

WHAT THE SLUDGE?!

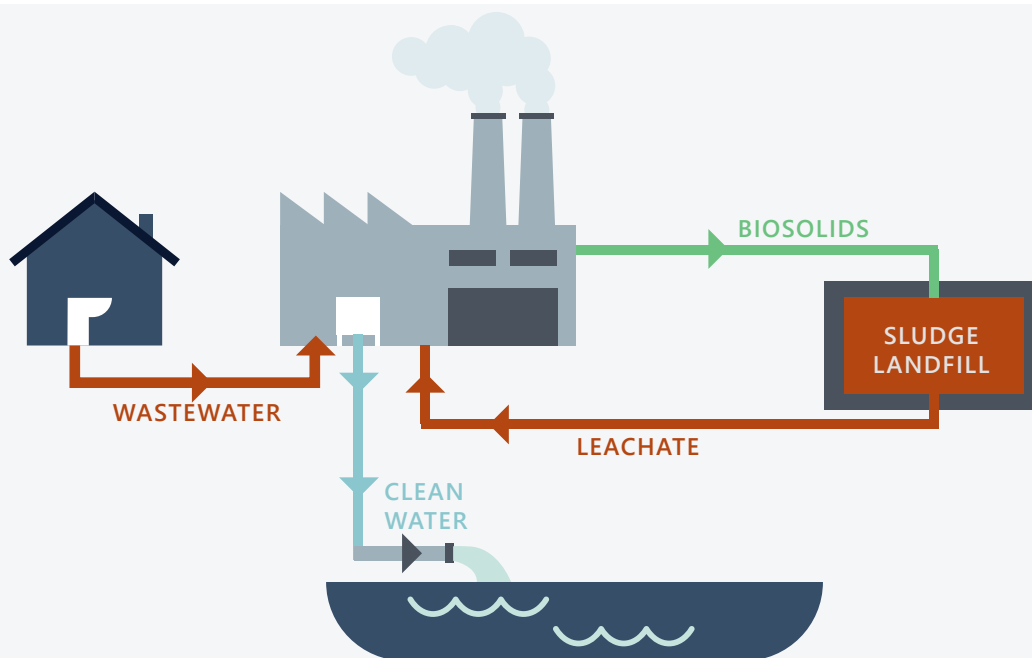


How the West Street Landfill expansion safeguards clean water for our community

The Project:

In 2023, the City of Gardner will construct a 4.3-acre expansion to the existing West Street sludge landfill, which receives biosolids, a nutrient-rich byproduct of the city's wastewater treatment processes. While treated organic biosolids should not pose a threat to human or environmental health, safe and effective management prevents inadvertent industrial compounds from infiltrating our soils, water, and air. The City of Gardner has explored numerous alternatives for managing biosolids and determined that landfill expansion best balances our community's infrastructural, environmental, and economic priorities.

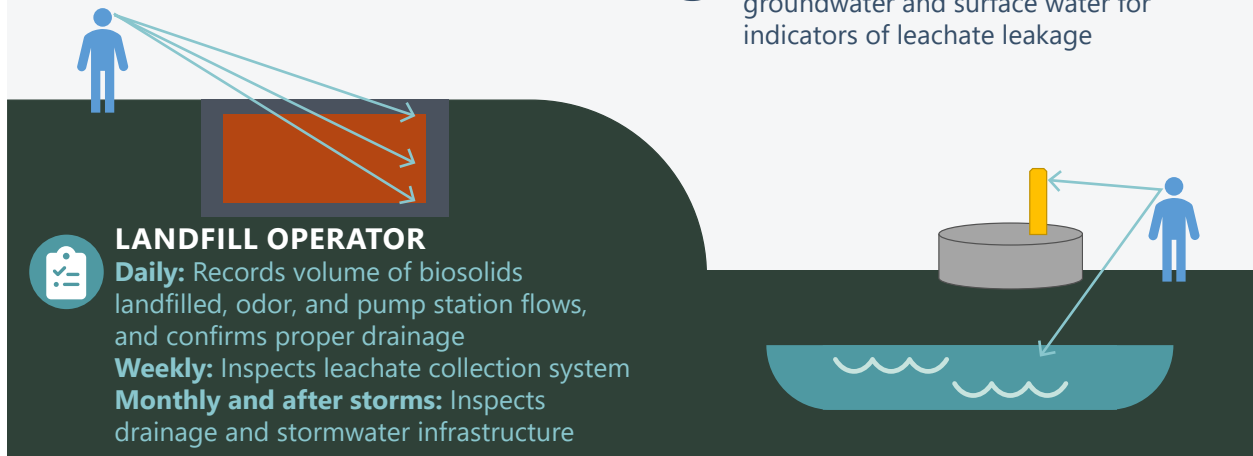
Considering Our Community:



Wastewater treatment continuity is non-negotiable. Gardner residents, visitors, and business owners rely on this important public health utility. Meanwhile, returning clean water to our environment makes it available to people, plants, and wildlife down the line. The existing landfill, operational since 1985, is nearing capacity. Its expansion secures effective long-term biosolids management to protect human and environmental health and enables economic growth in our community.

Protecting Our Environment:

MONITORING PROGRAM



The primary environmental concern for any landfill is containment of leachate. Leachate from biosolids consists of the latent moisture that remains after the City's wastewater treatment plant mechanically dewateres it to the extent possible, and some precipitation that filters through the landfill. The West Street Landfill expansion project includes the installation of a double-composite groundwater protection system, consisting of five impermeable barrier layers, a primary leachate collection system, and a leak detection and secondary leachate collection system. Landfill leachate is collected and conveyed to the city wastewater treatment plant. Regular inspections and contracted environmental monitoring are included in the landfill's operation and maintenance plan to monitor the performance of the groundwater protection system.

Optimizing the City's Investment:



The City explored nine alternatives before committing to expansion of the West Street sludge landfill. Many, including land application, composting, and incineration, were unworkable due to environmental concerns and State regulations related to the prevention and mitigation of PFAS contamination.

Contracted sludge hauling was explored, however the distance to and decreasing number of sites accepting biosolids presented severe environmental and cost barriers. As receiving landfills become scarcer, those that remain offer only short-term contracts, leaving the City without a long-term solution for sludge disposal.

The addition of anaerobic digestion to the City's wastewater treatment plant was considered and ultimately rejected because it does not eliminate sludge production and disposal. Also, the cost is prohibitive for Gardner's small treatment plant.



The project team also explored new innovations in biosolids disposal, such as pyrolysis and gasification, however these alternatives were disqualified due to their prohibitive cost and the risks associated with adopting untested technology. We are confident that expansion of the landfill is the safest, most effective, and fiscally responsible solution for biosolids management.

Construction of the West Street Sludge Landfill expansion is being conducted in compliance with applicable local, state, and federal environmental permitting requirements.

