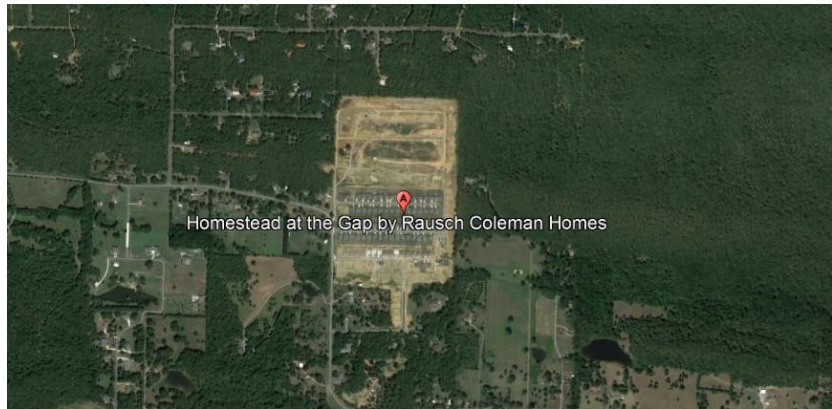


NPDES Discharge, 260 Homes, 72,000 GPD - Homestead at the Gap, Arkansas



A developer wants to build a subdivision outside the city sewer range. To maximize property development, at least 260 homes are needed on the 60-acre development including wastewater treatment and disposal. A compact wastewater treatment system must be selected to maximize residential development space and meet the 100' residential setback requirement. To save space, an NPDES surface discharge permit with stringent levels for BOD, TSS, Oil and Grease, COD, Total Organic Carbon, Ammonia and Phosphorus will be used.

FujiClean USA first started working on the Homestead at the Gap project in 2018. Full build-out of the development would happen from 2019 to 2023 in 3 phases. Due to the complex topography, a combination of gravity sewer and two lift stations were utilized, ultimately delivering the wastewater to a central collection point at the corner of the development. The combined final treatment system includes:

- 20,000-Gallon Trash/ Alum Dosing Primary Treatment Tank
- 20,000-Gallon Settling/ Equalization Dosing Tank
- Twelve (12) FujiClean CE6KG Secondary Treatment Units ~72,000-GPD Total Capacity
- 1,500-Gallon Discharge Tank
- Ultraviolet Light Disinfection

The FujiClean treatment system is modular, allowing the developer to control cost and infrastructure during the build-out. A common operator building was constructed to house the UV, Alum storage, flow meter, and control panels. Due to the daily flow rate and NPDES direct discharge requirements, a state certified operator is required. FujiClean has successfully completed hundreds of projects such as this both domestically and worldwide.

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Adapted from Onsite Installer Magazine, August 2023