

Response to Additional Questions, Issues, and Concerns
1-31-20
Wastewater Treatment Facility
City of Lanesboro, MN

Site Size

It has been suggested that the site selected for the wastewater treatment facility (WWTF) is barely large enough for the proposed facility and that there is no room for expansion or replacement.

The proposed site for the WWTF is large enough to accommodate the facility as designed. The facility has been designed to allow for the addition of future nutrient removal (nitrogen and/or phosphorus to current permit limits) without expansion of the facility footprint. The recent purchase of the adjacent home provides enough space to add filters should future nutrient removal limits drop to a level that would require filtration. In addition, the facility has been designed with redundant components, as required by MPCA, which allows for the facility to continue operating while major components are replaced.

Therefore, the proposed site is large enough to accommodate the facility, has room for expansion to meet potential future nutrient removal limits, and has been designed to allow for future replacement of all major components while continuing operations.

Floodplain Issues

It has been suggested that the City is not complying with MnDNR or FEMA recommendations related to floodplain and critical facilities.

The proposed facility has been designed to meet MnDNR and FEMA recommendations related to critical facilities. The 100-yr flood elevation at the proposed site is 825.0. The facility has been designed such that the lowest building floor is set at an elevation of 827.0. This meets the MnDNR/FEMA recommendation for critical facilities to be set 2-feet above the 100-yr flood elevation.

In addition, it should be noted that although the site is currently located within the 100-yr floodplain, the proposed project will effectively remove the site from the floodplain by filling the site above the 100-yr flood elevation. Since the proposed fill is outside of the designated floodway, filling the site will not have an impact on 100-yr flood elevations elsewhere along the river. Filling the site as proposed is in conformance with MnDNR, FEMA, and City of Lanesboro regulations.

Cost/Timing

It has been suggested that the proposed facility is grossly overpriced and that a motivating factor for proceeding with the project this year is related to the 2020 census.

The proposed facility has been designed to last, with concrete structures and block/brick buildings with an expected life of 60+ years. The treatment process has been designed to allow for the addition of future nutrient removal within the footprint of the proposed buildings and tanks, to minimize future costs. Decorative screening has been added to address aesthetic concerns associated with the facility location.

Although initial project capital costs could be reduced by using prefabricated structures, eliminating provisions for future nutrient removal, and eliminating the decorative screening, this would come at the expense of reduced expected life (25 years for pre-fabricated buildings/structures), increased future maintenance and replacement costs, increased cost for future nutrient removal addition, and reduced facility aesthetics.

The City's share of the facility cost will be based on an affordability calculation by the Public Facilities Authority (PFA). The most recent affordability calculation completed by PFA indicated that a \$4.3 million project would be considered affordable and eligible for a low interest loan through PFA. Any project cost above that amount would be eligible for grant funding up to 80% of the project costs with a maximum of \$5,000,000. Availability of grant funding is depending on project ranking on the Intended Use Plan (IUP) and the legislature adequately funding the PFA's infrastructure funding programs.

Expected reductions in overall project cost, as mentioned above, would not reduce project cost to a level below the City's affordability, therefore, there is no advantage to the City in modifying the project design to reduce project costs at the expense of reducing facility aesthetics, reducing expected life and increasing future maintenance, replacement, and nutrient removal costs.

The 2020 Census does not play a direct role in project funding through the PFA. The PFA bases the affordability calculation discussed above on the most recent median household income (MHI) data available through the American Community Survey (ACS), which is updated on an annual basis. Any change in the MHI on an annual basis could have a negative or positive effect on the affordability calculation, depending on whether MHI goes up or down.

The motivation for proceeding with the proposed project as soon as possible is primarily related to the fact that the existing facility has major components that are on the verge of failure. If those components fail, they must be replaced or repaired at significant cost (several hundred thousand dollars) to allow the facility to continue operating, which would be a sunk cost in a facility that is planned for replacement. In addition, further delay will involve construction inflation and, as mentioned above, the potential for reduced grant funding if the City's MHI increases.

Biosolids Disposal

It has been suggested that biosolids disposal for the proposed facility is an unknown.

Biosolids are a byproduct of all WWTF and are always hauled out in one form or another, depending on the treatment method. In the past, biosolids from the existing facility had been hauled and land applied locally by City staff. Currently, due to lack of storage issues at the existing facility, biosolids are being hauled to the City of Rushford's WWTF.

The proposed facility will include storage on site for 365 days of biosolids production. The City is currently considering hiring a contractor to haul and land apply biosolids locally. This has some advantages related to staff time and equipment rental/purchase. However, if the City decides to continue handling biosolids with their own staff, the facility will accommodate that. Operation and maintenance costs, when considering staff time and equipment purchase/rental, for either option would be similar and have been accounted for in financial planning for the proposed facility.