



Copper Mountain Wastewater Treatment Plant Expansion



2025

ABOUT THIS PROJECT:

Market Segment:
Wastewater Collection & Treatment

Applicator:
WBS Coatings

Location:
Copper Mountain, Summit County, Colorado, USA

Owner:
Copper Mountain Consolidated Metropolitan District

Engineer:
HDR

Products Used:
Xypex Megamix II with Bio-San

General Contractor:
Archer Western

The Copper Mountain Consolidated Metropolitan District undertook a major expansion and modernization of the Copper Mountain Wastewater Treatment Plant to support long term service needs for both year-round residents and resort visitors.

Originally constructed in 1981, the facility provides full wastewater treatment including biological nutrient removal, tertiary filtration, and ultraviolet disinfection prior to discharge into Ten Mile Creek. To meet evolving regulatory requirements and support future growth while maintaining continuous plant operations, the district-initiated upgrades to increase treatment capacity from approximately 1.1 million gallons per day to 2.46 million gallons per day.

The scope of work includes expanded equalization basins, new anaerobic and anoxic process basins, additional aeration and clarification capacity, filtration and ultraviolet system upgrades, and associated piping and support infrastructure.

As part of the rehabilitation scope, Xypex Megamix II with Bio-San was specified to restore and protect concrete surfaces exposed to aggressive wastewater environments. Approximately 24,000 lbs of the repair material were applied within the clarifier structures to restore deteriorated concrete and provide protection against microbial induced corrosion and hydrogen sulfide gas exposure.

The Xypex repair system enhances the durability of critical process structures while minimizing future maintenance requirements. The expanded facility will deliver improved regulatory compliance, operational resilience, and long-term wastewater treatment capacity for the Copper Mountain community.

