

THE NEXT GENERATION OF SCHOOLYARDS

LESSONS FROM THE WATERSHED DISCOVERY CAMPUS

GREENSPACES SUPPORT HEALTHIER CHILDREN

Connection to nature improves wellbeing by encouraging healthy social interactions—including opportunities for outdoor recreation—and support children’s physical, mental, social and emotional health. Investments in *accessible, high-quality green spaces* are also vital for the health of future generations by:

- mitigating extreme heat
- recharging groundwater
- capturing runoff
- filtering contaminants
- blocking air pollution and noise
- sequestering carbon



adapted from Children Nature Network

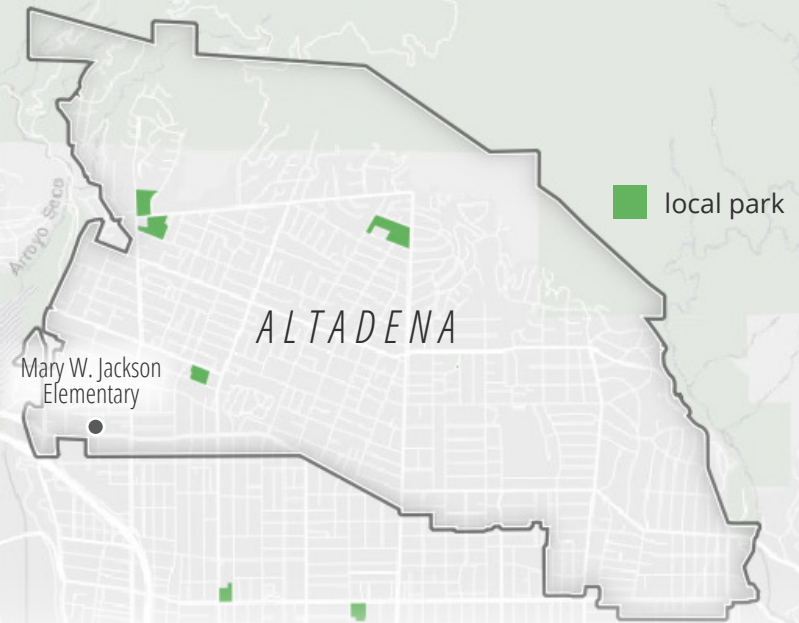


GREEN SCHOOLYARDS PROVIDE EQUITABLE ACCESS TO ENDURING, NATURE-RICH, AND SAFE LEARNING ENVIRONMENTS

Many urban children have limited access to parks. In Altadena:

ONLY 32%
of residents live within half a mile of a park

7 TIMES LESS
recreational space than in L.A. County overall



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Providing more green spaces to children—particularly at school—reduces outdoors temperatures and reduces energy needs supporting learning, physical activity, and overall health. Greening schoolyards in the Pasadena Unified School District (PUSD) and opening them to the public after school hours can be a cost-effective strategy for reducing urban heat while also addressing inequities in park access.

In 2021, PUSD's Mary W. Jackson STEAM Multilingual Magnet Elementary partnered with Amigos de los Rios to design, develop, complete, and operate the Watershed Discovery Campus, a project that adds natural spaces, restores the school's playground, and adds retrofits for stormwater capture.

As of 2023, children in Altadena experience
AT LEAST A WEEK OF EXCESS HEAT DAYS

By 2050, Altadena residents may experience as much as

THREE WEEKS OF EXTREME HEAT DAYS EVERY YEAR



Amigos de los Rios provides equitable access to nature in L.A. County's low-income communities, using a whole-systems approach to watershed and social restoration. One of its larger goals is the "Emerald Necklace," a natural infrastructure network of green spaces, green schools, parks, and trails throughout under-served communities in the Los Angeles Basin.



GREEN SCHOOLYARD BENEFITS

Comparing the benefits and costs of greening the Jackson Elementary playground over a 20 year period reveals that the investment is cost-effective.

Every dollar invested in greening, operating, and maintaining the schoolyard yields at least \$3.60 in community, economic, and environmental benefits.



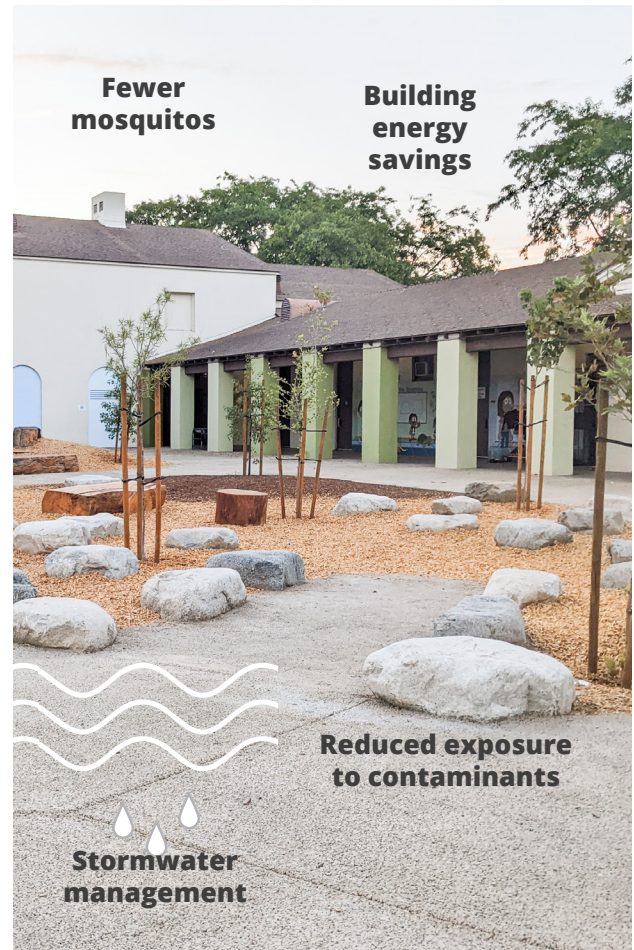
For an annual cost of \$95,000 (including operations and maintenance and in-kind volunteer hours), the project provides **\$368,000 in learning, health and wellness, community, and environmental benefits each year.**



The school administration, school district, and the broader community benefit from **improvements to neighborhood aesthetics and environmental quality, cost savings, and more regional economic activity.**



A scenario analysis shows that opening the playground to a broader public is economically sound. **Opening the playground to an additional 45 people per month yields more physical activity health benefits than the operations and maintenance costs.**



INVESTING IN GREEN SCHOOLS IS A COMPLEMENTARY STRATEGY FOR A RESILIENT LOS ANGELES

As the work of Amigos de los Rios shows, with the appropriate know-how, green schoolyards can be practical to implement and maintain for L.A. County schools. Investing in greening schoolyards is cost-effective and provides significant benefits to students, teachers, the community, and the environment. Beautifying the school provides unique opportunities for students to interact with nature in new ways and learn in a safe and healthy environment, which may also encourage greater enrollment.

“Every school is a microcosm of the bigger watershed. It’s very empowering to have students transforming their own campuses and learning in real time what it is to capture and protect water quality.”

Claire Robinson, managing director of Amigos de los Rios¹



MAIN COURTYARD



ALL PHOTOS COURTESY OF AMIGOS DE LOS RIOS

¹Smith, H. Feb 21, 2023. “L.A. promised to stop wasting so much stormwater. But progress has been painfully slow.” Los Angeles Times. www.latimes.com/california/story/2023-02-21/progress-on-l-a-stormwater-capture-program-is-slowing

