



# Niwot Sanitation Station (Headworks Building)



2024

## ABOUT THIS PROJECT:

**Market Segment:**  
Wastewater Treatment Plant

**Owner:**  
Niwot Sanitation District

**Products Used:**  
Xypex Bio-San

**Engineer:**  
JVA, Inc. (Boulder)

**General Contractor:**  
Rice Lake West (fka Stanek Constructors - Golden CO)

**Ready-Mix Provider:**  
Holcim (Colorado Springs)

**Location:**  
Niwot Sanitation District, Colorado

Built in 1967, the original wastewater treatment plant faced mounting challenges due to aging infrastructure and increasingly stringent federal discharge regulations. Significant upgrades were necessary to meet new environmental standards and ensure compliance with updated permits, requiring enhanced treatment processes to safeguard local waterways.

To reinforce these critical structures, advanced waterproofing and protection solutions were incorporated directly into the concrete during batching. Xypex Bio-San was crucial in improving durability, enhancing sustainability, and fortifying the plant against long-term wear. Xypex Bio-San provides specialized microbial-induced corrosion protection, including crystalline technology that enables the concrete to self-heal micro-cracks and resist hydrostatic pressure, ensuring lasting impermeability even in extreme conditions.



As part of these improvements, the Niwot Sanitation District expanded its facility with key additions, including a new headworks system, oxidation tank, clarifier, and digester tank. These structural enhancements were designed to support modernized operations while meeting regulatory demands for wastewater treatment.

Utilizing Xypex's advanced solutions strengthens the facility's resilience, reduces maintenance needs, and extends the service life of essential components. By integrating cutting-edge concrete solutions, the Niwot Sanitation District now operates a modernized, environmentally responsible treatment plant that upholds federal standards while promoting long-term efficiency and sustainability.

