

## Declaration of Emergency: Stern Grove

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## Emergency

- August 23, 2021 SFPUC crews working on leaking air valve on 54" transmission water pipeline at 22<sup>nd</sup> & Sloat
  - While tightening down a bolt, the air valve failed, sending pressurized water into the air and flooding Stern Grove
  - Approximately 700,000 gallons of water released
- Damages:
  - Stern Grove was heavily eroded and gullied making slopes unstable
  - Concert Meadow filled with debris and water
  - Water and soil intrusion into three backstage buildings
  - Creeks and culverts filled with debris
  - Over 60 trees damaged and removed
  - Flooding of tennis court and undermining of pathway and slope adjacent to tennis court.





- SFPUC declares emergency in accordance with Chapter 6, Article IV, Section 6.60(d).
- Working with two vendors, Hernandez Engineering and Anvil Builders, to complete the repair work.
- Utilized existing contract with Hernandez Engineering to secure the site, remove debris, and begin to restore backstage buildings.
- Anvil Builders to perform the remainder of the work:
  - Remove hazardous trees,
  - Completing engineered slope repair,
  - Tennis court restoration,
  - Replanting of impacted slope with tree seedlings
  - Hydroseeding of impacted slope and meadow, and
  - Refurbishing any damaged structures



- Estimated Total Cost: Not to exceed \$4 million
  - Soil and Tree Removal: \$1 million
  - Slope Stabilization and Tree Replanting: \$2.5 million
  - Concert Meadow Restoration: \$500,000
- Cost estimates based on experience with projects of similar size and scope.
- Estimated Completion: Spring 2022
  - Will be ready for Summer 2022 Concert Series



## **Current Status**

- Work completed to date is as follows:
  - Installation of additional temporary fencing to secure the site
  - Removal of approximately 1,500 cubic yards of soil
  - Interior building remediation including soil removal, dehumidification, removal of damaged building materials, disinfection, and testing under the supervision of a certified industrial hygienist
  - Removal, chipping, and hauling of 63 large Eucalyptus trees
  - Cleaning of storm drain culverts and installation of temporary slope stabilization materials
  - Topographic survey and geotechnical soil boring for slope design



- Remaining work is as follows:
  - Completion of slope stabilization design
  - Clearing and grubbing of impacted slope
  - Slope grading, hauling, placement, & compaction of engineered soil
  - Installation of slope keyway, toe, and intermediate terraces to prevent future soil erosion
  - Removal and reinstallation of historical rock walls
  - Restoration of tennis courts
  - Hydroseeding of meadow and impacted soil
  - Installation of temporary irrigation facilities
  - Growing and installation of tree seedlings on impacted soil
  - Exterior and Interior building restoration



- Support the approval of an emergency declaration of the San Francisco Public Utilities Commission pursuant to Administrative Code, Section 6.60.
- Completion of work by Spring 2022