Corte Madera Creek Flood Risk Management Project

by Sandy Guldman (2020)

This project replaces the long-lived, but ill-fated US Army Corps of Engineers (USACE) project. Now that the USACE's active involvement has ended, a new project description is being developed in consultation with stakeholders. This project has numerous components in different stages of planning.

At the request of regulators who were reviewing projects in different part of the concrete channel, Friends worked with the Flood Control District (FCD) to provide a clear description of the various segments of the project. This narrative and the accompanying map of the concrete channel and environs (with corresponding numbering) are the result. The sewer mentioned in several paragraphs is the large Ross Valley Sanitary District gravity flow line installed near the bottom of the left wall (looking downstream) when the concrete channel was built.

Work in areas **1** through **4** is being funded by the Ross Valley Watershed Program and a grant from the Department of Water Resources.

1 Lagunitas Road Bridge This bridge is the likely upstream limit of work done as part of the Corte Madera Creek Flood Risk Reduction Project.

2 Fish Ladder No matter which alternative is chosen (except for the No-Project Alternative), the fish ladder—actually a barrier to fish passage—will be removed as part of the Corte Madera Creek Flood Risk Reduction Project. It is at the upstream end of the concrete channel.

3 Allen Park This reach extends from the Lagunitas Road Bridge to the Kentfield Rehabilitation Hospital Bridge. Ideally, one or both concrete walls would be removed to create an expanded creek section with riparian terracing at Allen Park, with improvements upstream of the fish ladder to improve creek stability and accommodate more flow. Depending on the restoration design at Allen Park, an existing sewer pipeline along the creek's left bank may be rerouted.

4 Granton Park This reach extends from the Hospital Bridge to the Science-Math-Nursing (SMN) Bridge, near the upstream boundary of COM property. It is not feasible to widen the right-of-way in this reach because it is lined with homes and the hospital buildings. The key issues here are passage for steelhead and flood protection of the Granton Park neighborhood.

Passage for Steelhead Downstream of this reach, tidal action makes it possible for spawning steelhead to pass through the concrete channel even though there are no places for them to rest. By contrast, this reach is a substantial barrier to spawning steelhead, and regulatory agencies expect this barrier to be treated as a condition for approving construction of the upstream Allen Park project. Conceptual designs for this reach are preliminary but will likely include constructing larger resting pools to allow spawning steelhead to travel through this reach. Friends of Corte Madera Creek Watershed submitted an application to the Coastal Conservancy for Prop. 1 2019 funds that would partially fund the design for fish passage restoration in this component. If we receive the funding, it will be awarded at the February meeting of the Coastal Conservancy Board.

Flood Protection for Granton Park Construction of a new floodwall at the left bank along this reach is proposed. This would minimize creek overtopping into the adjacent low-lying Granton Park neighborhood. The proposal also includes construction of a new pump station in this reach to route stormwater out of the interior drainage system in the neighborhood.

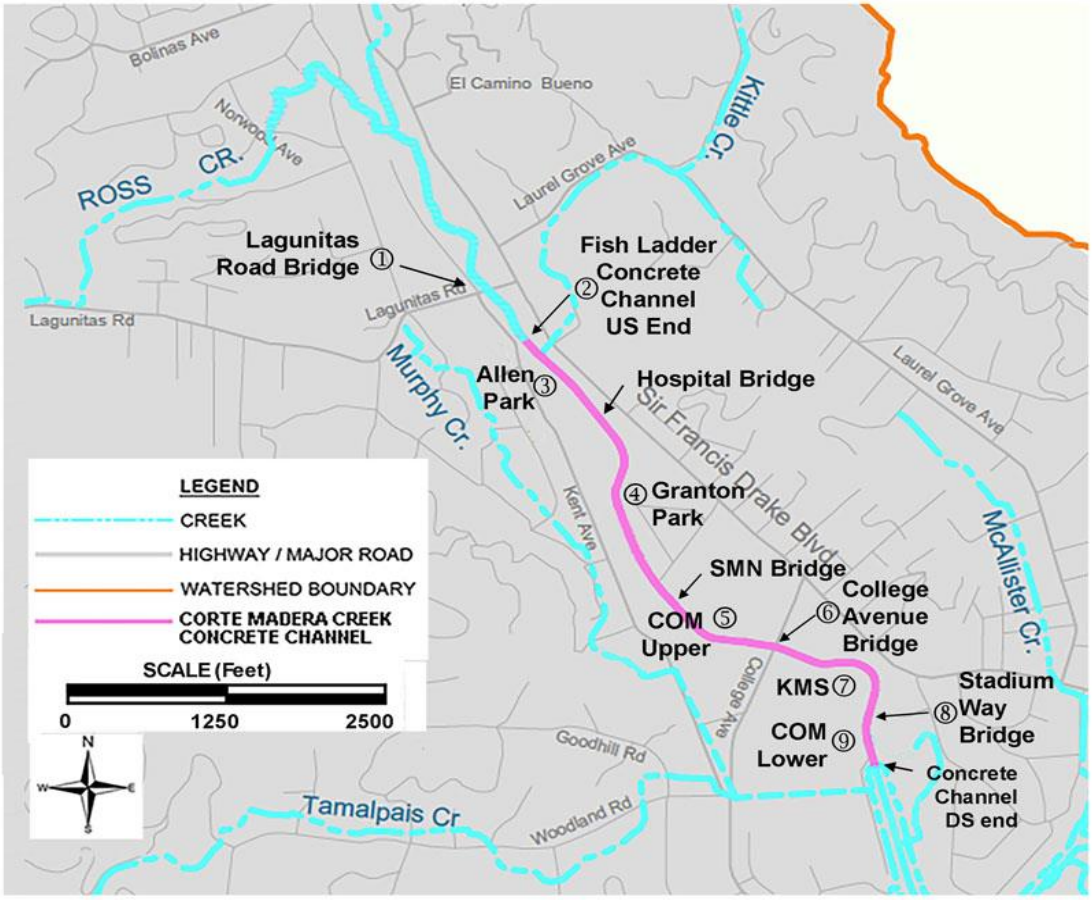
Work in areas **5** through **8** will be included in the project environmental impact report to be prepared for the Corte Madera Creek Flood Risk Reduction Project, but at the present time there is no funding for detailed design or construction. Friends plans to seek funding in the near future.

5 COM Upper This reach extends from the SMN Bridge down to the College Avenue Bridge. The conceptual plan calls for removal of the right wall in this reach, with the left bank left in place to protect the sewer and infrastructure installed by COM.

6 College Avenue Bridge This bridge constricts flow, but is in good condition and provides adequate capacity for traffic. The proposed solution is to build two high-flow, bypass culverts, one on each side of the existing bridge, within the FCD right-of-way.

7 Kent Middle School (KMS) The Flood Control District has an easement for the concrete channel and land on either side of the channel. Removing the right bank of the channel at KMS would require extending

the project beyond the FCD easement onto land owned by the Kentfield School District (KSD), either to lower the entire playing field to create a floodplain or to widen the channel by laying back the bank. If KSD will not allow a wider easement, then various alternatives to accommodate more flow within the FCD right-of-way will be developed. Plans call for the multi-use path to be moved to the left bank of the creek, with the left wall remaining to protect the sewer and provide space for the multiuse path. This is the least well-defined component of concrete channel modifications.



Project areas (see text for descriptions of conceptual plans):

① Lagunitas Road Bridge
② Fish Ladder
③ Allen Park
④ Granton Park
⑤ COM Upper
⑥ College Avenue Bridge
⑦ Kent Middle School (KMS)
⑧ Stadium Way Bridge
⑨ COM Lower

Source: Base map modified from Ross Valley Watershed Program map

8 Stadium Way Bridge The bridge will be replaced with a new, longer bridge. The design will depend on how the right bank at KMS is treated. The bridge is part of Safe Routes to School used by students going to KMS. At the present time, the multi-use path crosses the creek on this bridge.
9 COM Lower This reach starts at the downstream side of the Stadium Way Bridge and extends down to the end of the concrete channel. Conceptual plans call for removing the concrete on the right bank and bottom of the channel and preserving the protective covering of the sewer along the left bank. The multi-use path would be retained, but rerouted. The FCD owns the right-of-way; the wider creek would expand onto College of Marin land along the right bank. Developing the 65% design for this component is being funded by a grant to Friends from Marin Community Foundation, managed by the Coastal Conservancy. Design work is starting in early January 2020.