

Vibrant Metabolic Landscapes: A Sustainable District Study for Yesler Terrace

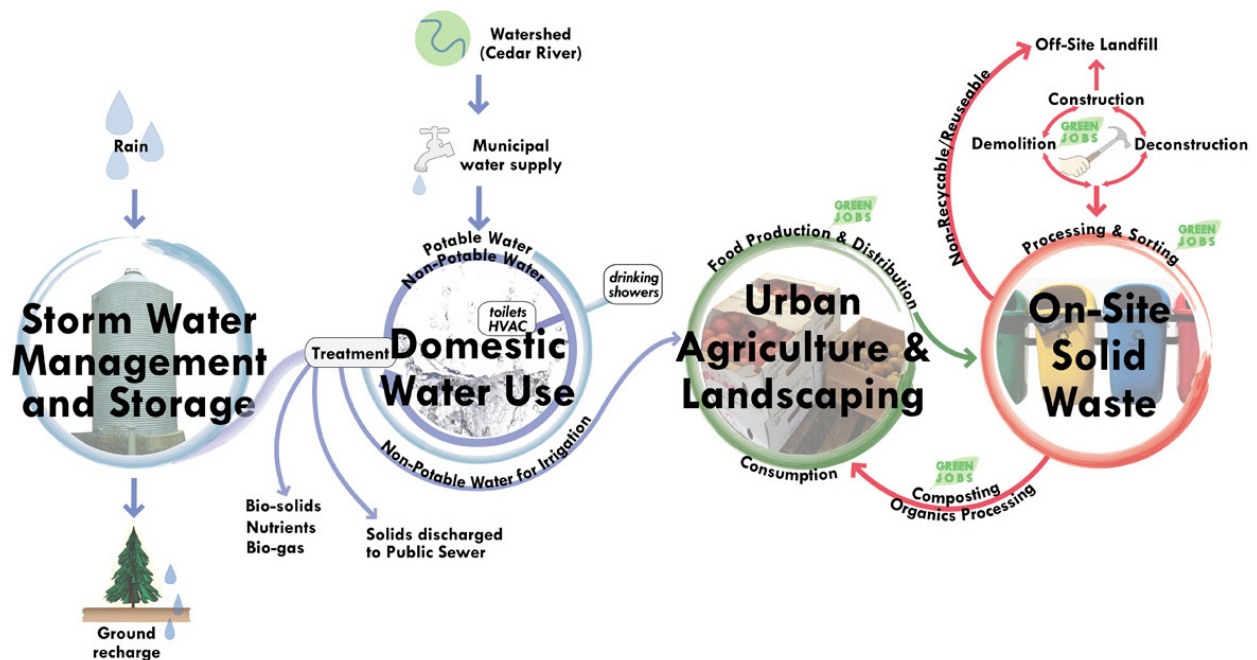
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As part of initial scoping work for the redevelopment of the Yesler Terrace neighborhood, CollinsWoerman conducted a study of sustainability strategies that could be implemented on a district scale. The sustainable district study was designed to answer questions about sustainable alternatives that might uniquely be applied in the Yesler Terrace redevelopment. Of the many potential “green” strategies that could be pursued, which could the Yesler Terrace redevelopment project accommodate and still maintain commercial viability? Were there energy, water, transportation and solid waste alternatives that made sense at a district scale that should receive further consideration? Were there potential synergies between some versions

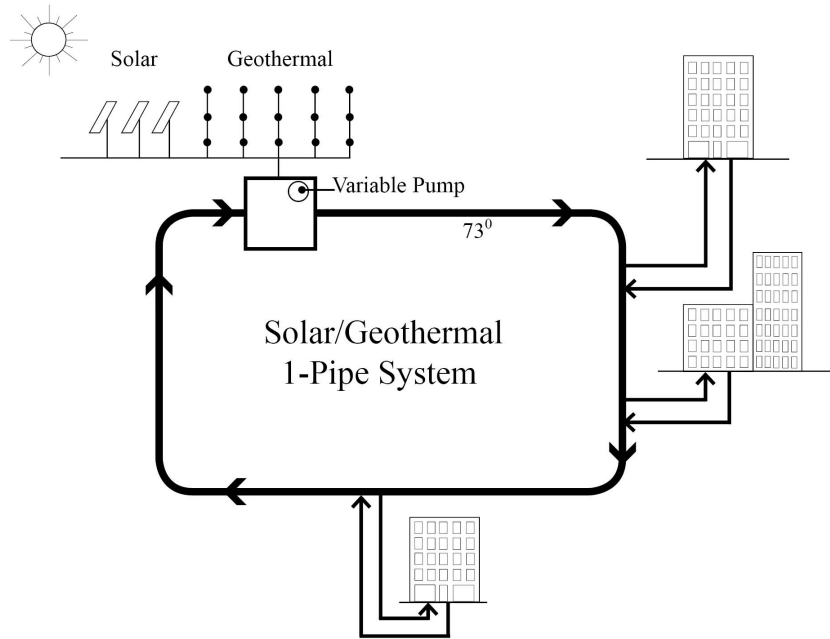
of these proposals that could be explored? Would such systems run into barriers from current regulations? Would costs be in line with a business-as-usual approach, or would some of these proposals be nice in concept but fundamentally uneconomic?

CollinsWoerman conducted an in-house charrette that brought together local government officials, public housing experts, urban designers and planners, and recognized national experts in the fields of renewable energy, wastewater treatment, and solid waste. The ideas generated during this charrette were then analyzed in depth to find efficient, synergistic solutions.

Initial Concept Drawings for Vibrant Metabolic Landscapes, 2009



The analysis led to a preliminary plan that combines geothermal, solar, and sewer heat recovery as energy sources, a local membrane bioreactor to treat wastewater, and on-site composting.



The expected benefits are a significant reduction in potable water use and wastewater generation, reductions in the impacts of development on city and regional infrastructure systems, and reduced soil, water, and air pollution. Most of the proposed systems are on-site, providing potential jobs for the community, as well as visible reinforcement of the sustainable character of the new neighborhood. These benefits are paired with substantial operational savings that are estimated to offset the capital costs of the systems in less than 6 years.

“Business As Usual”

Membrane Bioreactor

