



Former ASARCO Smelter East Helena, Montana December 2022

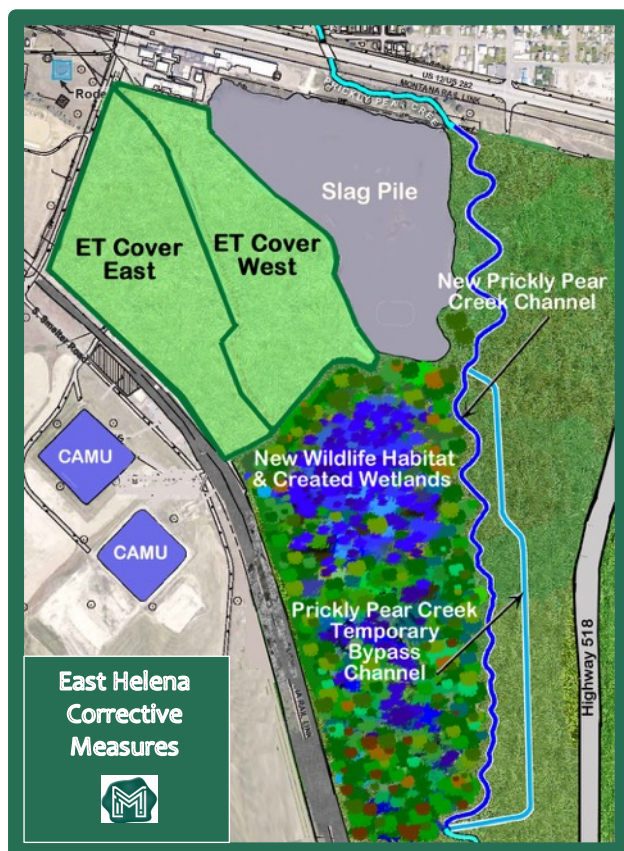


The Environmental Challenge

More than a century of lead smelting left extensive contamination in soil and groundwater at the former ASARCO smelter in East Helena. Soils contaminated with lead, arsenic, and other metals posed a threat to people, migratory birds, and other direct-contact receptors. Precipitation leached contaminants from smelter soils into groundwater and mobilized surface soil contaminants into stormwater runoff. Surface waters from Prickly Pear Creek (PPC) and two manmade lakes raised groundwater levels under the former smelter and slag pile, pushing groundwater through impacted soils and adding contaminants to groundwater that resulted in plumes of arsenic and selenium migrating off-site.

The Cleanup Solution

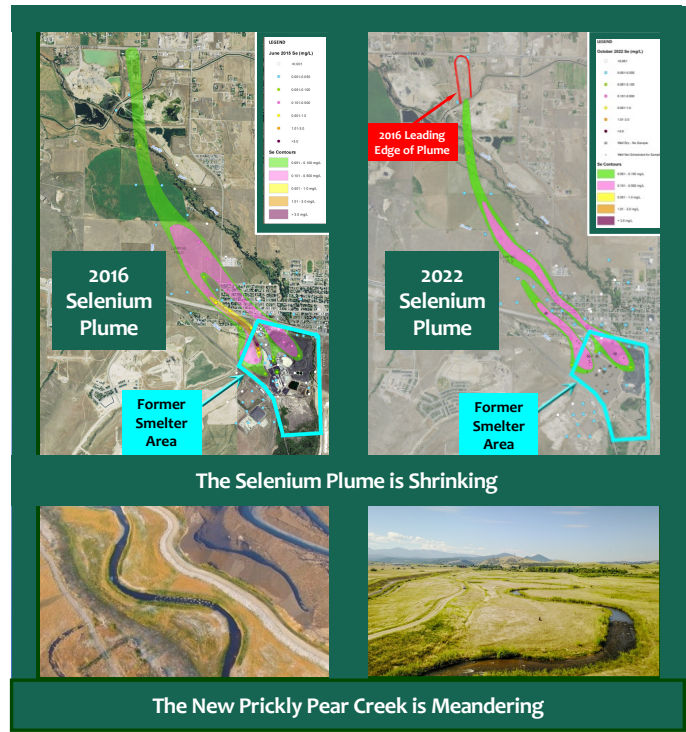
In the last 11 years, contamination at the former smelter has largely been addressed. A 62-acre evapotranspirative (ET) cover—the largest contiguous ET cover in the country—constructed over the entire former smelter area eliminates risk of direct-contact exposure to contaminated soils by people, animals, and birds, and prevents leaching of contaminants into groundwater. The natural, self-sustaining ET cover also stores and sheds clean stormwater. Moving PPC away from the smelter and slag pile and draining the manmade lakes have lowered groundwater levels under the former plant. This dramatically reduced the volume of groundwater flowing through contaminated soils, preventing its contamination. The Montana Environmental Trust Group (METG) substantially completed removal of the PPC Temporary Bypass Channel in 2022. Groundwater contamination has been further reduced by removing select areas of highly contaminated soils that were a source of contamination to groundwater.



METG, as Trustee of the Montana Environmental Custodial Trust, remediated and restored an 80-acre parcel (on Wylie Drive) to enhance migratory bird habitat and support the Greenway Trail, which is now open for public use. The last remaining cleanup measure will entail grading and capping the 16-million-ton slag pile—a step to take place after the uppermost 2 million tons of unfumed slag have been recycled. The slag is being crushed and shipped to Canada, where it is transported by oceangoing vessels to South Korea for residual metals recovery and cement manufacturing.

Cleanup Results

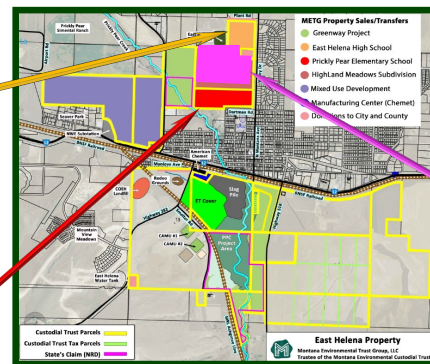
Arsenic and selenium concentrations have dropped by more than 50% on the smelter site. The off-site selenium plume has shrunk by more than 40%, concentrations have dropped by 35%, and the plume has receded more than 2,000 feet. Dilapidated buildings and other remnants of the former smelter have been demolished and replaced with a graded, vegetated ET cover. Demolition debris, contaminated source area soils, and other excavated materials have been safely stored under the ET cover or in the corrective action management units (CAMUs) south of the smelter plant. Stormwater is now stored in or shed clean from the ET cover. PPC now flows in a natural, meandering 1.25-mile-long channel. One hundred acres of new, previously nonexistent floodplain now provide bird habitat and flood storage capacity to mitigate flooding in downstream flood-prone areas of East Helena. New, enhanced wetlands have replaced the manmade lakes and support fish populations. Smelter Dam, once used to store water in the manmade lakes, has been removed and, with it, the last impediment to fish passage between the PPC headwaters and Lake Helena.



East Helena High School



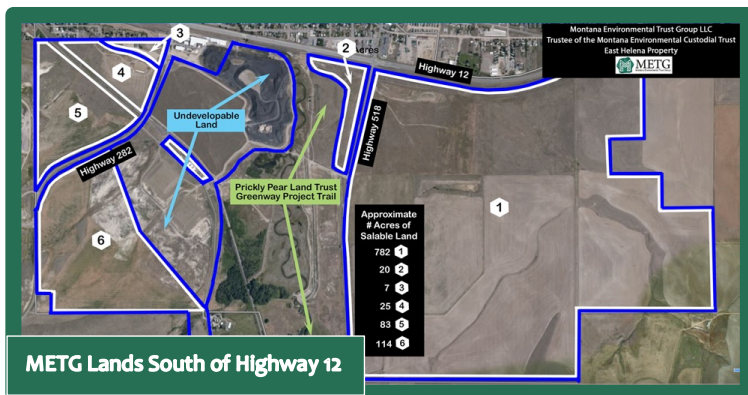
Prickly Pear Elementary School



Highland Meadows Residential Subdivision

Redevelopment Results and Plans

In partnership with the City of East Helena, East Helena Public Schools, Prickly Pear Land Trust (PPLT), Highland Meadows, and Town Pump, METG sold or donated 777 acres of former ASARCO lands that have since been transformed into the new Prickly Pear Elementary School, the new East Helena High School, and the 300+ single-family residential Highland Meadows subdivision. The centerpiece of METG's redevelopment is the 322-acre Greenway Trail—a wildlife habitat and recreational area along the reconstructed, remediated, and restored PPC.



METG is working with several local and regional companies and organizations on plans to redevelop the ±1,000 acres of former ASARCO lands located south of Highway 12. Prospective purchasers have proposed future uses that include residential, commercial, office, and light industrial developments that will further transform and define the future of East Helena and surrounding areas.

If you have questions, please contact:
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