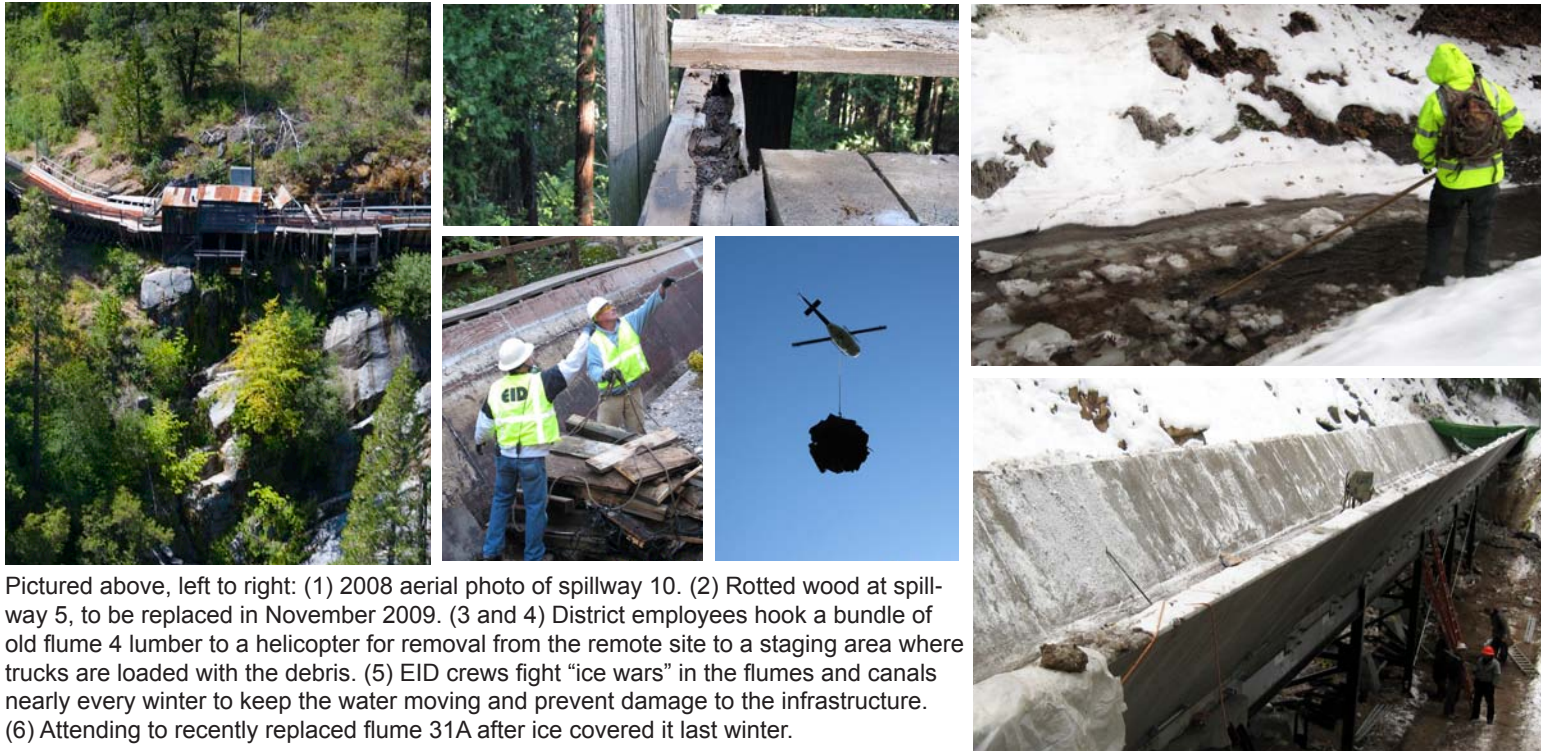


EID at Work—Hydro Crews Keep the Water Flowing



Pictured above, left to right: (1) 2008 aerial photo of spillway 10. (2) Rotted wood at spillway 5, to be replaced in November 2009. (3 and 4) District employees hook a bundle of old flume 4 lumber to a helicopter for removal from the remote site to a staging area where trucks are loaded with the debris. (5) EID crews fight “ice wars” in the flumes and canals nearly every winter to keep the water moving and prevent damage to the infrastructure. (6) Attending to recently replaced flume 31A after ice covered it last winter.

Every fall, as most of us prepare for the end of the year and upcoming holidays, EID employees on the hydro crew turn their full-time attention to the El Dorado canal system* that transports water from high Sierra lakes for use by district customers and the production of state-certified renewable hydropower. Normally by October 1, the crew has dewatered the system for repair and maintenance over the next 45 days or so. The time frame is short because of impending adverse weather, but the work is crucial to ensure a safe and reliable flow of water all year long.

Throughout the year, the district inspects the flumes and canals as part of a long-range capital improvement plan that includes scheduled priorities for rebuilding, upgrading, and repairing this important water conveyance system. During the fall “outage,” the scheduled improvements and repairs are completed.

“We work hard to keep the water flowing,” says Steve Lindstrom, who supervises maintenance of the system. “During the fall outage period, our teams are on the job seven days a week up to twelve hours a day to complete these grueling projects on time. We do much of the work in house, which saves the district—and our customers—money.”

The more than 22 miles of canals and flumes that make up the system wind through the forest entrenched on steep terrain above Highway 50. Significant portions of the system are in remote areas that are difficult to access, so helicopters must be used to transport equipment to the workers, who hike, or at times during the winter, snowshoe into a location.

With changing weather come potential mud slides, falling trees, and extremely cold temperatures that build ice in and along the canals and flumes. It is imperative this system is closely monitored for these types of blockages 24/7. And that is what the crews do.

By maintaining the water system, the district helps to avert failures that are very costly to repair. “This year’s project is to replace spillway 5 located in a remote area above Kyburz,” explains Cindy Megerdigian, EID’s water/hydro engineering manager. “This spillway is forty to forty-five years old, and replacing it will ensure many more years of reliable service.” The canal and flume capital improvement program is a fine example of the proactive, long-term planning needed to keep the water flowing in EID’s service area.

* Canals are in-ground structures, while flumes are essentially elevated canals built of treated lumber or concrete. EID’s integrated canal/flume system dates back to the gold rush days of the nineteenth century.