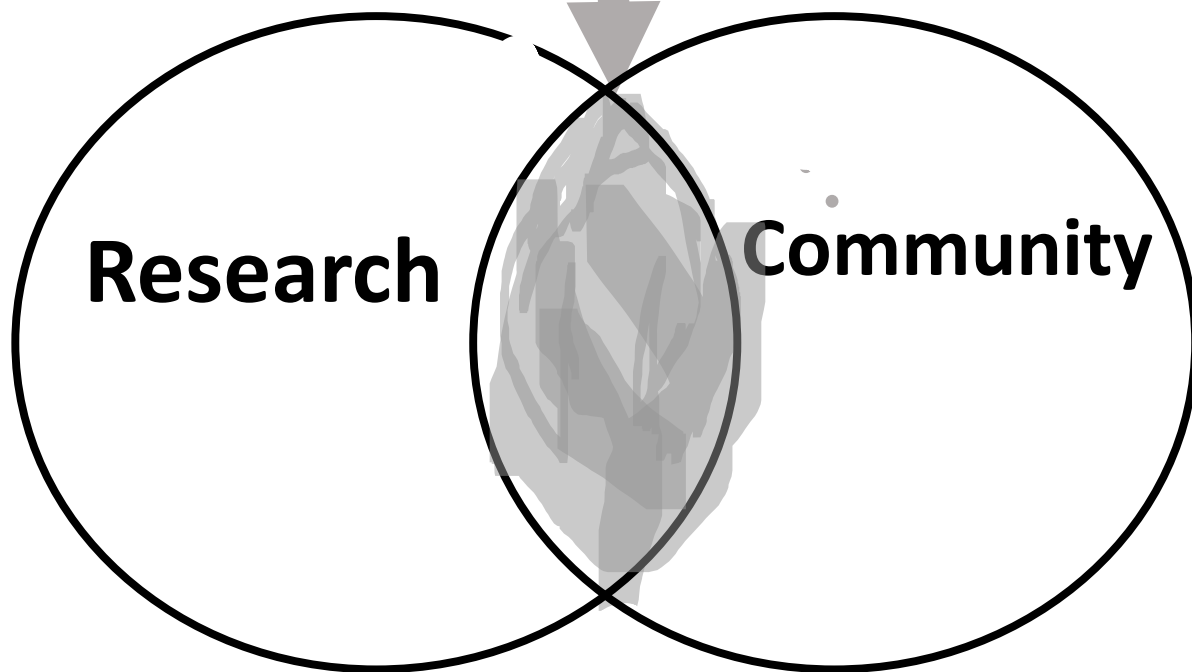


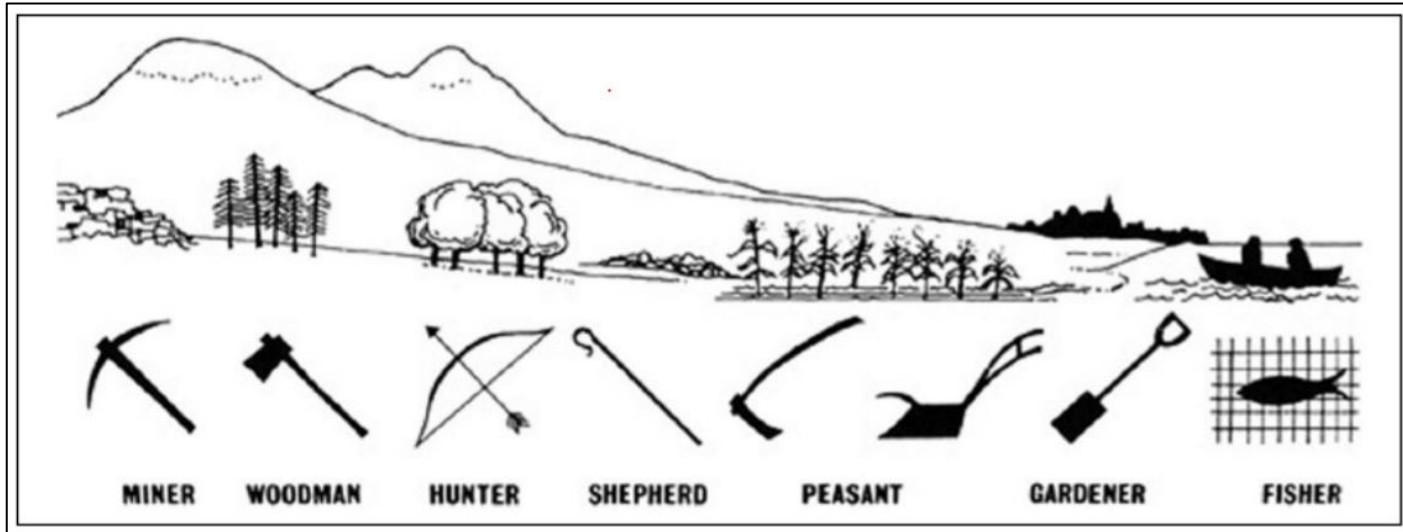
Strengthening Community Engagement and the Role of Universities in Climate Action Policy, Planning and Design



California-Mexico 2030 Summit, April 19-20, Mexico City.
Keith Pezzoli, PhD. Bioregional Center for Sustainability Science,
Planning and Design. UC San Diego. kpezzoli@ucsd.edu

A BIOREGIONAL APPROACH

1. Cultivate Bioregional Imagination: *Improve Urban-Rural Linkages*
2. Root the University: *Increase Place-based Experiential Learning*
3. Energize the Bioregional Transition: *Build Place-Based Community-University Power*



Bioregionalism begins from the understanding that human beings are social animals; if we are to survive as a species we need healthy relationships and secure, “rooted” attachments with one another and with the land, waters, habitat, plants and animals upon which we depend. Bioregional policy and planning is guided by a place-based ethics rooted in the land, ecosystems, and urban-rural interdependencies of a particular territory.





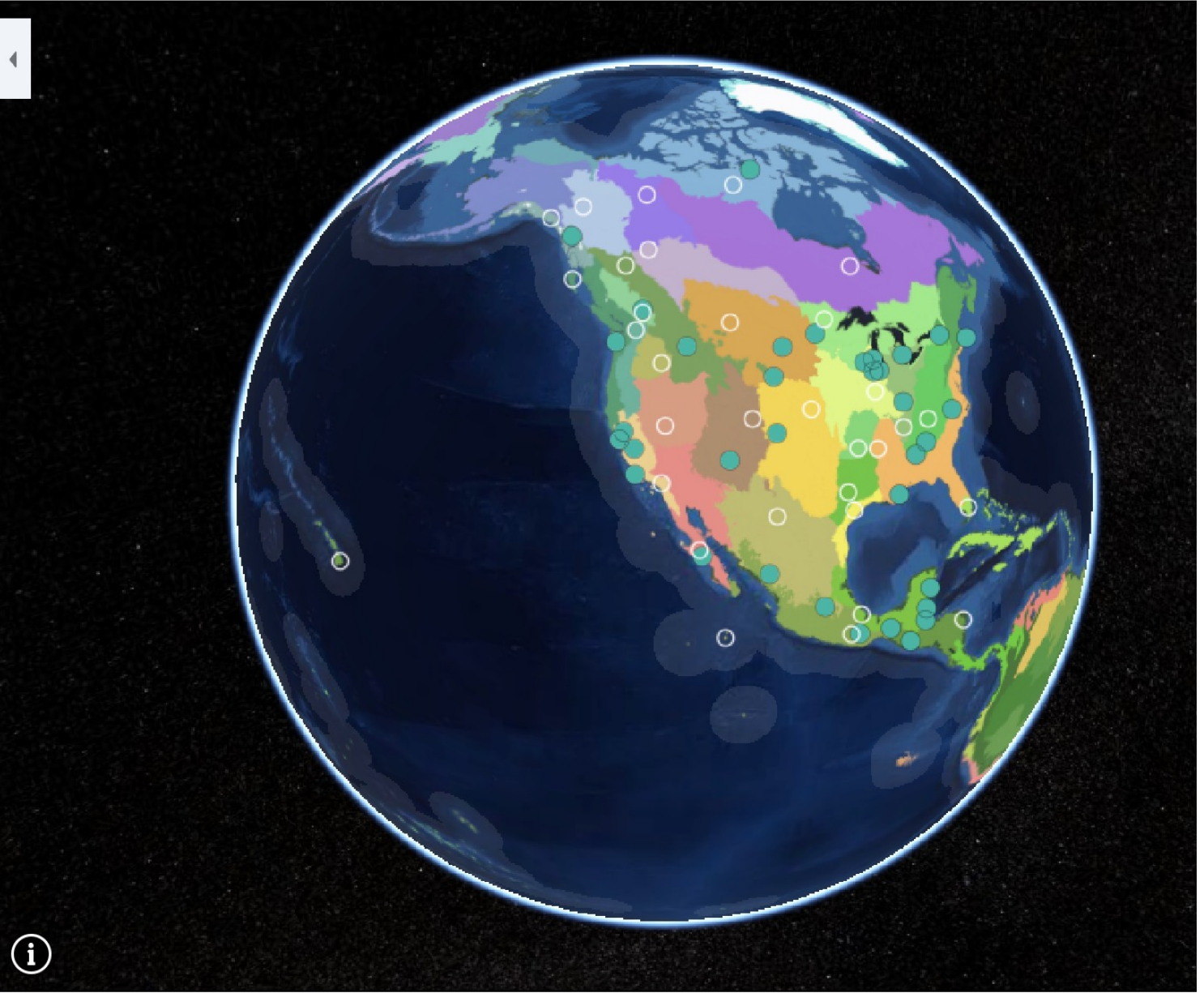
Bioregions 2020

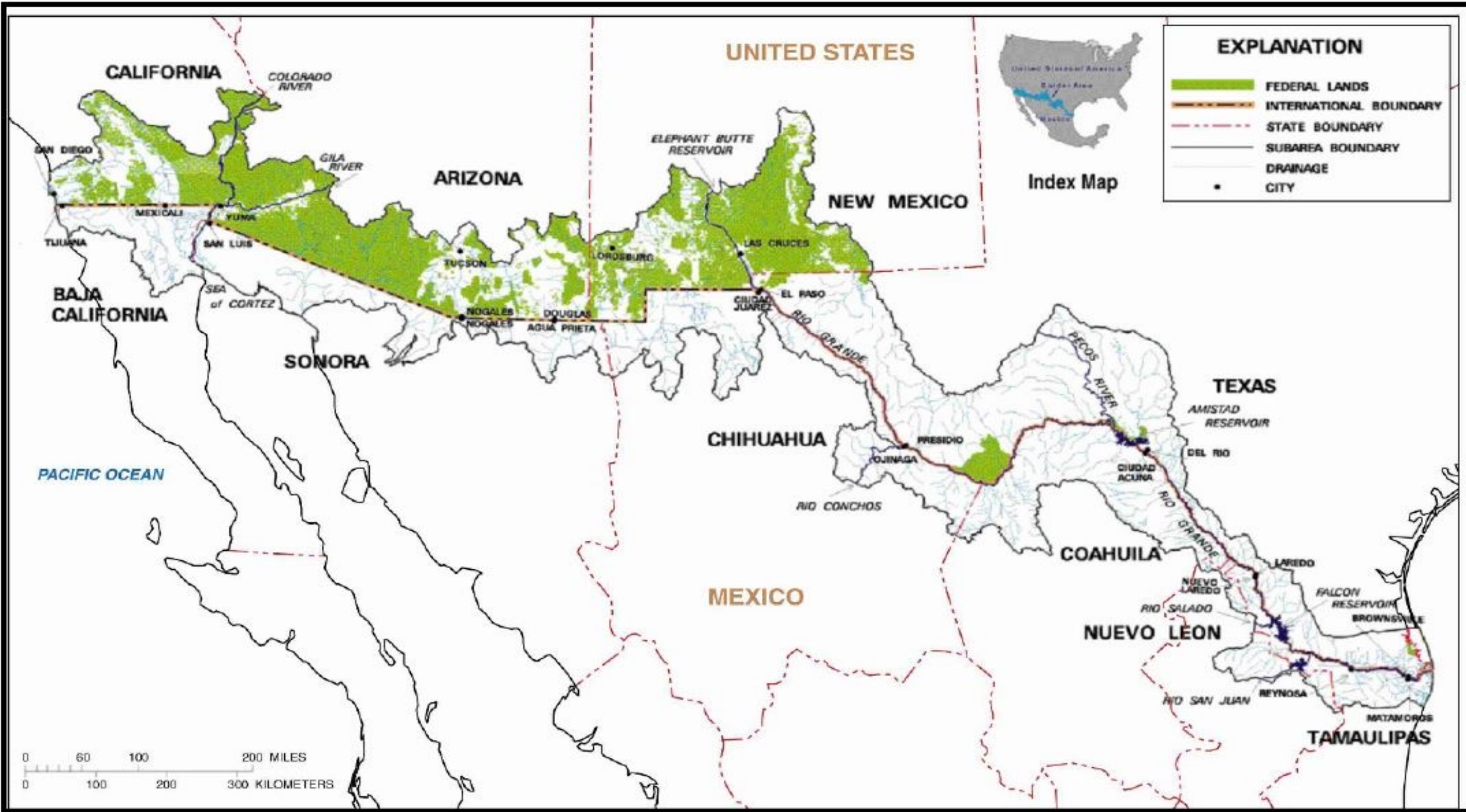
If nature were to draw a map of the world, what would it look like? We've grown accustomed to seeing the world divided into countries but there is another way to see, and better understand, the planet we call home. One Earth presents a novel biogeographical framework defined by 185 unique bioregions, which helps reveal the underlying ecological fabric of life that surrounds us. [Learn more.](#)

[Project Index](#) | [Bioregion Index](#)

Subarctic America

- Alaska 3 bioregions +
- Canadian Tundra 1 bioregions +





UNITED STATES

EXPLANATION

- FEDERAL LANDS
- INTERNATIONAL BOUNDARY
- STATE BOUNDARY
- SUBAREA BOUNDARY
- DRAINAGE
- CITY



0 60 100 200 MILES
 0 100 200 300 KILOMETERS

CALIFORNIA

ARIZONA

NEW MEXICO

SONORA

CHIHUAHUA

COAHUILA

NUEVO LEON

TAMAULIPAS

TEXAS

MEXICO

SAN DIEGO

TUJUNGA

MEXICALI

YUMA

SAN LUIS

TUCSON

LORESBURG

LAS CRUCES

EL PASO

CRIGAN JUAN

NOGALES

NOGALES

AGUA PRIETA

DOUGLAS

PRESIDIO

OJINAGA

PECOS RIVER

RIO CONCHOS

RIO GRANDE

LAREDO

NUEVO LAREDO

RIO SALADO

RIO SAN JUAN

DEL RIO

CIUDAD ACUNA

REYNOSA

BROWNSVILLE

MATAMOROS

COLORADO RIVER

GILA RIVER

SEA of CORTEZ

BAJA CALIFORNIA

PACIFIC OCEAN

ELEPHANT BUTTE RESERVOIR

AMISTAD RESERVOIR

FALCON RESERVOIR



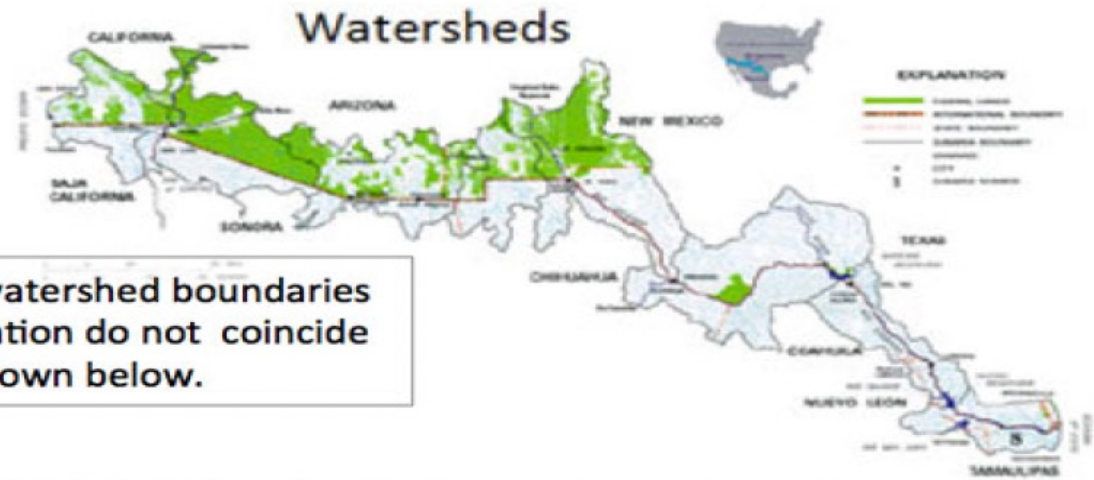
Ecological regions of the U.S.-Mexico border

— Border Environmental Health Initiative Regions

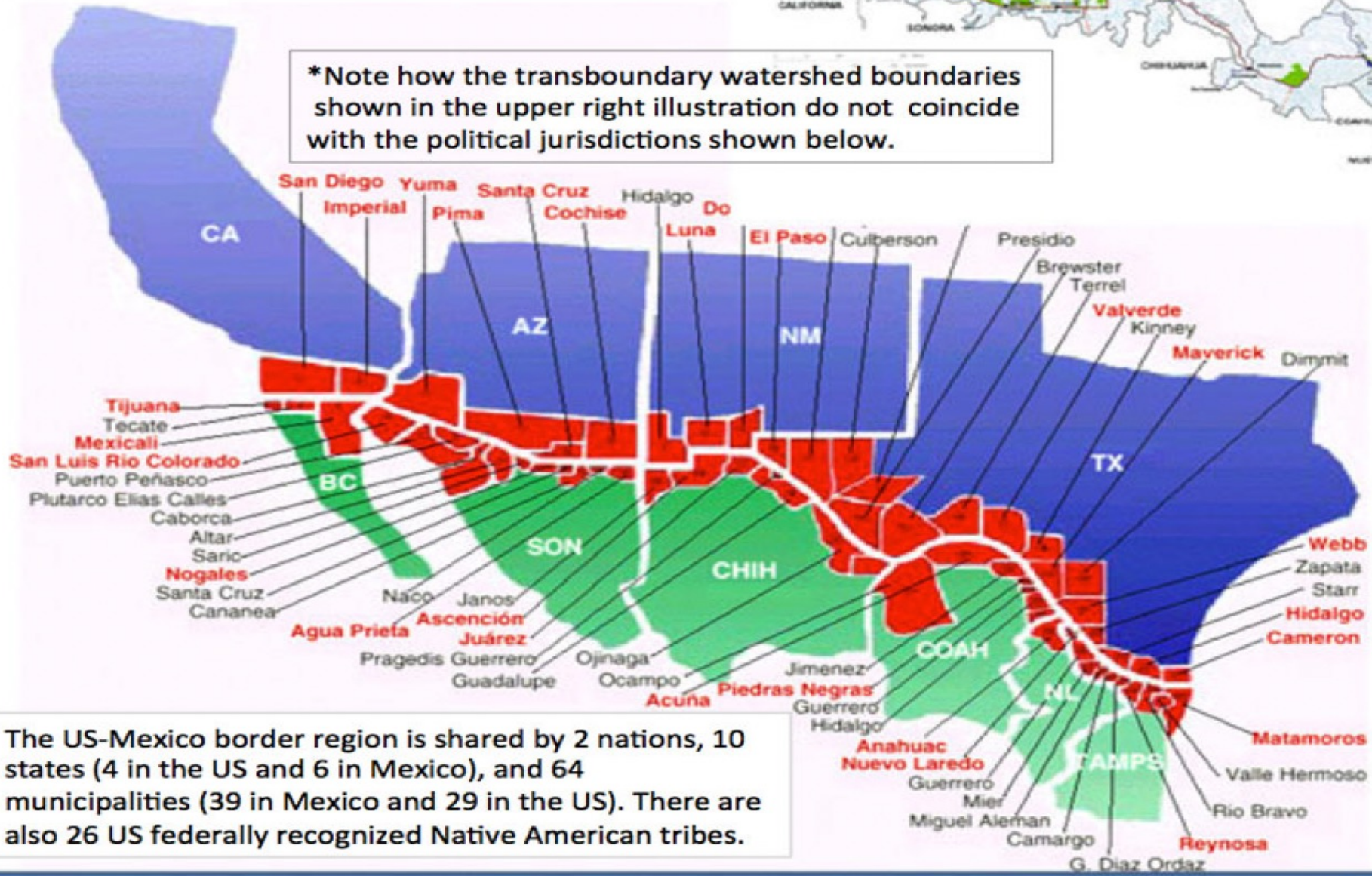
- California Coastal Sage, Chaparral, and Oak Woodlands
- Chihuahuan Desert
- Mandrea Archipelago
- Sonoran Desert
- Southern Texas Plains/ Interior Plains and Hills with Xerophytic Shrub and Oak Forest
- Western Gulf Coastal Plain



Watersheds and Political Jurisdictions Along the U.S.-Mexico Border

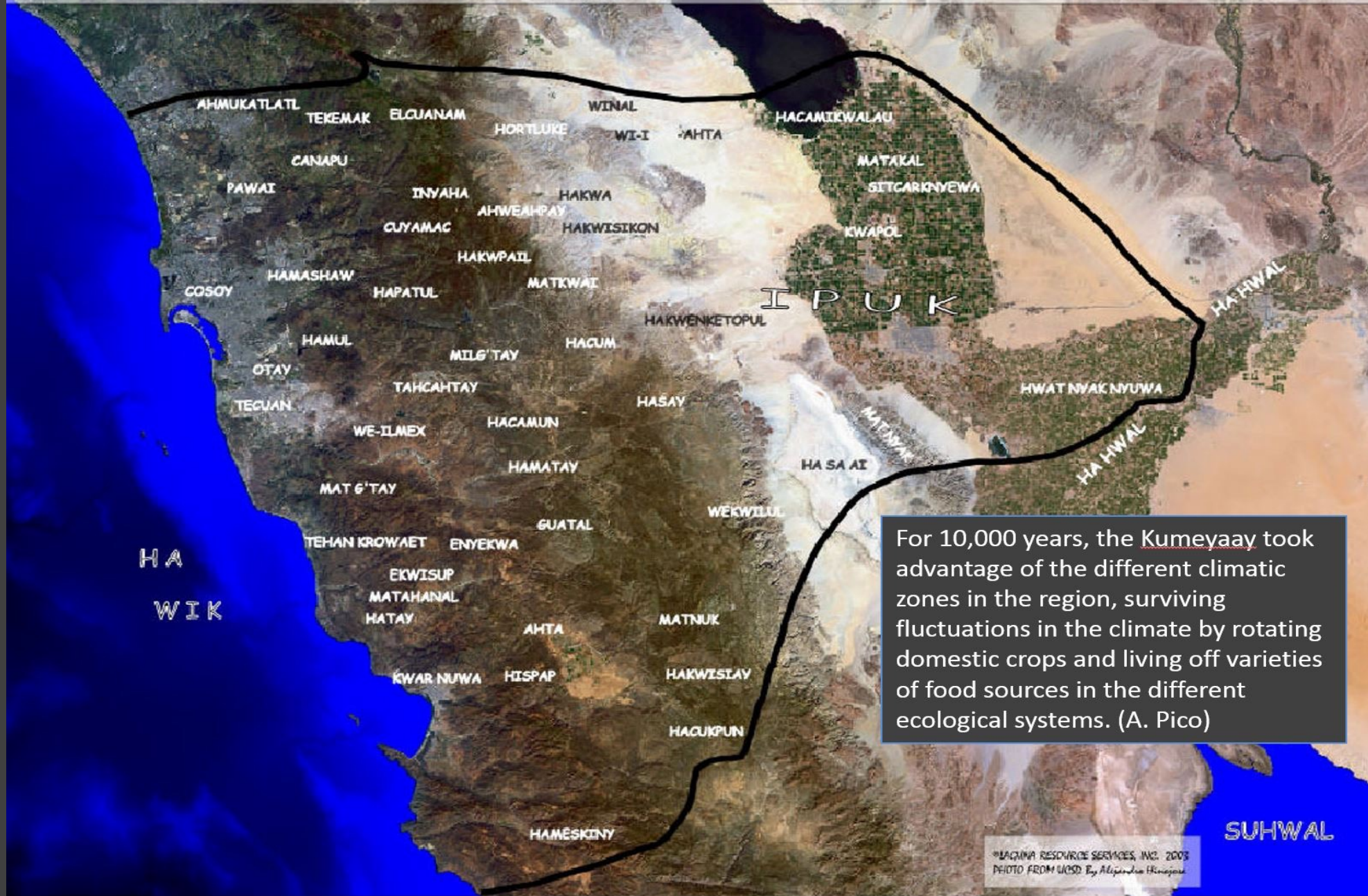


*Note how the transboundary watershed boundaries shown in the upper right illustration do not coincide with the political jurisdictions shown below.



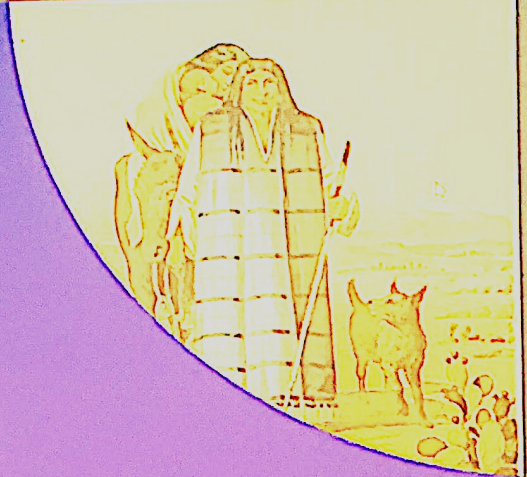
The US-Mexico border region is shared by 2 nations, 10 states (4 in the US and 6 in Mexico), and 64 municipalities (39 in Mexico and 29 in the US). There are also 26 US federally recognized Native American tribes.

THE KUMEYAAY NATION



For 10,000 years, the Kumeyaay took advantage of the different climatic zones in the region, surviving fluctuations in the climate by rotating domestic crops and living off varieties of food sources in the different ecological systems. (A. Pico)

Native Climate Sciences: (Re)turning the Gaze on Invasive Species of Thought



Our Speakers:



Michael Connolly Miskwish
THE KUMEYAAV NATION



Dr. Ora Marek-Martinez
THE NAVAJO NATION



Edward Wemytewa
THE ZUNI TRIBE



Tino Villaluz
THE SWINOMISH TRIBE



Daranda Hinkey
THE FORT MCDERMITT
PAIUTE-SHOSHONE TRIBE



Dr. Shasta Gaughen
ENVIRONMENTAL DIRECTOR



Dr. Giorgio Hadi Curti
SOCIO-CULTURAL
GEOGRAPHER

Our Moderators:



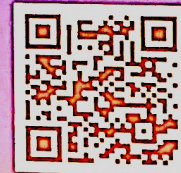
SDSU | San Diego State University

San Diego State University,
5500 Campanile Dr, San Diego, CA 92182
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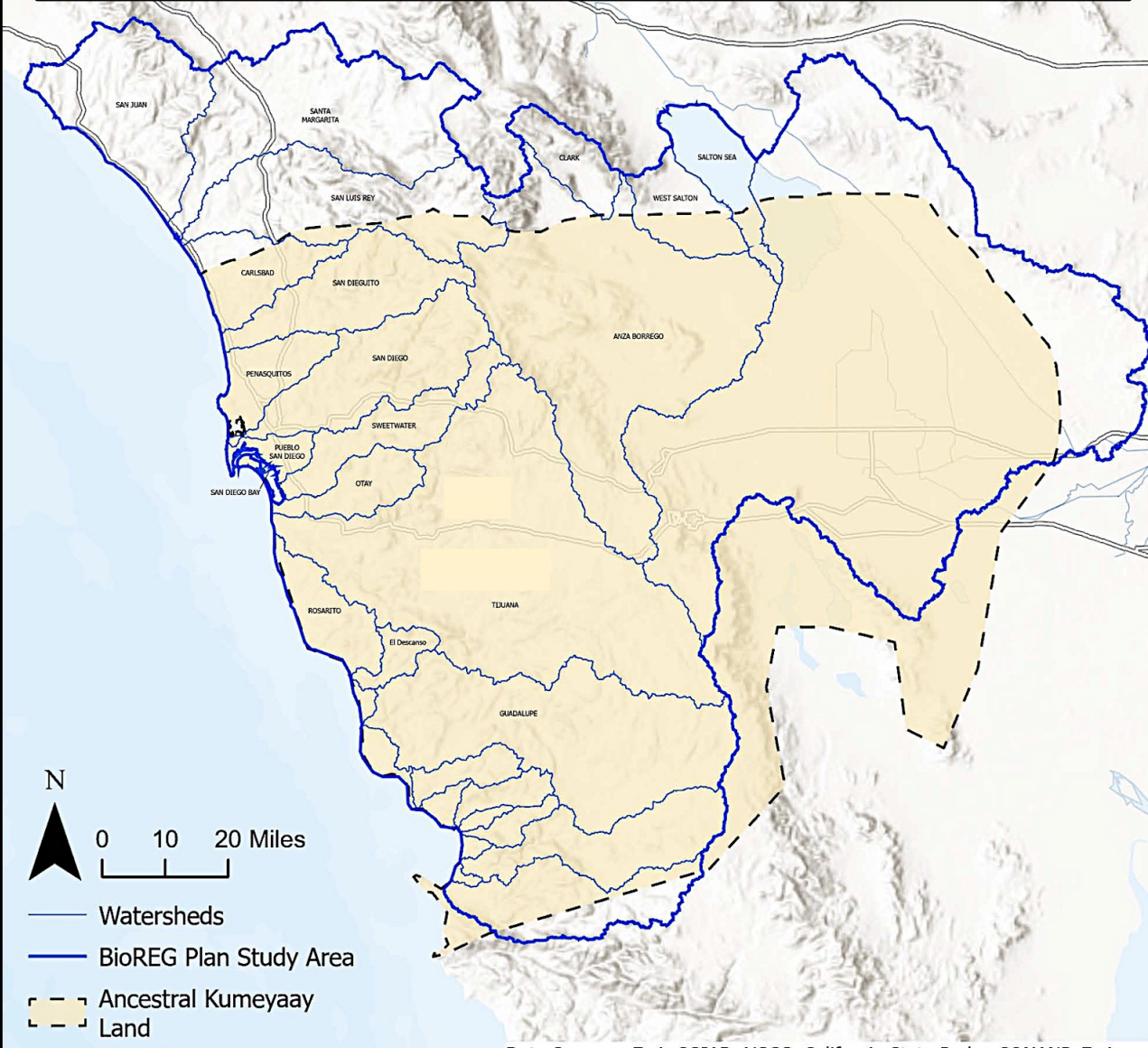
Student Affairs and Campus Diversity
Student Success Fee



Checkout our
webpage for
more info!



Native Nations-Mexico-USA Cali-Baja Bioregion



Map created by the UC San Diego Bioregional Center for Sustainability Science, Planning and Design, 06/04/22

Data Sources: Esri; CGIAR, USGS, California State Parks, CONANP, Esri, HERE, Garmin, FAO, NOAA, USGS, Bureau of Land Management, EPA, NPS, Michael Connolly Miskwish, M.A. (Resource Economist, Kumeyaay Historian).

Cali-Baja Bioregional Territory and Coastal Area: Native Nations-Mexico-US

The Challenge: Identify key strategies that should be implemented on a Tri-National Bioregional Basis (Native Nations-Mexico-US) to strengthen Climate Action Research, Planning/Design and Development essential to making life and living in the Cali-Baja Bioregion Sustainable, Resilient, Regenerative and Just.

Our Approach: Engage partners in a Participatory Strategic Planning Process to produce: (1) A Shared Vision, (2) List of Contradictions, (3) Road Map identifying pathways to deal with the Contradictions, and (4) a Bioregional Framework spelling out strategies to improve urban-rural relationships, governance and wellbeing in the Cali-Baja Tri-National lifespan.

Contact: Keith Pezzoli, Ph.D.

kpezzoli@ucsd.edu

March 28, 2023

Rooted Community-University Relationships in the Bioregional Imaginary

Research Universities

Civil Society Innovation and Solutions

Problem Solving at the Regional Scale

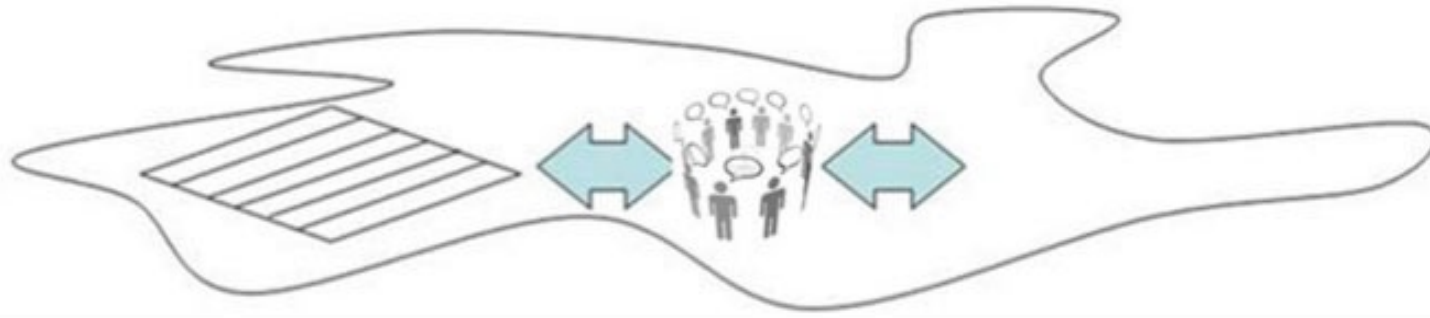
(a)



(b)



(c)



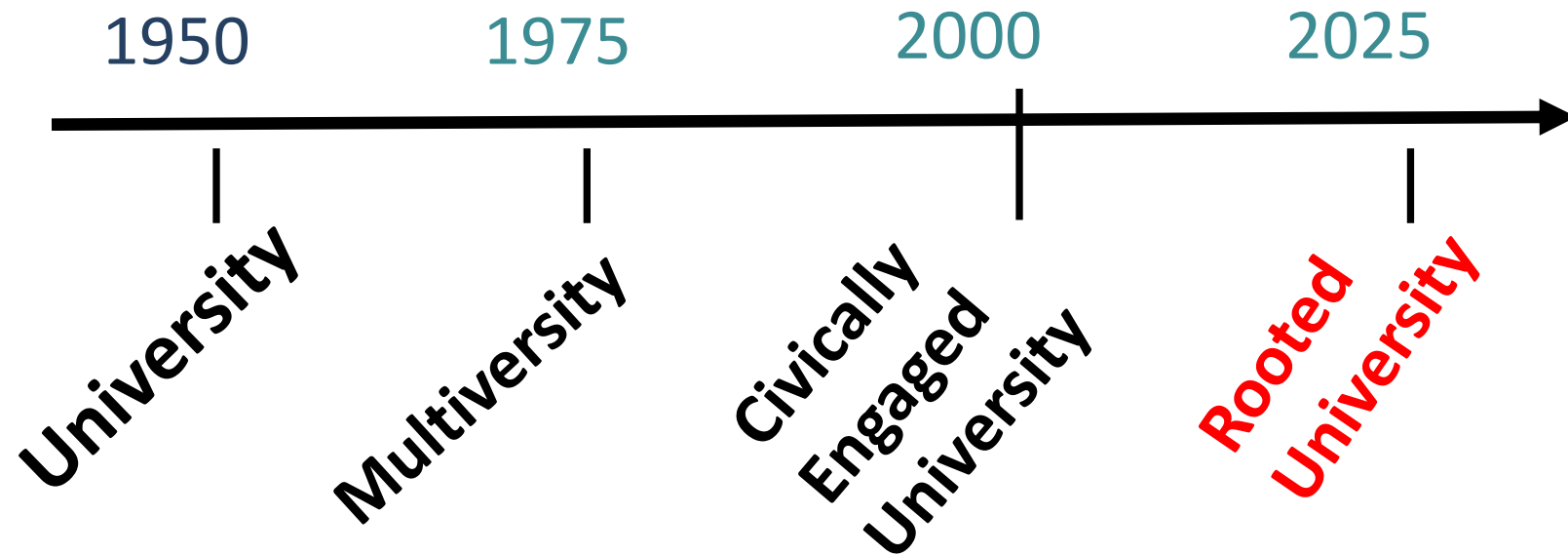
Rootedness exists when an individual or collective being experiences a sense of belonging and attachment to a particular place that stems from attributes of, and vested interests in, the place itself.

(a) Research universities and civil society not engaged in bioregional problem solving.

(b) Civil society engaged in bioregional problem solving, without systemic research university participation.

(c) Research universities and civil society jointly engaged in local and bioregional problem solving.

Transitioning 21st Century Universities From Civically Engaged to Rooted



The Rooted University is a university that has aligned a significant amount of its theory-building and practices in education, research and community engagement to challenges emerging out of the bioregion (lifeplace) of which it is part. This entails an intentional democratization of science, technology, education and training in glocally-minded, place-based ways that foster equity, sustainability and resilience in the coupling of human and natural systems for the common good. .

BIOREGIONAL GATEWAY

Creating a transboundary data-knowledge commons for convergence research and community science to better understand and improve urban-rural resilience




Enabling data integration, sustainability asset mapping and geospatial analysis focused on the urban-rural continuum in transboundary city-regions including working lands and natural spaces.

Solid Terrain Model (Bioregional Center's territorial focus based on Ancestral Kumeyaay Tribal Lands)



Los Laureles Canyon,
Tijuana, Mexico

 Suzie's Farm

Tijuana River Estuary,
San Diego

Pacific
Ocean





Los Laureles Canyon, Tijuana, Mexico (Feb. 9, 2008)
UC San Diego, Urban Studies and Planning Club's
Community Service Work Group



One of the roads to be covered with pervious pavers.
Pervious pavers are designed to minimize erosion by lessening the velocity and amount of stormwater runoff. 2/9/08
Los Laureles Canyon, Tijuana, Mexico

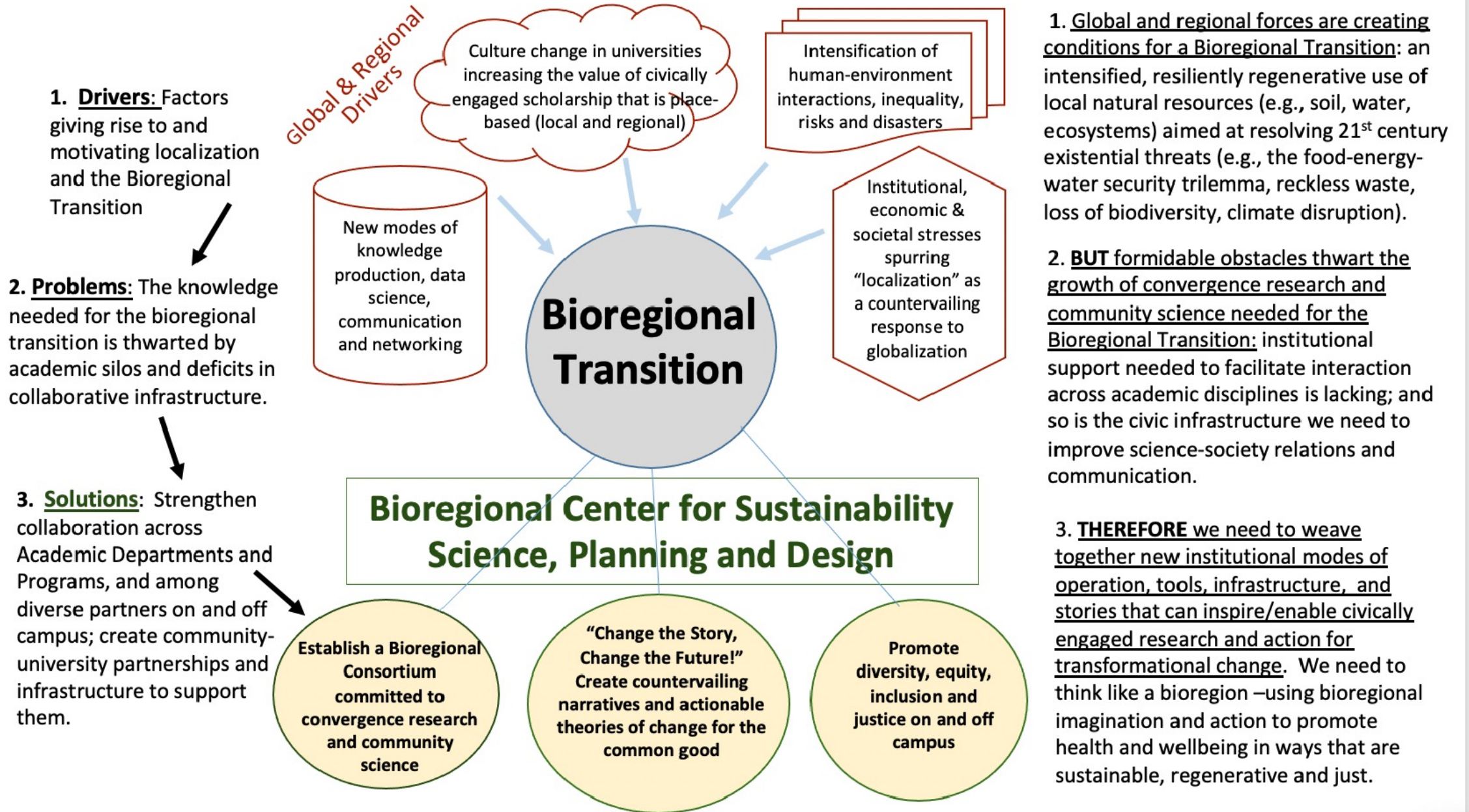


Students mixing aggregate for constructing pervious pavers

Civically engaged research

Food Security





Urban-Rural Resilience: A Bioregional Perspective of the 14 Transboundary City-Regions Spanning the US-Mexico Border

