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**Migratory fish stream report for The Livermore, Pleasanton and Dublin-Tri-Valley
Barriers to fish migration**

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Ever wonder why there are no steelhead or salmon in the creeks and streams passing through the Tri-Valley? One answer to this question could be that these streams often go dry, especially in the summer. Another possible answer is that there are six existing physical blockages to anadromous fish spawning. The fish are unable to get back and forth from the ocean even if there are adequate flows. The first blockage on the Arroyo Mocho is a three-foot high concrete structure at the now abandoned Southern Pacific railroad crossing (formerly Central Pacific) (at about mile-post 47) thought to be now owned by SP Land Co. This blockage is a stone's throw from where Stanley Boulevard crosses Murrieta Boulevard in Livermore (shown in the map and photo #1). Another blockage near by where the Mocho crosses Isabel Ave is shown in photo #1a.

The six major creeks and arroyos in the Tri-Valley area have a complex flow pattern. The Arroyo Mocho drains the Mines Road area and passes through Robertson's Park. It then goes behind Granada High School and across Stanley Boulevard. The Arroyo Seco drains the area surrounding the Tesla Road area, while Altamont Creek drains the watershed along the Old Altamont Pass Road area. Both of these streams feed the Arroyo Las Positas, which passes by the Livermore Airport. The Arroyo Las Positas then feeds the Arroyo Mocho and passes through Pleasanton. The resulting stream falls over the second drop structure shown in photo #2. Finally, the water enters the Arroyo De La Laguna.

The Arroyo Del Valle is fed by a large watershed in the southern half of the Tri-Valley. In addition to the Del Valle dam, this arroyo has one small drop near the end of Corte Monterey and close to Bernal Ave. and 680 in Pleasanton. This drop is shown in photo #3. Further down stream there is a drop structure on the Arroyo De La Laguna at the Castlewood Golf course shown in photo #4. This drop structure blocks passage to the entire tri-valley stream system during normal flow. Photo #5 shows the bridge at Division Street in Pleasanton, which is the extension of Hopyard Road where it crosses the Arroyo Del Valle. This bridge was built in 1951 and would appear to stop upstream migration in all but high flows due to the large drop of a few feet and flat apron. Photo #6

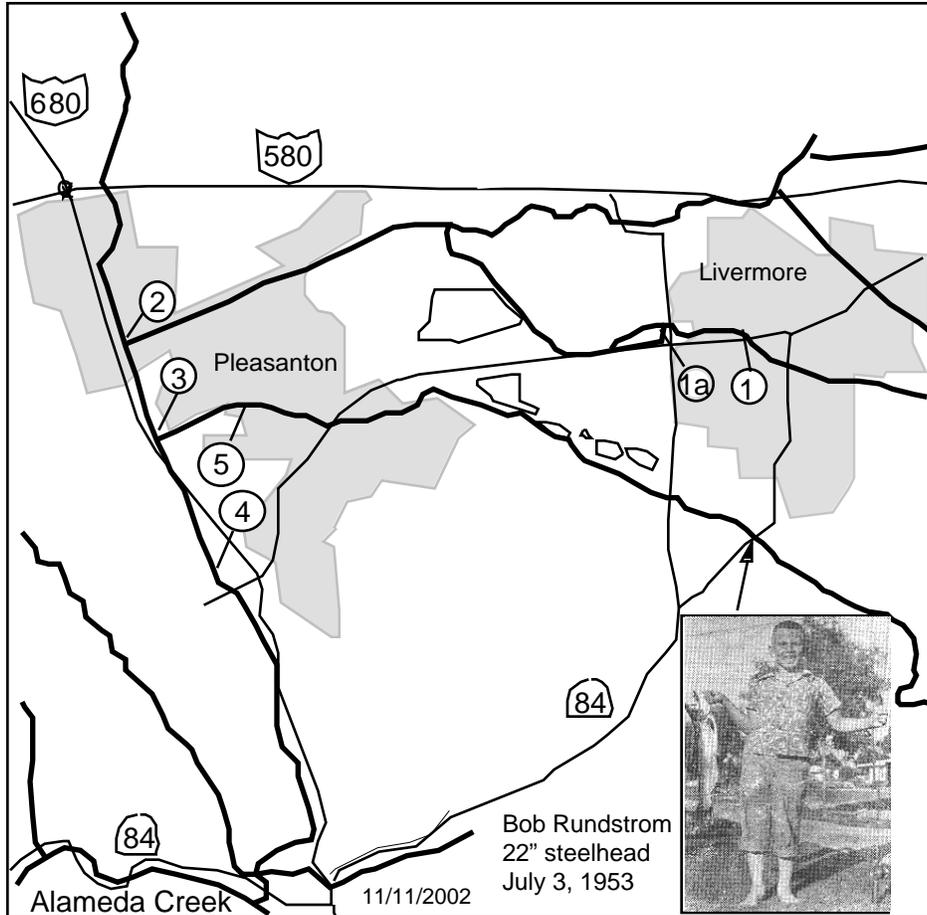
shows another barrier at the bridge at Main Street where it crosses the Arroyo Del Valle next to the Pleasanton Hotel.

As one looks further down stream, there are more watersheds feeding the ocean-going water of Alameda Creek, which runs through Niles Canyon and on to the bay. Like the Tri-Valley area there are several blockages in this section of the stream. However, through the good work of the Alameda Creek Alliance (under the able leadership of Jeff Miller) and other organizations and governing bodies, all the structures and blockages in the lower portion of Alameda Creek will be removed or fish ladders built by 2005

Would the presence of year-round water flow and the removal of these barriers permit migratory fish to travel into the Tri-Valley area? As recently as the 1960s there were steelhead and salmon runs into the Sunol Park area and up the Arroyo Del Valle. Furthermore, one wonders if there are any Rainbow trout or other migratory fish in existence that would like to go back and forth to the ocean. It turns out that there are such trout still living in the Arroyo Mocho, and in other creeks further downstream. What appears to be missing is sufficient, regular water flow.

There is plenty of water in the Tri-valley, even more than in the past, due to the additional supplies brought in by the South Bay Aqueduct. This water, however, is used for agriculture and household needs. Once the domestic water is used, it is treated and then pumped as “used” water up over the Dublin grade and into the bay. Much percolated water or agricultural water that gets into the water table is eventually pumped back out, treated and used as domestic water. Water from the South Bay Aqueduct is sent down the Arroyo Mocho and Del Valle streams to meet Fremont’s needs. Unfortunately for the steelhead and other fish, this water is shut off for extended periods.

Will migratory fish ever return to the Tri-Valley? Certainly the three blockages in the area could be removed like those being removed in Alameda Creek. Ensuring adequate and sustained water flow is more problematic, however. Perhaps there are creative solutions to a healthier arroyo system of the Tri-Valley. Let’s be friends of the arroyos!



Map showing the streams in the Tri-Valley and the four drop structures shown in the photos.



Photo #1. Drop structure (three foot) on Arroyo Mocho at Stanley and Murrieta Blvd at the old Southern Pacific Railroad Bridge in Livermore. A slot as shown needs to be cut in the concrete to allow fish passage.



Photo #1a. This structure and others 200 yards lower down stream on Arroyo Mocho where it crosses Isabel Avenue might not allow up-stream migration.



Photo #2. Drop structure (about one foot) on Arroyo Mocho near W. Las Positas Blvd and 680 just 50 yards up stream from the Arroyo De La Laguna in Pleasanton.



Photo #3. Drop structure (about half a foot) on Arroyo Del Valle at the end of Corte Monterey near Bernal and 680 in Pleasanton, 50 yards upstream from the Arroyo De La Laguna. At low to moderate flow this structure might block fish passage due to the flat apron above the drop and a slot might need to be cut in the concrete.



Photo #4. Drop structure on the Arroyo De La Laguna in Pleasanton next to the Castlewood golf course. It looks like this structure will allow fish passage.



Photo #5. Drop structure (a few feet) on Arroyo Del Valle where Division Street crosses in Pleasanton. At low to moderate flows this structure blocks fish passage due to the drop and the flat apron above the drop.



Photo #6. Drop structure (a few feet) on Arroyo Del Valle at the Pleasanton Hotel where Main Street crosses the arroyo next to Del Valle Parkway in Pleasanton. At low to moderate flows this structure blocks fish passage due to the drop and the flat apron above the drop.