

# Upper Llagas Creek Flood Protection Project

Priority E: Provide flood protection to homes, businesses, schools and highways.

# Lake Silveira Wetlands Creation

Valley Water is committed to protecting our environment and restoring habitat around creeks, rivers and the bay. As part of that commitment, the Upper Llagas Flood Protection Project will improve habitat for fish and wildlife while also restoring portions of the creek. As required by federal and state laws, when unavoidable impacts occur in a stream or wetland, compensatory mitigation is required to offset those activities. The compensatory mitigation for the project includes creation of approximately 5 acres of islands and freshwater wetlands at Lake Silveira and restoration of 2,000 linear feet of Llagas Creek back to the original channel for federally protected steelhead trout. The wetlands will be constructed with islands for wildlife refuge and will include basking sites for the native turtles that inhabit the lake. Invasive vegetation that have degraded the native riparian vegetation, such as giant reed, yellow flag iris, and Himalayan blackberry, will be removed and replaced with native vegetation.

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Wetlands and islands will be created at Lake Silveira, as well as restore an abandoned portion of the creek channel to the north of the lake. Q: construction access point

### **Project-wide environmental enhancements**

- A low-flow creek channel with floodplain terraces in Reaches 4, 5, 6, and 7a for unimpeded fish passage
- Instream features for native fish woody debris; logs, wing deflectors, root wads and boulder clusters for refuge
- Improved tree habitat for birds and bats
- Installation of bat boxes
- Upland log piles for wildlife nesting and refuge at 143 locations
- Removal of legacy trash and hardscape debris
- Installation of 105 acres of native riparian plantings
- Invasive plant removal (giant reed, yellow flag iris, Himalayan Blackberry and Arundo donax) and replacement with native vegetation
- Improved water quality by creating a stable creek channel requiring less future maintenance and sediment removal
- Construction of drainage swales to capture storm water before entering the creek for improved water quality



Himalayan Blackberry

Years project area sustained flood damage:



# **Historic flooding**

This project will provide 100-year level of flood protection to urban areas of Morgan Hill in Reaches 7 and 8, 10-year protection for Reach 14, and no induced flooding due to creek modifications on Reaches 4, 5, and 6 when completed. For a 100-year level of flood protection, this means Llagas Creek should be able to withstand flooding in the event of a large and rare storm event which has a onein-100 (1 percent) chance of occurring in any given year.



The Llagas Creek has a recent history of major flooding events, with significant impacts to homes, businesses and infrastructure. Seen here is the fallout from flooding in downtown Morgan Hill in October 2009.

#### **CONTACT US**

For more information, contact Neighborhood Liaison, Jose Villarreal at (408) 630-2879 or by email at *jvillarreal@valleywater.org.* Or use our Access Valley Water customer request and information system at *https://delivr.com/2yukx* to find out the latest information on Valley Water projects or to submit questions, complaints or compliments directly to a Valley Water staff person.



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