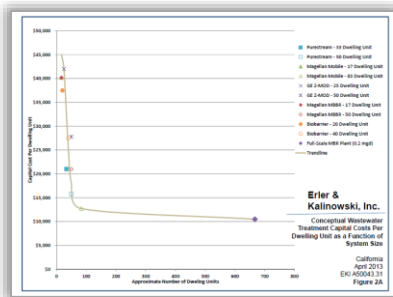


Planning Assistance for Wastewater and Recycled Water System for Southern California Development



EKI assisted a major developer with evaluating options for wastewater and recycled water systems for a new, large-scale development in an agricultural area of Southern California. As part of this work, EKI reviewed existing planning and engineering documents and evaluated the feasibility of providing recycled water suitable for unrestricted reuse to the community. Among other issues, EKI investigated the feasibility of discharging disinfected, tertiary-treated wastewater into an on-site lake for seasonal recycled water storage.

After the timing for the proposed project was changed, EKI performed a feasibility evaluation of options for interim wastewater treatment processes that would still provide recycled water suitable for unrestricted reuse, but on a very small scale, such as for a single hotel. Due to the uncertain development timeline, the evaluation particularly focused on options that would be modular and easily expandable over time. EKI evaluated various factors including cost, footprint, recycled water quality, expandability, transportability, and aesthetics. For the cost evaluation, EKI summarized the costs as a function of system size to graphically show the relative cost-effectiveness of each option.

As part of the larger project, EKI prepared a detailed water demand study for the project, projecting indoor and outdoor water demands for the proposed project based on expected land uses. EKI also conducted a sustainable yield assessment for the local groundwater basin.