

Milltown Reservoir Site Update, June 18, 2007.

It's been a full year since the Milltown Reservoir cleanup and dam removal project began with the reservoir drawdown in June, 2006. The project remains on schedule for dam removal in March 2008. The reservoir is drawn down about 7.75 feet today, down from a maximum drawdown of 12 feet earlier this year.



This overview photo shows the significant progress made at the site in the past month. The flood berms surrounding the contaminated sediment area are complete, and work has begun in earnest on excavation of the bypass channel. Later this summer a rail spur will be constructed alongside the Clark Fork flood berm, and stockpiled sediment removed during excavation of the bypass channel; will be shipped off site in September. Note the visibly increased sediment load in the Clark Fork channel on the right, which is due in part to elevated sediment levels coming into the reservoir from the Clark Fork upstream and also from sediment scouring from the drawn down reservoir. The flow in the river today is about 5,260 cubic feet per second (cfs). Peak flows of about 9,000 cfs occurred in May and again in June this year. A ten year flood event for the combined flows of both rivers is 25,900 cfs. The flood berms surrounding the contaminated sediment were designed to handle at least a ten year flood event.



The photo above shows excavation of the bypass channel near the toe of the Interstate highway. The channel will be 100 feet wide at the bottom, and sized to handle the 100-year flood after the dam is removed next spring. A large truck is stockpiling clean fill in the foreground. This is soil that was removed from an old dump area near the interstate, following removal of solid waste including tires and steel. This material will be stored on site until after the river is diverted into the bypass channel and the Milltown Dam is removed in 2008. It will eventually be disposed of in the low are near tunnel pond on the south side of the reservoir.



These photos show the tires and steel removed from the old dump area near the Interstate. These materials will be disposed of at the Missoula landfill, or recycled.



The photo above shows the upstream end of the project area, including contaminated sediment stockpiles in the foreground and the Envirocon construction offices in the background. Excavators are beginning to dig the upstream end of the bypass channel in the upper right hand of the photo. Envirocon has installed additional wells to remove water from the sediments to enable excavation. Water is now being pumped directly to the Clark Fork River at the upper end of the bypass channel, as well as the to the Blackfoot River at the downstream end of the channel, which was initiated last fall. The rate of pumping has increased from about 400 gallons per minute to about 3,000 gallons per minute. However, the quality of the water in the upper end of the excavation is much better, with lower arsenic and iron concentrations. Total loading of contaminants to the river has remained fairly stable, even with the recent increased rate of pumping.

Water quality downstream of the dam during May and the first half of June has remained within the warning limits and applicable standards. However, sediment has been scoured from the reservoir during much of May and June, with somewhat elevated levels of turbidity and suspended solids below the dam as compared to upstream on the Clark Fork or Blackfoot Rivers. Water quality was at its worst downstream of the dam on about June 8, when arsenic levels reached a high of 7.6 parts per billion (ppb). On the same date, arsenic levels in the Clark Fork upstream near Turah were 12.3 ppb. The drinking water standard for arsenic is 10 ppb. During May and June so far, arsenic levels have ranged from 2.4 to 7.6 ppb downstream of the dam, and from 4.1 to 12.3 ppb upstream at Turah. Sediments containing arsenic are being eroded downstream from the drawn down reservoir, but the cleaner Blackfoot River water is providing ample dilution to keep concentrations lower downstream. Water quality monitoring includes daily sampling for arsenic, copper and suspended sediments, and turbidity is monitored 2-3 times per day. Monitoring sites include the Clark Fork 1.6 miles downstream of the dam, and upstream sites on both the Clark Fork and Blackfoot Rivers.

For recent Milltown news, check the Clark Fork River Technical Assistance Committee's website at www.cfrtac.org or the EPA website <http://www.epa.gov/region8/superfund/sites/mt/milltowncfr/home.html> which includes weekly construction updates.

