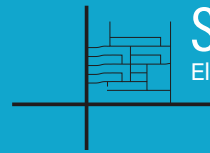


THE PROJECT



SUNBLOCK
Elementary school | Myers Ganuong

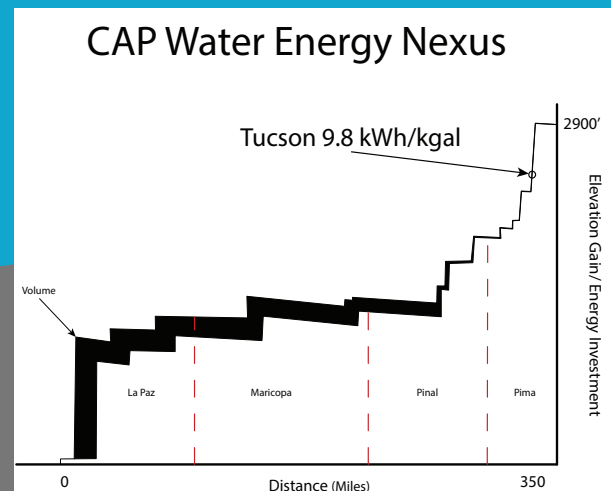


PROJECT SUMMARY

With solar radiation available year-round in Tucson the widespread adoption of solar panels is placing stress on the grid. The Elementary SunBlock looks to address this issue by storing the abundance of renewable solar energy in the form of thermal energy, offering residents an economic alternative for their energy demand. Exacerbating the energy issue is our unsustainable means of supplying potable water to our residents. The Central Arizona Project accounts for the largest user of our state's electricity. It uses 2.8 billion kilowatt hours annually to supply 500 billion gallons of water to 80% of the state's population. The elementary will look to the summer monsoon season to capture and utilize the heavy rains that previously flowed away from the site. The elementary's common typology across Tucson schools ensures that the combined water and energy efficiency strategies employed there can be implemented broadly across the 114 other elementary schools in Tucson to increase the greater community's resilience through energy independence. This in turn will reduce the state's reliance on carbon-based fossil fuels, greatly reducing our emission of greenhouse gases.



Central Arizona Project map



CAP water energy nexus graphic depicting flow reduction vs distance traveled and elevation gained



Render of New building