ENVISION LĀʻIE

Press Kit

Drainage

Since the late 1800s, there have been several major floods in Lāʻie. Most recently, a December 2008 storm that inundated much of Oʻahu overwhelmed the town's drainage system, which led to extensive flooding.

Part of Lāʻie's challenge is its unique topography, which has been described as "dish-like." The town is bordered by mountains on one side and a slightly elevated Kamehameha Highway on the other. During heavy rains, the highway and the slope that it sits on form a barrier, which sends floodwaters back toward Lāʻie. As a result, most of Lāʻie is designated a flood zone and homeowners are required to carry flood insurance.

"Drainage solutions in Laʻie begin with increasing outfall capacity at two key points: Wailele stream and Lāʻie loa bridge near Foodland," said Kevin Schlag, Lāʻie Community Association Drainage Committee Chair.

Wailele Stream runs between the southern boundary of Lāʻie and BYU–Hawaii's campus and then flows into the ocean near Pounder's Beach Park. During massive storms, the stream backs up and overflows into the community because the stream's conduit under Kamehameha Highway isn't large enough to accommodate peak water flows. A cost sharing arrangement was recently approved between the federal and city government, and land-manager, Hawaii Reserves, Inc., to complete an Army Corps of Engineers flood control study for Wailele Stream.

In 2010, after extensive discussion with the Laʻie Community Association and Hawaii Reserves, Inc., the State Department of Transportation agreed to widen the Lāʻieloa Bridge by approximately 25 feet, more than doubling its outflow capacity. Work on the bridge-widening project is in design and a schedule will likely be announced later this year.

"Since 2009, our drainage problems have been an essential part of Envision Lāʻie's planning process," said Eric Beaver, president of Hawaii Reserves, Inc. A wider Lāʻieloa Bridge and a more efficient drainage system will help provide the southern areas of Lāʻie with essential protection from flooding."

Efforts to alleviate Lāʻie's drainage problems go back more than 50 years. A drainage system, completed in 1961, connected more than 50 inlets in the northern part of Lāʻie to several main drains running into the ocean. More than 20 years later, the Army Corps of Engineers began a study, and eventually construction, on a drainage system designed to alleviate the overflow and flooding from the Kahawainui and Lāʻiewai streams. In addition to a concrete channel, an excavated earth channel, floodwalls and levees, the Corps also raised two roadways. Completed in 1990, the $5.8 million system protects the northern parts of Lāʻie from flooding. Similar benefits are anticipated for the southern part of Lāʻie if a Corps project is built for Wailele Stream.