Native Landscaping Final Report

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Team Leaders | Chloe Ney & Hogan Fenster
Team Members | Lea Le Rouzo, Peter Lee, Audrey Salinger, Mike Peters, Kyle Crowley
Stakeholder | Bonny Bentzin

RESEARCH QUESTION

How do we incorporate more native landscaping into current campus landscaping practices?

Goals

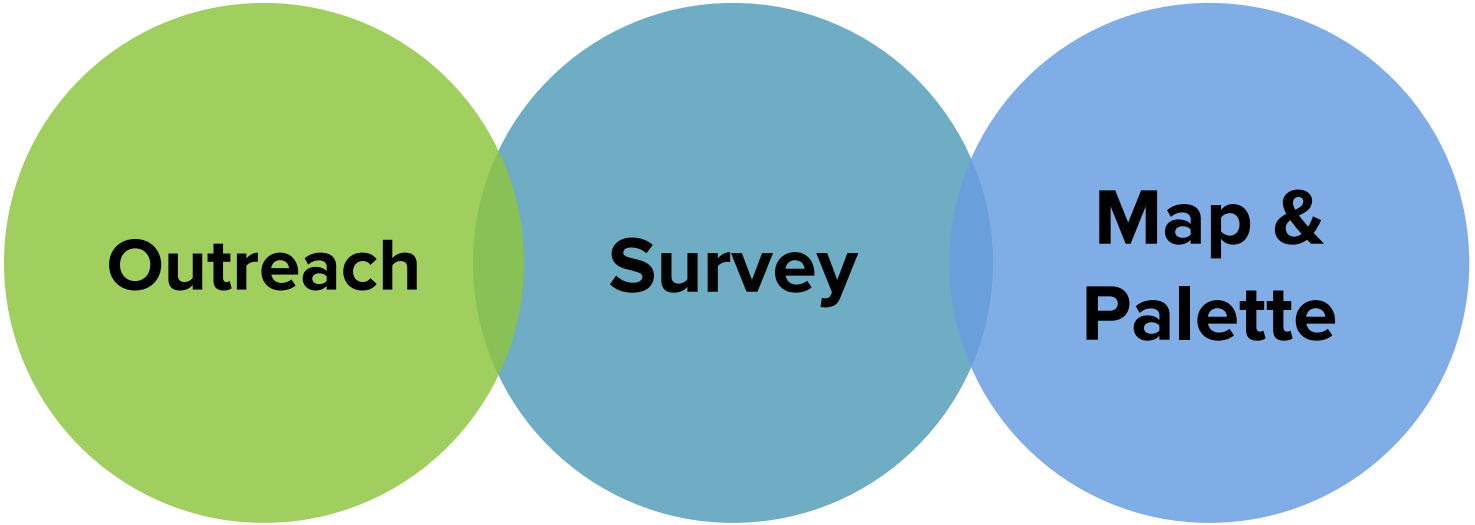
Short term goals

- Provide the opportunity for interdisciplinary education on outdoor spaces at UCLA
- Improve underutilized spaces on campus with functional landscaping

Long term goals

- Improve campus *ecology and biodiversity*
- Reach UCLA's *Carbon Neutral Initiative Goal By 2025*
- UCLA as a model for *ecologically sound urban landscaping*

Three Pronged Approach



Outreach — Methodology

Key informant interviews

- Cully Nordby, Tom Gillespie, Nurit Katz, Alison Lipman, Stephanie Landregan, Lisa Novick, Wayne Dollase
  - Create a more thriving, biodiverse ecosystems by incorporating natives
  - Ensure UCLA will intend to plant non-invasive plants as lawn areas are transformed
  - Promote education through purposeful landscaping

Outreach — Methodology

Outreach Interviews

- Chico State, Stanford University, Santa Monica College, UC Santa Barbara
  - UCLA can benefit from space-based planting and using green spaces for education
  - Natives must be incorporated gradually and based on location, rigid guidelines are constricting

Stakeholder, Capital Programs, Facilities Meetings

- UCLA is already moving towards integrating natives and drought-tolerant landscaping
  - UCLA stakeholders should review pallets and guidelines as underutilized spaces are transformed
  - Minimize pesticide use, mowing, watering, maintaining, polluting (exhaust)

Survey — Methodology

- Survey based on key informant interviews and from UC Stormwater Initiative Survey
- Filled out by a variety of **81** community members, spanning **33** majors/departments
- Gauged knowledge of native plants
- Determined preferences/priorities for landscaping

MAJOR/DEPARTMENT	COUNT
Anthropology	1
Asian Languages and Linguistics	1
Biochemistry	3
Biology	5
Chemical Engineering	2
Chemistry/Materials Science	1
Chicano Studies	1
Chinese Language and Culture	1
Civil Engineering	2
Communication	1
Communication Studies	2
Computer Science	6
Ecology and Evolutionary Biology	5
Economics	3
Electrical and Computer Engineering	1
English	4
Environmental Science	16
Financial Actuarial Math	1
Geography	7
Geology	1
History	1
International Development Studies	1
Materials Engineering	2
MCDB	1
Mechanical Engineering	1
Neuroscience	1
Political Science	1
Psychobiology	3
Psychology	1
School of Dentistry	1
Sociology	1
World Arts and Cultures/Dance	1
N/A	2
Total	81

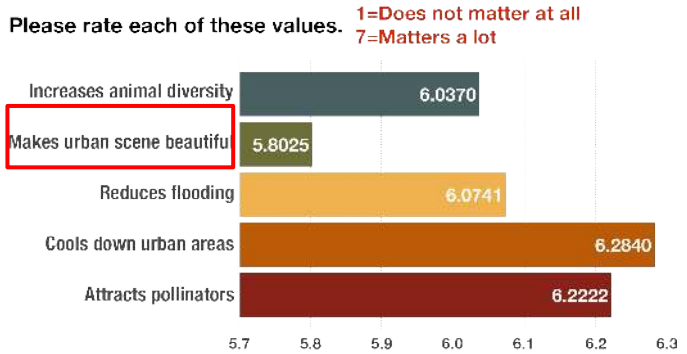
List of majors surveyed

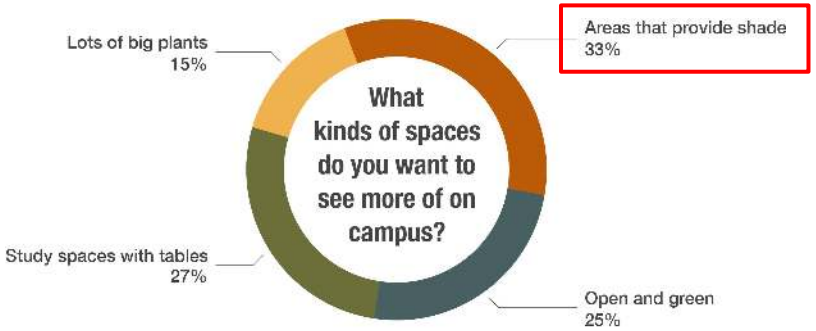
Survey — Results

Functionality

- The survey helped demonstrate the clear demand for **functional** landscaping over **aesthetics**

- Respondents wanted to see more **trees** and areas that provide **shade** to facilitate working outside on laptops

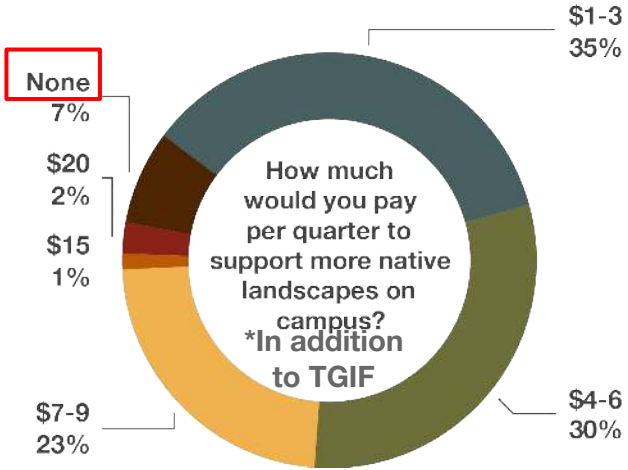




Survey — Results

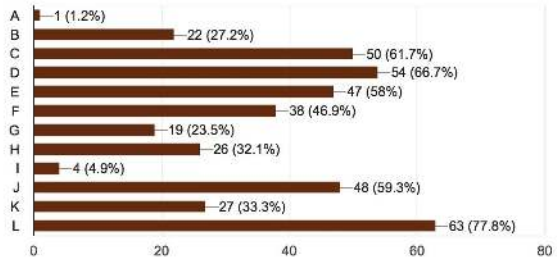
Funding

- People are **willing to pay** to make sure this happens!



Native Landscape Perception

- People could identify native plants with a **52.4%** accuracy



Native Plant Preferences

		1 - Do not want to see at all 7 - Definitely want to see	
Yarrow	*Achillea millefollium*	6.148148148	
Tree anemone	*Carpenteria californica*	6.12345679	
Channel Islands tree poppy	*Dendromecon harfordii*	6.012345679	
California tree poppy	*Romneya coulteri*	5.987654321	
California brittlebush	*Encelia californica*	5.962962963	
California buckeye	*Aesculus californica*	5.950617284	
California bay	*Umbellularia californica*	5.666666667	

		1 - Do not want to see at all 7 - Definitely want to see	
Toyon	*Heteromeles arbutifolia*	5.49382716	
Pacific madrone	*Arbutus menziesii*	5.456790123	
Bearberry	*Arctostaphylos uva-ursi*	5.12345679	
Coyote brush	*Baccharis pilularis*	4.851851852	
Dune sedge	*Carex pansa*	4.62962963	
Deergrass	*Muhlenbergia rigens*	4.62962963	

Palette — Methodology

- ***Local*** California Native Plants
- Focus on UCLA microclimates
- Looked at Santa Monica Community College, Theodore Payne Foundation, and Sustainable Landscape Case Study

SANTA MONICA COLLEGE

THEODORE PAYNE FOUNDATION for Wild Flowers & Native Plants, Inc.

CITY OF SANTA MONICA
A Sustainable Community
sustainablesm.org

Palette — Results

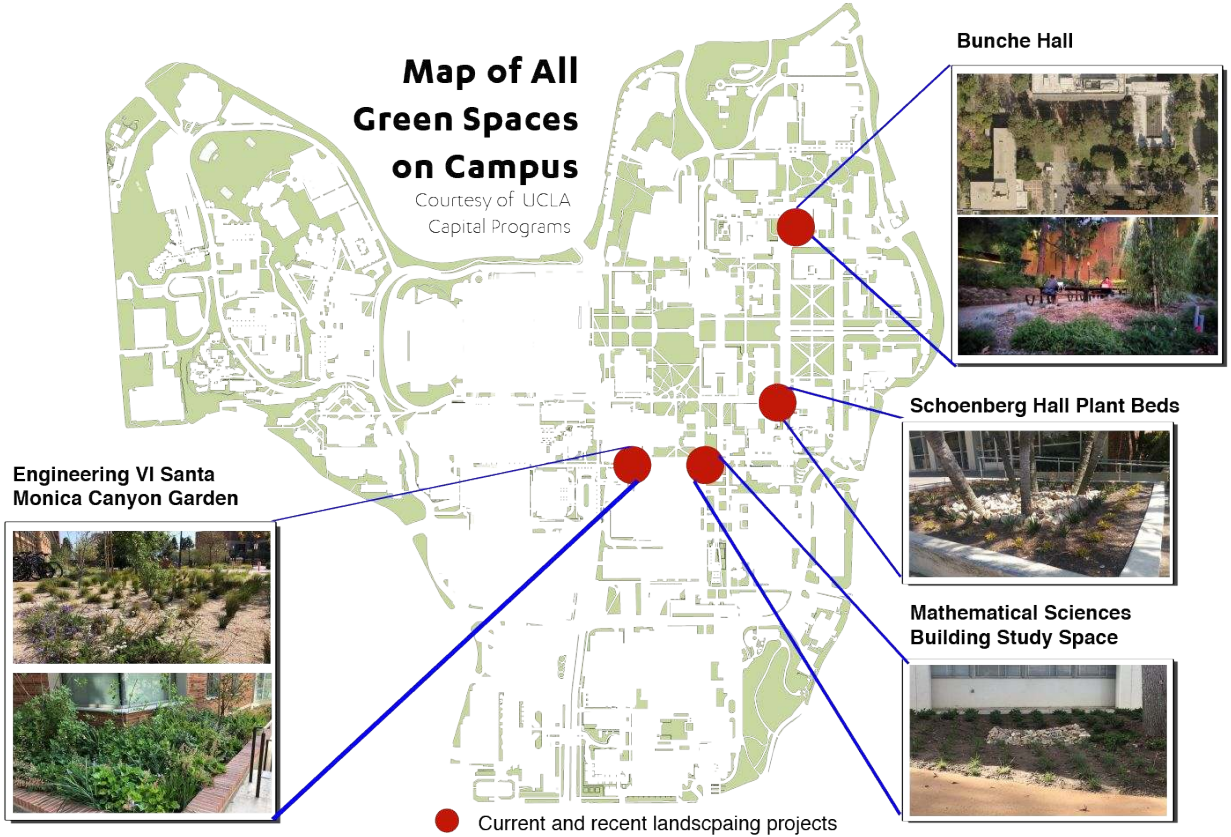
- 100+ choices for shrubs, grasses, and trees in the 90095 zip code alone
- 50% biomass of native plants

California Bush Sunflower

Deer Grass

Box Elder

Map — Results


Map of All Green Spaces on Campus
Courtesy of UCLA Capital Programs
Bunche Hall
Schoenberg Hall Plant Beds
Mathematical Sciences Building Study Space
Engineering VI Santa Monica Canyon Garden
Current and recent landscpaing projects

Conclusion

Recommendations

- Enforce **50% native/50% non-native** biomass rule on future projects
- Proceed with consistent **landscape architect/landscaping task-force** committee meetings and review
- Future SAR projects: conduct **cost-benefit analysis** on water usage and maintenance

We would like to thank...

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UCLA Facilities Management

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Luskin Center FOR INNOVATION

The Green Initiative Fund

For providing us funds for Earth Day and Survey Efforts.

the greeninitiative fund

Capital Programs

For providing us with maps and GIS data.

UCLA Capital Programs

Lisa Novick

For providing us with invaluable information on native plants.

THEODORE PAYNE FOUNDATION for Wild Flowers & Native Plants, Inc.

Any comments, questions, or concerns?