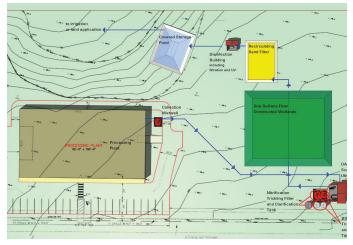
MAUI CATTLE COMPANY

Industrial Wastewater Treatment & Reuse Using Natural Systems

Maui, Hawaii



Schematic site plan

The Maui Cattle
Company was developing a new meat-processing
facility near a residential
area. The client desired a
wastewater treatment and
reuse system that minimizes
odor, provides reuse-quality
treatment in an environmentally-sensitive manner and
supplies reclaimed effluent
for pasture irrigation.

The treatment facility is designed to produce reuse-quality effluent from up to 14,000 gpd of high-strength wash-down water from the plant. Treatment components include prescreening and a dissolved-air flotation (DAF) unit, roughing and nitrification trickling filters,

subsurface flow constructed wetlands, a recirculating sand filter, mechanical filtration, and UV disinfection.

Reclaimed effluent will be stored in an onsite, covered irrigation pond. Approximately five acres of pasture land will be irrigated with the effluent, drastically reducing the facility's water consumption.

Biohabitats integrated conventional pretreatment technologies (screens and DAF) with treatment components based upon natural processes (wetlands, sand filter, trickling filters) to handle industrial-strength effluent in a mechanically simple and energy efficient process.

conservation planning ecological restoration regenerative design

