

Palo Alto Flood Basin Tide Gate Structure Replacement Project Frequently Asked Questions (FAQ)

1. What is the Palo Alto Flood Basin (PAFB) Tide Gate Structure?

The PAFB Tide Gate Structure controls the downstream water levels for Matadero, Adobe, and Barron Creeks, which all drain to the PAFB. The tide gate structure controls the water levels by draining high water from the PAFB to the San Francisco Bay at low tide. The tide gate structure also keeps high tide waters out of the PAFB and prevents tidal flooding of homes, businesses, and schools in the vicinity of Matadero, Adobe and Barron Creeks, and to U.S. Highway 101. In addition to flood protection, the tide gate structure reduces periods when the land inside the PAFB is inundated with water, which creates nesting and wintering habitat for migratory waterfowl and shorebirds.

2. Where is the PAFB Tide Gate Structure located?

The PAFB Tide Gate Structure is located where the PAFB connects to the San Francisco Bay and is half a mile northeast of the Byxbee Park parking lot on the Adobe Creek Loop Trail.

3. Why is the Palo Alto Flood Basin (PAFB) Tide Gate Structure being replaced? Can't the existing structure be repaired?

The existing Palo Alto Flood Basin Tide Gate Structure was built in 1957 and has reached the end of its planned service life of 50 years. Due to its age and location in a corrosive marine environment, the tide gate structure now shows advanced deterioration, including spalled concrete, exposed reinforcement steel, and significant water seepage through cracked concrete and leaky tide gate seals.

In 2017, Valley Water attempted concrete repairs to extend the service life of the structure. But as these repairs were attempted, we discovered additional damage to the concrete and determined that repairs were not feasible. The existing structure is also vulnerable to projected future sea-level rise, which reduces the tide gate structure's ability to drain the flood basin. Because of these reasons, the tide gate structure needs to be replaced.

4. Does this project account for rising sea-levels?

The replacement structure will practicably address rising sea-levels using gravity drainage methods. The existing structure is vulnerable to projected future sea-level rise, which reduces the tide gate structure's ability to drain the flood basin. This, in addition to the structure's current condition, contributes to the list of reasons for the structure's replacement.

5. How is this project being funded? How much will this project cost?

The project is funded by Valley Water's Watershed and Stream Stewardship Fund and is expected to cost approximately \$39 million.

6. What is being done to protect sensitive biological resources on the project?

The project will result in temporary and permanent impacts to a small area of tidal salt marsh and open waters of the flood basin and San Francisco Bay. Tidal salt marsh and Bay waters support a number of

special-status species, such as the California Ridgway's rail (a type of bird), the salt marsh harvest mouse, longfin smelt, white sturgeon, and steelhead trout, among others. Many species of migratory birds are also known to have a presence in and near the project's anticipated work area.

To prevent impacts to nesting California Ridgway's rail and other birds, work is scheduled to occur from September 1 through January 31, outside the rail nesting period. In addition to this seasonal work restriction, a suite of best management practices and mitigation measures will be implemented to further avoid and minimize impacts on biological resources. Specifically, these measures include:

- Pre-construction surveys by a qualified biologist for special-status species;
- Construction monitoring by a qualified biologist, when appropriate;
- Environmental training for all construction workers prior to working on the project site;
- Installation of environmentally sensitive area fencing to keep wildlife out of the project area and keep work activities inside the project area;
- The exclusion and relocation of fish from the project site during the dewatering process;
- Compensation for the relatively small wetland impacts through the direct creation, restoration, and or enhancement of wetland habitats on- or off-site or indirectly through the purchase of credits from an appropriate mitigation bank.

Construction methods have also been selected with these sensitive biological resources in mind to reduce the potential for disturbance as a result of project activities.

7. When will construction occur? How long will construction take and why?

Onsite construction is anticipated to start September 2023. Construction is anticipated to take four years, with active construction only occurring between September 1 through January 31.

As previously mentioned, this construction window is an important precautionary measure taken to protect nearby sensitive biological resources. Due to flood protection provided by the PAFB Tide Gate Structure, the existing structure must remain in service until the replacement structure is constructed. The anticipated four-year construction duration will ensure continual critical flood protection is maintained while minimizing environmental impacts during construction.

8. How will this project affect the trail? Is there a way to keep the entire loop trail open when not in construction?

Public safety is our top priority. Since a portion of the existing Adobe Creek Loop Trail and levee will be removed during the first phase of construction, it will require a portion of the trail to be closed for everyone's safety until construction is complete.

Maintaining access to this portion of the trail and surrounding open space long term is a priority for Valley Water, which is why the structure has to be replaced. While construction may temporarily limit access to portions of the trail for the duration of the project, the Palo Alto Flood Basin Tide Gate Structure will be at risk of failing if nothing is done to address the existing aging structure. If the structure fails, access to this portion of the trail will be lost indefinitely.

Please refer to the "Proposed Trail Closure and Detour" map shown on the project website:
<https://www.valleywater.org/pafbtidegates>.