

## A Glittering, Living Canvas

By MARY TOMPKINS LEWIS



Leo Villareal's 'The Bay Lights' deploys more than 25,000 LEDs. Getty Images

### San Francisco

When the San Francisco-Oakland Bay Bridge opened in November 1936, it was the world's largest, and hailed as a milestone in modern engineering. Conceived as early as the California Gold Rush, the bridge, when completed, brought to a close decades of efforts to link the beautiful city by the bay with the northern industrial waterfront. Charles H. Purcell (1883-1951), a civil engineer, designed and oversaw its construction, which employed more than 2,000 Depression-era workers to build its two crossings and the massive tunnel that was blasted through the rocky island of Yerba Buena to connect them. The Bay Bridge's elegant, illuminated spans and muscular piers were greeted with heraldic tributes, fireworks and comparisons to the graceful flying Clipper Ships that were soon photographed in their midst. Six months later, San Francisco's iconic Golden Gate Bridge was completed, and its single, arcing suspension and picturesque site at the mouth of the bay made it a celebrated symbol of the paradise California had come to represent.

Now, however, and for at least the next two years—thanks to the artist Leo Villareal's exquisite light sculpture that is temporarily installed on its western span—the best view to be had in San Francisco is again of the Bay Bridge. No longer a stepchild of its showier sibling, it is a sight not to be missed. "The Bay Lights" is the largest public light sculpture in the world, and deploys more than 25,000 white, energy-efficient light-emitting diodes that stretch along nearly five miles of its vertical suspension cables. Installation began in September 2012, with riggers working at night to complete the monumental work in time for its opening last month.

The luminous nocturnal sculpture is visible only on its outer, northern face, so that drivers are not distracted, and comes alive at dusk to produce constantly changing configurations until 2 a.m. It is expected to provide a boon to the city's economy and, if the bars buzzing along the Embarcadero are any indication, it will surely succeed. No drain on local resources, the privately funded project cost \$8 million, \$6 million of which has already been raised, and its energy expenses, for which only \$11,000 a year has been allocated, are offset by solar credits to minimize its environmental impact.

The project's greatest feat, however, is its ingenious transformation of the static, enduring bridge, at one time its own symbol of invention and change, into a dynamic, living canvas that perfectly captures the conflation of art, nature and technology that now shapes the Bay Area's cultural landscape.

Mr. Villareal, whose work is represented in numerous museum collections, is known both for light sculptures using LEDs and computer-driven imagery and for architectural, site-specific works. [His background as a researcher](#) at Microsoft co-founder [Paul Allen's](#) think tank in the early 1990s positioned him well to tackle the technical demands of "The Bay Lights," his largest and most ambitious work to date. The artist used complex algorithms to write the underlying software that synthesizes the endlessly varied patterns created by such ambient elements as the water, wind, onshore and bay traffic, weather and wildlife. The results, as projected here on a colossal scale (1.8 miles in width), are nothing less than hypnotic.

On a recent San Francisco evening, the western span of the bridge was shrouded in the city's signature, rain-swept fog and, as darkness gathered, promised little in the way of viewing. But at dusk, as if on cue, the scrimlike mist lifted to reveal the bridge, illuminated by Mr. Villareal's scintillating, rhythmic designs and silhouetted against a firmament of midnight blue. It is no surprise to learn that the artist drew inspiration from what he has called "this monumental structure of the American sublime." The abstract patterns that flashed across its face evoked, in dazzling drops of light, the rain that had just stopped, and then, in fleeting synthetic shadows that streaked from left to right, the passage of a school of flying fish or a flock of birds headed south. Later, darkened shapes gently floating over the span altered the piece's restless pace to suggest whales lumbering across the bay, or perhaps windblown clouds slowly sweeping the sky, while, in the spectacular segment to follow, waves buffeted by the wind seemed to unfold across its surface.

As engaging and open-ended as it is brilliantly ephemeral, Mr. Villareal's "The Bay Lights" offers a breathtaking encounter with the fugitive forces of its surroundings as captured by state-of-the-art technology. It is public art at its best—temporal, contemporary and indescribably beautiful.

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