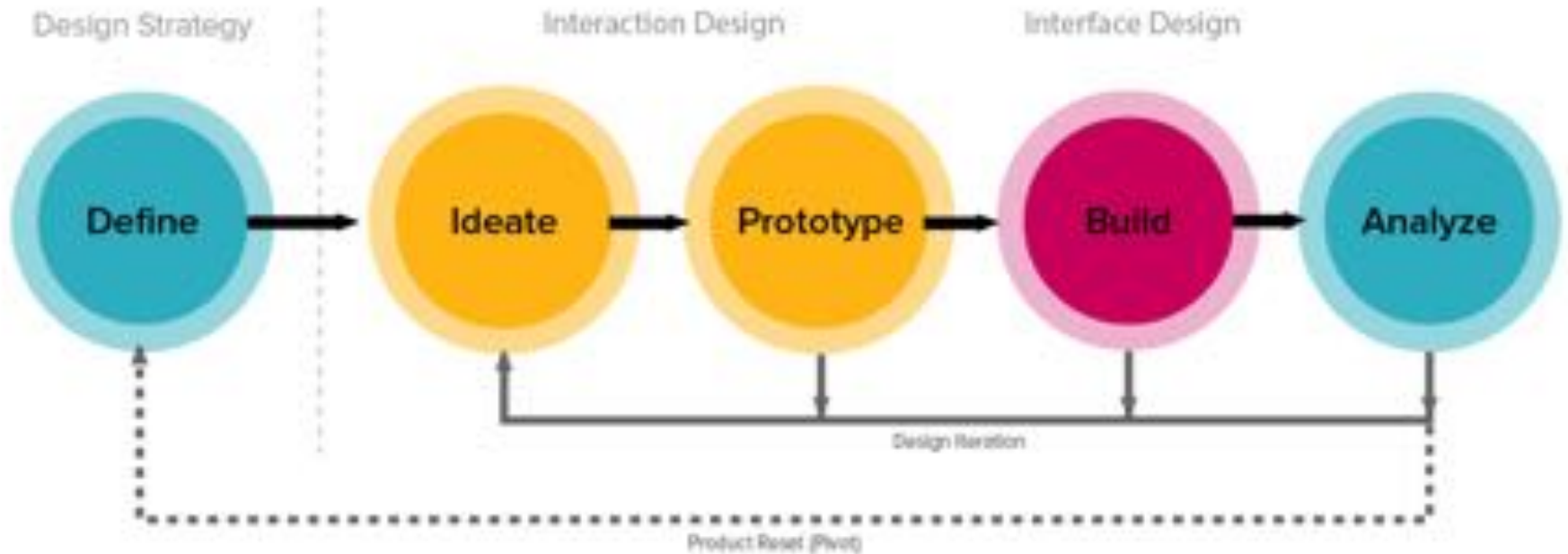
Link: <http://www.climatebenefitsca.org/>

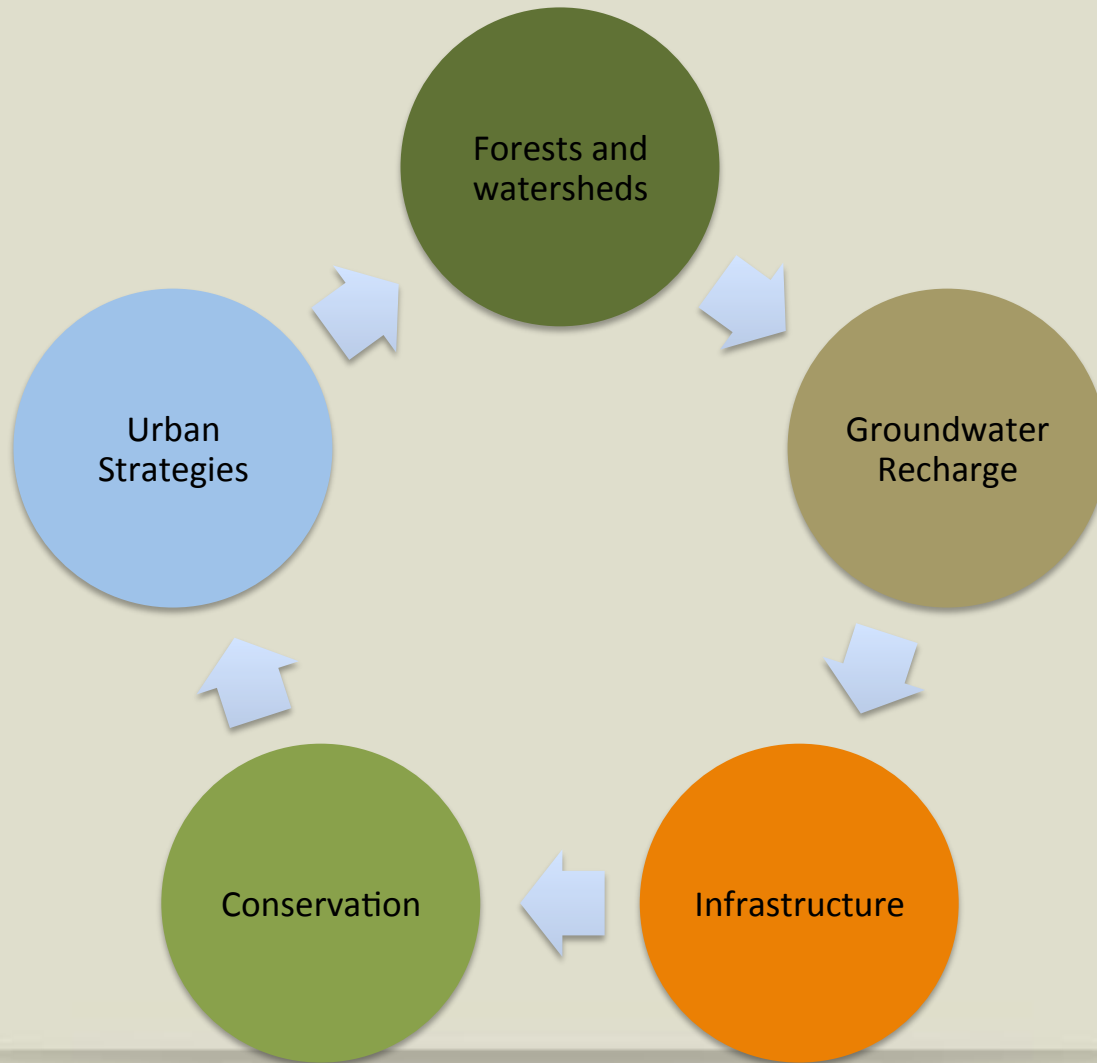




- 65% of Developed water supply
- 71% of all water to Bay Area
- 66% of all water to LA
- 25% reduction in water supply
- Changing in timing and rain/snow mix

Resilience requires a systems approach





Forest and Watershed Resilience

- Data driven but adaptively managed
- Forest management for ecological resilience
- Capitalize on multiple benefits
 - Break the public-private lands conundrum
 - Water yield and energy supply
 - Local economic development
- Tie downstream benefit to upstream investment

Key Stakeholders

Water Providers and Utilities

Urban and Rural Business Groups

Emergency Response Planners (local, state, federal)

Urban Climate Adaptation Groups

Forest and Watershed Managers (public/private)

Risk Management

Academia

ARCCA Alliance of Regional Collaboratives
for Climate Adaptation

 Bay Area
**Regional
Collaborative** **Climate
Collaborative**
SAN DIEGO REGION

LARC
Los Angeles Regional Collaborative
for Climate Action and Sustainability

 **SIERRA
CAMP** CAPITAL REGION
CLIMATE READINESS
COLLABORATIVE

Planning for Resilience in the Sierra Nevada

February 12, 2016



Steven Frisch
sfrisch@sierrabusiness.org

KEY QUESTIONS

1. What about climate adaptation necessitates collaboration?
2. For whatever issue is at stake, who are the key stakeholders and how do you begin to understand their interests to motivate them to come to the table in a collaborative way?
3. How do you define roles and responsibilities that leverage each stakeholder's unique competencies and assets?
4. What is the common set of characteristics that make collaboratives take off?
5. How do you measure progress towards building resiliency?
6. How do you move ahead from planning to implementation?