2018

Campus-Community

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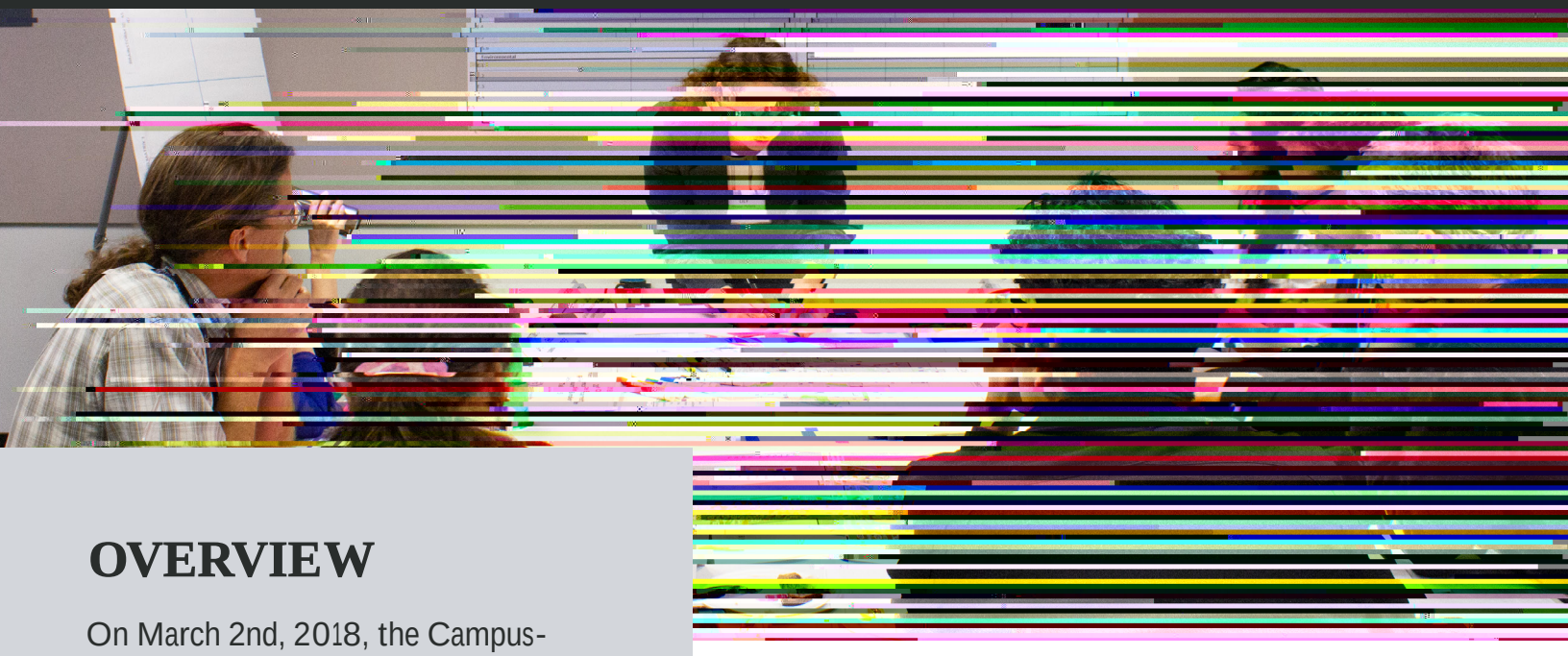
CHA E E

2, 2018

ELIZABETH LAMDE
PORT OF LONG BEA

EXECUTIVE SUMMARY



OVERVIEW

On March 2nd, 2018, the Campus-Community Resilience Charrette was co-organized and co-hosted by The O□ce of Sustainability and Center for Community Engagement (CCE) at California State University, Long Beach (CSULB). In this context, resilience specifically refers to "increasing the ability to survive disruption and to anticipate, adapt, and flourish in the face of change" (Second Nature 2016). A charrette is a meeting in which all stakeholders in a project attempt to resolve conflicts and map solutions. The Resilience Charrette aimed to go beyond a traditional stakeholder workshop via a day of structured, engaging activities emphasizing coordination, cooperation, and solutions-oriented thinking. The day-long immersive event brought together identified leaders from diverse departments, centers, and organizations from the university campus and local Long Beach community.

OBJECTIVES

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OBJECTIVE 1

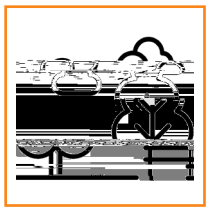
Characterize climate hazards

OBJECTIVE 2

Identify vulnerabilities and strengths on CSULB's campus and in the local community

OBJECTIVE 3

Prioritize and align campus-community actions to enhance resilience to climate hazards



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Increase tree cover and green space on campus and across the city, focusing on programs for planting and maintaining trees and green spaces, expand the urban forest, improve education about caring for trees during droughts, integrate edible fruit trees into tree-planting plans, increase green infrastructure, improve equity in distribution of green space especially in frontline communities.

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Active and electrified transportation, including increasing transit-oriented and mixed used development that is a□ordable and helps people to live closer to e□cient public transportation options and closer to where they work to remove commute times and number of single passenger vehicle trips. Also, increase student housing near and on campus, and develop more distance learning and telecommuting options.

KEY ACTION AREAS

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C [illegible]

E G I : Design to mitigate and protect against impacts to the electrical grid, such as brown outs during extreme heat events, and full outages during emergencies. Improvements to the electrical grid and energy infrastructure that emerged from the working groups focused on the possibility of creating a backup system to mitigate power outages and increase resilience in the case of an emergency. Solar panels were a popular idea for a renewable and generally reliable source of power during an outage or emergency. Anticipatory planning for technology malfunctions was also proposed to increase resilience, by having plans in place to cope with power outages.

M C : Design the system so that if one area is a□ected by an event, other areas could still be up and running smoothly. Microgrid capability with enhanced local-scale control, such as at the neighborhood scale, was proposed as a way to enhance resilience. Participants raised interest in future scenarios with more distributed control over energy production, storage, and consumption. Improving incentives for energy conservation were also mentioned.

E : More rapid adoption of renewable energy sources to increase energy infrastructure stability and accessibility, while reducing air pollution in local communities. Strong emphasis for clean, renewable energy was a shared priority that arose many times.

A . . , . : Increase the connectivity, accessibility, and safety of walking and biking pathways. If walking and biking options are safer, more people will feel comfortable using active modes of transportation, rather than relying on driving vehicles. Bike sharing stations are seen as a strength, but are not su□cient and not accessible enough to all members of the Long Beach community.

High priorities focus on local vulnerable, disadvantaged, and marginalized populations. Across break out groups, participants raised the issue of inequality and stressed that climate impacts may further exacerbate the housing crisis and homelessness.

Major challenges include the lack of a□ordable housing, the need for increased capacity

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should build from and expand on existing collaborations of diverse cultural communities, and include overcoming language barriers to discuss climate solutions. It was proposed that partnerships between the university and community organizations could serve to increase the diversity and cultural appropriateness of climate education. A further recommendation was to add a university general education requirement for sustainability to increase climate literacy. Transparency and accountability of public o□cials was also raised as an important issue.

was considered a strength by participants due to the large number of activists and community-based organizations in Long Beach. However, there was concern that the mindset that "someone else will take care of it" may serve to dissipate activism.

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[illegible] M [illegible]: A shared concern is the lack of capacity for stormwater capture in Long Beach. Participants urged increased attention to stormwaters' potential as an additional source of water, especially for irrigation of gardens, greenspace and the urban forest. The individual building-level emerged as the recommended scale for capturing and reusing stormwater.

G [illegible] I [illegible] emerged as a key priority for climate change mitigation and adaptation, including cool roofs and cool pavement, permeable pavement, green roofs and rooftop gardens, and street level rain gardens to enhance stormwater management, mitigate extreme heat, and reduce air pollution. Integrating green infrastructure standards into the building code was a recommendation. Wetland conservation and enhancement presents additional benefits for managing urban flooding and sea level rise impacts.

D [illegible] M [illegible] solutions include increasing water e□ciency by replacing old pipes to prevent them from leaking, increasing the reach of the purple pipes/recycled water, and publishing guidelines for helping the public choose appropriate native and drought tolerant plant species for landscaping. Some participants recommended enforcing stricter rules and policies for residential water use during periods of water scarcity and drought. Many agreed that new urban greenspace projects should be designed with a focus on drought management to ensure that long-term sustainability and appropriateness to a changing climate.

INFRASTRUCTURE

COMMUNITY INFRASTRUCTURE

- Assess policy and implementation barriers to stormwater capture and storage
- Debris and pollution prevention strategies
- Integrate stormwater capture and green infrastructure solutions into planning and design (ie. catchment basins, bioswales, native (local) trees & plants at city parks and 22-acre campus site, potential to install cisterns under new buildings)
- Don't install basements in new buildings

TRANSPORTATION INFRASTRUCTURE & TRANSIT-ORIENTED DEVELOPMENT

- Modify roads to raise them above grade, assess potential to integrate permeable pavement, cool streets
- Construct more campus housing, assess potential for increasing distance learning opportunities and e-commute work policies
- Reduce carbon pollution by expanding public transportation, building more affordable mixed-used development that allows people to live close to where they work (ie. transit-oriented development), electrify and expand campus shuttles to serve more off-campus housing areas where student populations are dense
- Expand and electrify public transportation options
- Continue to improve bike and pedestrian infrastructure

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Strengthen community organizations that serve vulnerable areas and populations.

Assess equity concerns in all other climate planning actions/priorities

Improve education to public agencies on climate impacts. Improve coordination with community organizations, assess funding opportunities

SUMMARY OF FINDINGS

VULNERABILITIES

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FEA E
Electrical grid/infrastructure
Stormwater management/drainage systems
Lacking public services (health, education, environment)

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Green infrastructure	Environmental
Presence of an aquifer (increase water security)	Environmental

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Buildings	Infrastructure
Community organizations & neighborhood groups	Societal
Emergency response & communication systems	Societal
Economic opportunities (green jobs, clean energy sector)	Societal
Green space/parks/habitat	Environmental
Urban agriculture	Environmental
Hydrological and ecological features/ LA River daylighting (restore natural hydrology)	Environmental
Resilience as part of environmental planning	Environmental

NEXT STEPS

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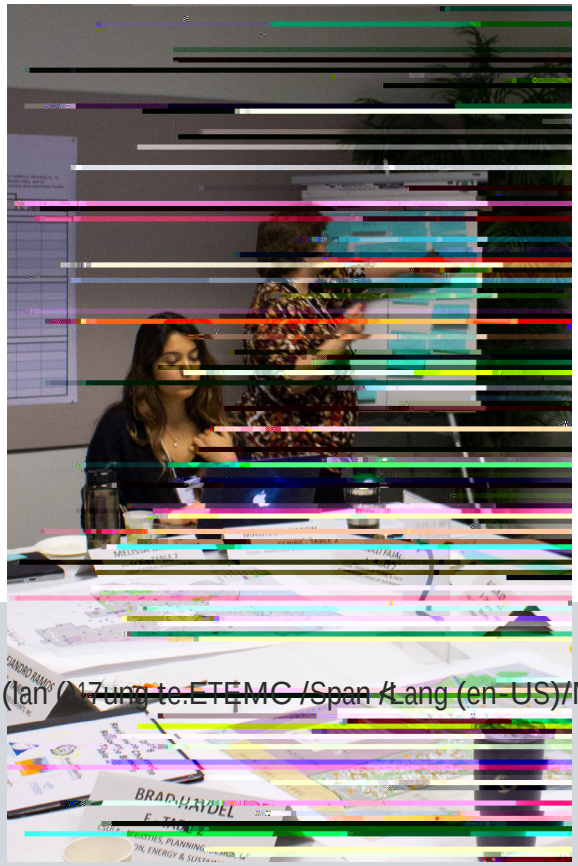
Determining a resilience baseline across a number of indicators in each thematic area, against which future progress can be measured

Goal-setting for specific high priority resilience actions to establish measurable, impact-driven planning and financing horizons

Updating the CSULB Climate Action Plan (CAP) to explicitly address climate resilience in addition to greenhouse gas reduction targets and carbon footprint mitigation



The findings of the Resilience Charrette, presented in this repoaEMC /3 willeasu (ette, din5ecn this)]e2 (limate Action P)9 (lan (17unn te.ETEMC /Span /Lang (en-US)/MCID 6

APPENDIX

LI OF E ILIENCE CHA E E A ICI AN AND E E EN ED O GANI A ION :
(in alphabetical order by last name)

Daniel Alderete Gonzalez
Jan Victor Andasan
Heather Barker
Eric Bryan
Courtney Chatterson
Sona Co□ee
Holli Fajack
Michael Gardner
Amy Gerety
Elliot Gonzalez
Edric Guise
Brad Haydel
Lamiya Hoque
John Kindred
Dan Knapp
Elizabeth Lambe
Jennifer Lentz
Grace Lorentzen
Justin Luedy
Cole Maloney
Dana McConnell
Gary Morrison
Chris Najera
William Nash
Kristyn Payne
Christine Petit
Alejandro Ramos
Larry Rich
Yesmean Rihbany
Hayley Searight
Laurie Smith
Craig Stone
Dean Toji
Christine Whitcraft
Margaret Williams
Paul Wingco
Emily Yam

Aquarium of the Pacific
Port of Long Beach
City of Long Beach Sustainable City Commission
East Yard Communities for Environmental Justice
City of Long Beach O□ce of Sustainability
Building Healthy Communities
Citizen's Climate Lobby
Los Cerritos Wetlands Land Trust
Long Beach Environmental Alliance
Local neighborhood residents
Local property owners

LI OF E ILIENCE CHA E E FACILI A O :

Carmen Arreola
Genie Bey
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Lilian Ledesma
Lorena Palacios
Carina Sass

LI OF E ILIENCE CHA E E C BE :

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Victoria Du□y
Josafat Gonzalez
Brisia Gutierrez
Anna Johnson
Melissa Mejia
Sydney Morgan
Valerie Palacios
Brian Ramirez
Claudia Villalta