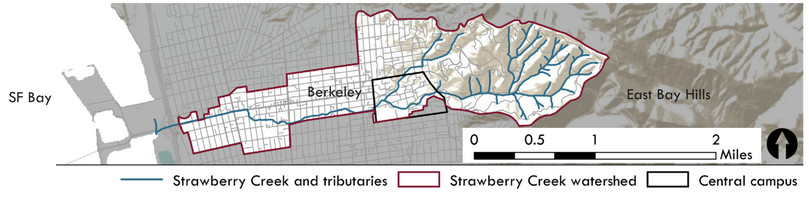
Registration Code: M1

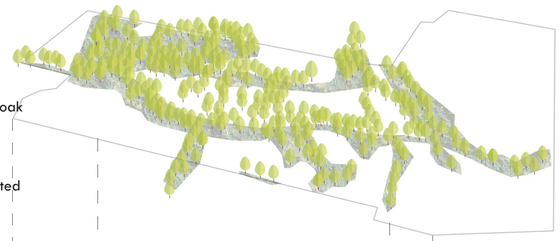
# [RE] GENERATIONS

## GREEN INFRASTRUCTURE FOR A VIBRANT FUTURE

(Re)Generations is a vision of the UC Berkeley campus that integrates spatial and temporal strategies for green infrastructure to benefit local communities and future generations. Through research, iterative design, and discussions with local professionals and numerous campus administrators, we took advantage of the bounty of information before us to create a rich and coherent proposal. We developed a methodology that harnesses the existing long range master plan and pairs it with a robust analysis of contemporary factors and a comprehensive toolkit of stormwater green infrastructure. The goal was to create a process that could be passed along to campus administrators to aid in future master plan development and quantification of impacts such as runoff reduction and pollutant removal.




## Interventions:



**5** acres converted to oak woodland

**18** buildings retrofitted with blue roofs

**9** buildings retrofitted with green roofs

**109** roof downspouts disconnected and routed to vegetated areas

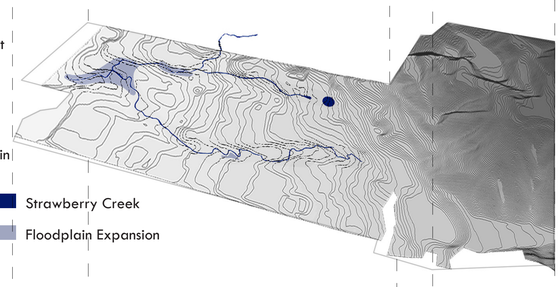
Blue Roof
Green Roof

**30** acres of permeable pavers

**9** acres of filter strips treating 5 miles of road

**38** bioretention cells treating 10 acres of parking lots & other impervious surfaces

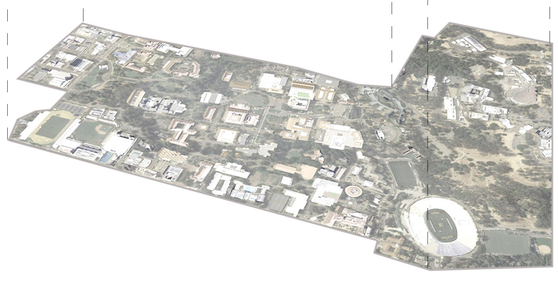
Rain Garden
Vehicle Road
Filter Strip
Permeable Pavement



**1,600** linear feet of daylighted/restored creek

**170,500** square feet of floodplain expansion

Strawberry Creek
Floodplain Expansion



## Impacts:

Each mature *Quercus Agrifolia* sequesters

**186** pounds of carbon and intercepts

**4,158** gallons of rainfall per year

**2.5** million gallons captured annually



Annual Pollutant removal:

**68** lbs metals

**482** lbs nitrate

**241** lbs total phosphorus

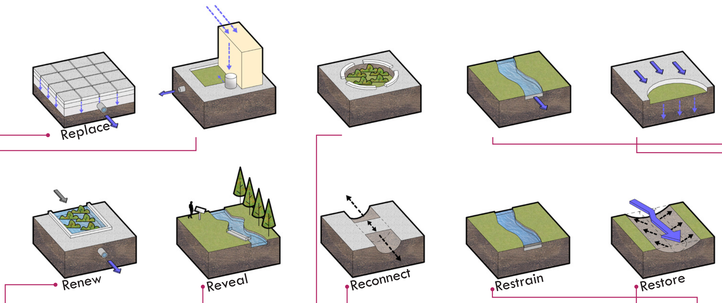
**1466** lbs total suspended solids

**6%** peak flow reduction in Strawberry Creek

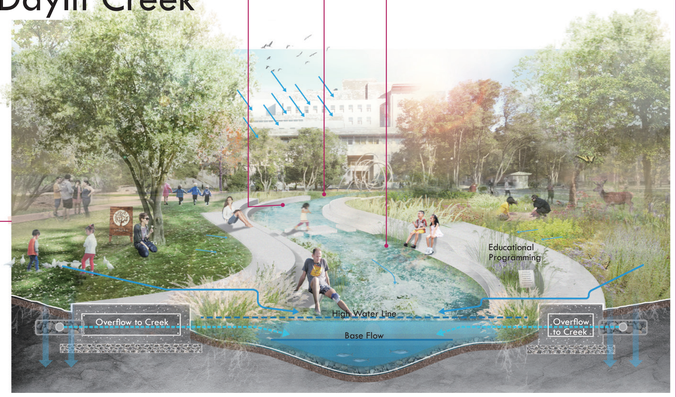
**22.8%** reduction in peak flow on campus

## Master Plan:

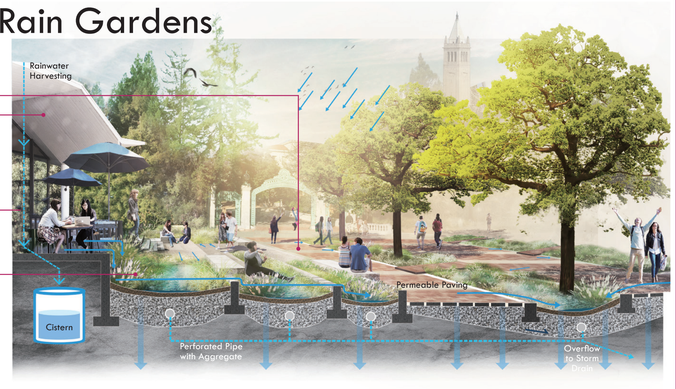

## Tactical Toolkit:




## Daylit Creek




## Rain Gardens




## Expanded Floodplain