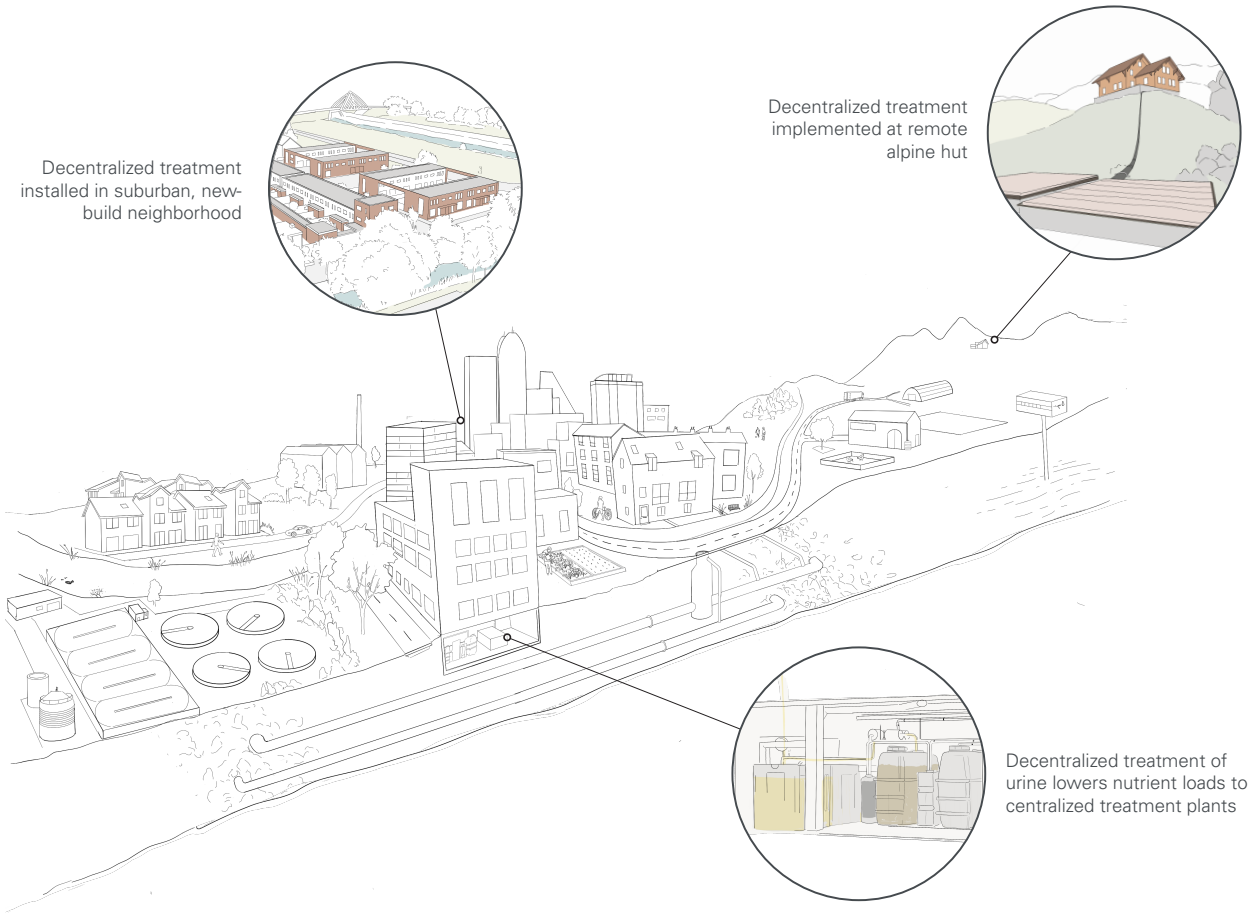
TREAT DECENTRALLY

GOAL

In many contexts, centralized infrastructure is absent, such as in sparsely-populated and remote areas, or in areas where financial burden of centralized systems is too high. Infrastructure may also be absent where urbanization outpaces the implementation of centralized infrastructure. In other cases, existing sewer and/or treatment infrastructure is ageing or is at capacity. Decentralized treatment, of some or all streams can replace or extend the operating capacity of existing infrastructure, deferring expensive investments. Decentralized treatment also allows for autarkic solutions and allows for experimentation and flexibility in design and operation.



DEVELOP INDEPENDENT OF THE GRID

In areas where centralized drinking and/or wastewater infrastructure is absent (e.g., remote hut, village or settlement), or when it is desired to exercise grid autonomy, on-site or decentralised sanitation provides water supply and wastewater treatment.

RELIEVE THE GRID

Diverting the total volume (e.g. greywater, flush water, rainwater) and nutrient load (e.g. urine and feces) from existing sewers and treatment plants extends their operating capacity and increases their treatment performance. Such solutions help avoid or postpone costly expansions. Diverted streams need to be treated, reused or discharged (semi-)decentrally.

TAILOR SOLUTIONS PER CONTEXT

Buildings, neighborhoods or cities may face different challenges. Decentralization allows for the implementation of tailored solutions that are flexible and adaptable. These solutions not only address local challenges but also reduce vulnerability during disasters.