Clearing the Bottleneck to Flood Protection

by Sam Wilson

The U.S. Army Corps of Engineers moved into the Corte Madera Creek watershed in the 1960s with the mission of protecting the Ross Valley from flooding. The Corps installed the concrete channel along which the creek now flows from behind the Ross post office to the eastern edge of the College of Marin campus and its playing fields. The original plan was to extend the concrete lining of the channel upstream to Fairfax, but public opposition put a stop to it.

Repeated flooding has proven the current channel to be inadequate; both the concrete-lined channel and the unlined channel immediately upstream of it, lack the capacity to contain severe stormwater flows. In fact, the inadequate capacity of the channel through Ross and Kentfield stands in the way of flood-protection measures that would increase the creek channel's capacity in areas further upstream. If, for example, the main cause of flooding in downtown San Anselmo—the creek-straddling building where L'Appart Resto restaurant is located—were to be removed, flood events in Ross and Kentfield would be worse.

A series of alternatives for increasing capacity of the channel is currently in its feasibility phase. The alternatives could include a combination of berms and floodwalls, adapting the walkway alongside the concrete channel to contain more flow, and deepening and/or widening the channel upstream of the concrete channel. Improving fish passage is an important part of the project.

Funding for this phase is split 50/50 by the Corps and the Ross Valley Flood Protection and Watershed Program.



The fish ladder located at the upstream end of the concrete channel, broken and non-functional, also exacerbates water-level rise during flood events, when the flow breaches the channel along Sylvan Lane. Flood waters inundate Ross Common, and flow through buildings, streets, and gardens on their way to the Bay. Photo by Charles Kennard

When design and environmental review are complete, Congress must authorize and fund the project for it to proceed. Construction would begin along the stretch of the creek termed Unit 2, which extends upstream from the Bon Air Road bridge and includes the concrete-lined channel up to College Avenue. Unit 3 would follow, extending to the upstream end of the concrete channel, and then Unit 4, which ends at the Sir Francis Drake Blvd bridge in Ross.

Costs of the construction phase will be shared 65/35 with the Corps paying the larger portion. The project will require the cooperation of both institutional and private landowners, since a Marin County policy for the project specifies that owners not be forced to comply.

Here is the total suite of project goals to manage flood risk in a manner that is fully implementable and supportable by the local community:

- reducing the likelihood and consequences of flooding on human life & safety, and reducing the risk of flood damages;
- improving fish passage;
- minimizing future erosion of unprotected creek banks & improving bank stability along the earthen channel in Ross;
- preserving or restoring the natural creekbed and associated riparian habitat;
- preserving or improving, to extent practicable, the recreational experience & aesthetic quality of Corte Madera Creek; and,
- minimizing project's long-term maintenance requirements.

For further information, go to this website, from which information in this article is taken:
www.Marinwatersheds.org/documents_and_reports/USACECorteMaderaCreekProject.
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