

Proposal Summary
City of Flagstaff
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Vaccinations for SARS-CoV-2 are only available to individuals who are 12 and over. When considering the eligible population within Coconino County, 44% of individuals are still not vaccinated. As of the August 20th, 2021 Coconino County update, transmission in our community is high, and percent positivity is substantial. The purpose of the proposed work is to monitor SARS-CoV-2 throughout Flagstaff as well as in populations that do not yet have the choice to be vaccinated, and where the rollout may be slow due to vaccination hesitancy. With funds provided by the City of Flagstaff, we will sample the wastewater once weekly at all elementary and middle schools within the Flagstaff Unified School District, the Wildcat and Rio de Flag wastewater treatment plant facilities, and at charter schools that agree to also be sampled (FALA has requested this service already, and we will reach out to others once funding is secured). We will provide results to the site within 72 hours of pulling samples from each site, and to the city if the site agrees. The goal of this work is to provide proactive information to each site so that they can better enforce or alter their mitigation strategies. For example, a school that has a high viral load in wastewater may better enforce masks in the classroom, or the school nurse could more actively search for children that should undergo rapid testing. Wastewater treatment plant testing would help the city understand what the viral load may be one week ahead of time. In addition, if viral load is high enough in any given sample, we will submit the sample for genomic sequencing and try to determine which variants of concern are present. We have been conducting this type of testing for more than a year at Northern Arizona University (who funded us to carry out this project again this year) and for five months at the Flagstaff Unified School District. Our funding to carry out school-based testing has ended, so the City of Flagstaff funds would reignite this effort.