



Niwot Sanitation District



ABOUT THIS PROJECT:

Market Segment:
Wastewater Collection & Treatment

General Contractor:
Dustin Foss - Rice
Lake West (fka Stanek
Constructors - Golden
CO - Headquarters)

Products Used:
Xypex Admix C-500
Xypex Bio-San

Owner / Developer:
Niwot Sanitation District

Engineer:
JVA, Inc.,
Direct Discharge
Consulting, LLC

Ready-Mix:
Holcim (Denver, CO)

Location:
Longmont, Colorado, USA

The Niwot Sanitation District (NSD) in Colorado USA, undertook a significant project to modernize its wastewater treatment plant (WWTP), driven by the need to meet new environmental standards and replace outdated infrastructure.

The original plant, built in 1967, faced increasing challenges due to aging equipment and stricter federal regulations governing wastewater discharge. Upgrades were essential to comply with a new discharge permit that requires enhanced treatment processes to protect the environment and the local stream where the plant releases its wastewater.

NSD's facility was expanded to include several new substructures, such as the headworks, oxidation tank, clarifier, and digester tank, all essential for the plant's operation under the updated regulatory framework.

Xypex's innovative concrete waterproofing solutions, including Xypex Bio-San and Xypex C-500, were integrated into the concrete at time of batching to waterproof, protect and enhance the durability and sustainability of these critical concrete structures.





Xypex Bio-San offers microbial-induced corrosion protection, while Xypex C-500's crystalline technology ensures the concrete remains impermeable, even under extreme conditions, by self-healing micro-cracks and withstanding hydrostatic pressure. These products not only protect the plant's structural integrity but also significantly reduce maintenance and prolong service life, with waterproofing benefits and additional antimicrobial augmentation in areas of high risk aligning with the long-term goals of the NSD.

By utilizing Xypex's advanced solutions, the Niwot Sanitation District is equipped with a safe and reliable wastewater treatment facility that adheres to federal standards, ensuring environmental protection and operational efficiency for years to come.

