

# Marin Independent Journal

Marin Voice

## Young San Rafael students tackle sea-level problem

By Shirl Buss

The Union of Concerned Scientists recently issued a report indicating that by the year 2045 Marin will be severely impacted by climate-driven sea level rise. A three-foot rise over the next 100 years will push San Francisco Bay into the San Rafael Canal community and low-lying business and industrial areas downtown.

These threats put thousands of people — many of whom are low-income — at risk of losing their homes, neighborhoods, and more.

Fortunately, fourth-grade students at Laurel Dell Elementary School have started to tackle these enormous challenges. For the past school year, 46 children worked side by side with architects, planners and artists from UC Berkeley's Y-Plan, Youth in Arts and Bionic program. As part of the Bay Area: Resilient by Design challenge, they helped generate strategies for San Rafael to respond to rising seas.

Our team had trepidations about introducing these big is-

ssues to young students. This was especially true in light of the fact that — when polled — many adults in the community said sea level rise is too overwhelming, too complicated, or too far in the future to be a priority.

We feared that the topic might be too abstract and complex for children to engage with in a meaningful way. We speculated that the impacts are so long-term it might be difficult for them to sustain interest. Lastly, we anticipated that the projections about sea level rise are too depressing, and that some children might even become scared.

To our surprise and delight, the students' response was in sharp contrast to the adults. When asked to engage with the RBD challenge, the fourth-graders enlisted with vigor. They wanted to be engaged in authentic issues and were not daunted by real, thorny problems.

The children loved studying inspiring best practices from around the world. Images of waterways and floating buildings in Amsterdam showed them how people live with water.

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Learning about the creative, protective strategies being implemented in New York City in the wake of Hurricane Sandy helped them think realistically. The students translated their research into models and posters featuring their own vibrant strategies to protect the Canal district and central San Rafael from flooding, while increasing accessibility, livability, and fun.

Their solutions included lush living shorelines by the bay and delightful protective boardwalks along San Rafael Creek.

The students presented their work and engaged with stakeholders at various community forums, including the 2018 Flood Fair at Pickleweed

Park. At one meeting, 10-year-old Alex Macías, proudly showcased his vision for a "floodable park" near Spinnaker Point. A local activist asked him, "What will happen when our toilets won't flush?" At first Alex was confused. He couldn't see the connection between sea level rise and toilets. When the activist explained how percolating ground water impacts the sewers and storm drains, he scratched his head and went back to his seat.

Ten minutes later Alex was back, eagerly telling the woman, "I think I have the solution about how to keep our toilets working." He then described his idea for a system to remediate flood-

ing. Even though he may have needed more technical information, Alex clearly saw himself as an innovator, problem solver, and leader— ready to meet every challenge thrown his way.

What does this mean for Marin in the near and far future? Like Alex, most children want to learn, act and contribute.

They bring a fresh and optimistic perspective to the table. They also want to use real tools to analyze data, create models, and generate imaginative, insightful and humane solutions. Engaging with real challenges activates children's sense of purpose and imbues them with a sense of pride and an investment in our community. Children are potentially our most active and enthusiastic community members.

Let's support our young leaders in any way we can to help meet our collective future with optimism and verve!

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