

Smart Solutions for Watershed Management

AGRICULTURE

INDUSTRIAL

MUNICIPAL

Rural Water Systems... have specific challenges: contamination from iron, manganese, hydrogen sulfide (H₂S), methane, etc. **Solution:** GDT™ Process.

Simplicity: easy to use, no chemical mixing, storing or feeding.

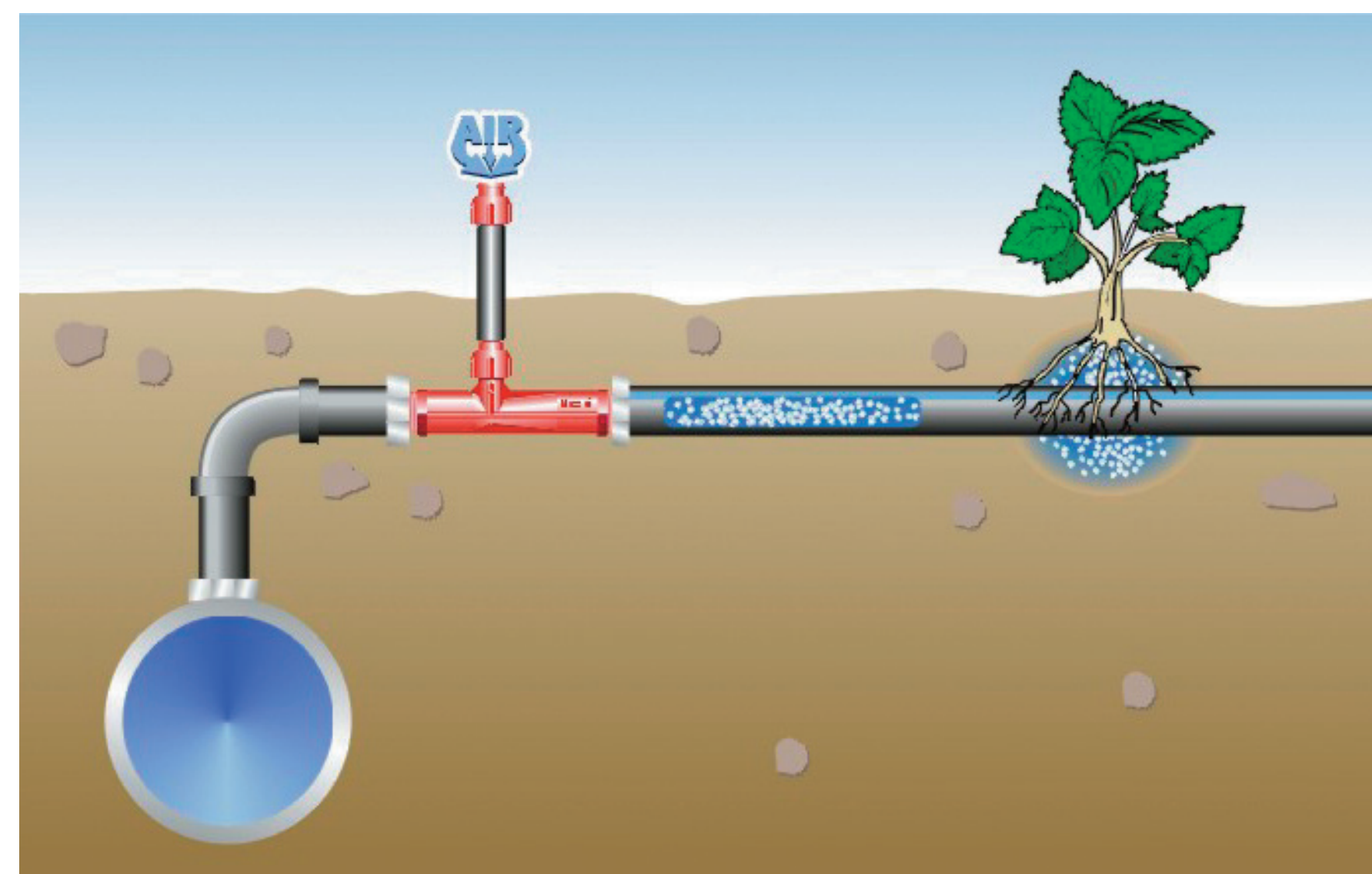
Small Footprint: space and materials of construction.

Mixing: intense and forceful.

Contacting: efficient and effective.



Drip Irrigation Systems... improving conventional systems with the addition of AirJection® Irrigation—the injecting of air into water with a Venturi injector and delivering the air/water mixture to the root zone via subsurface drip irrigation.

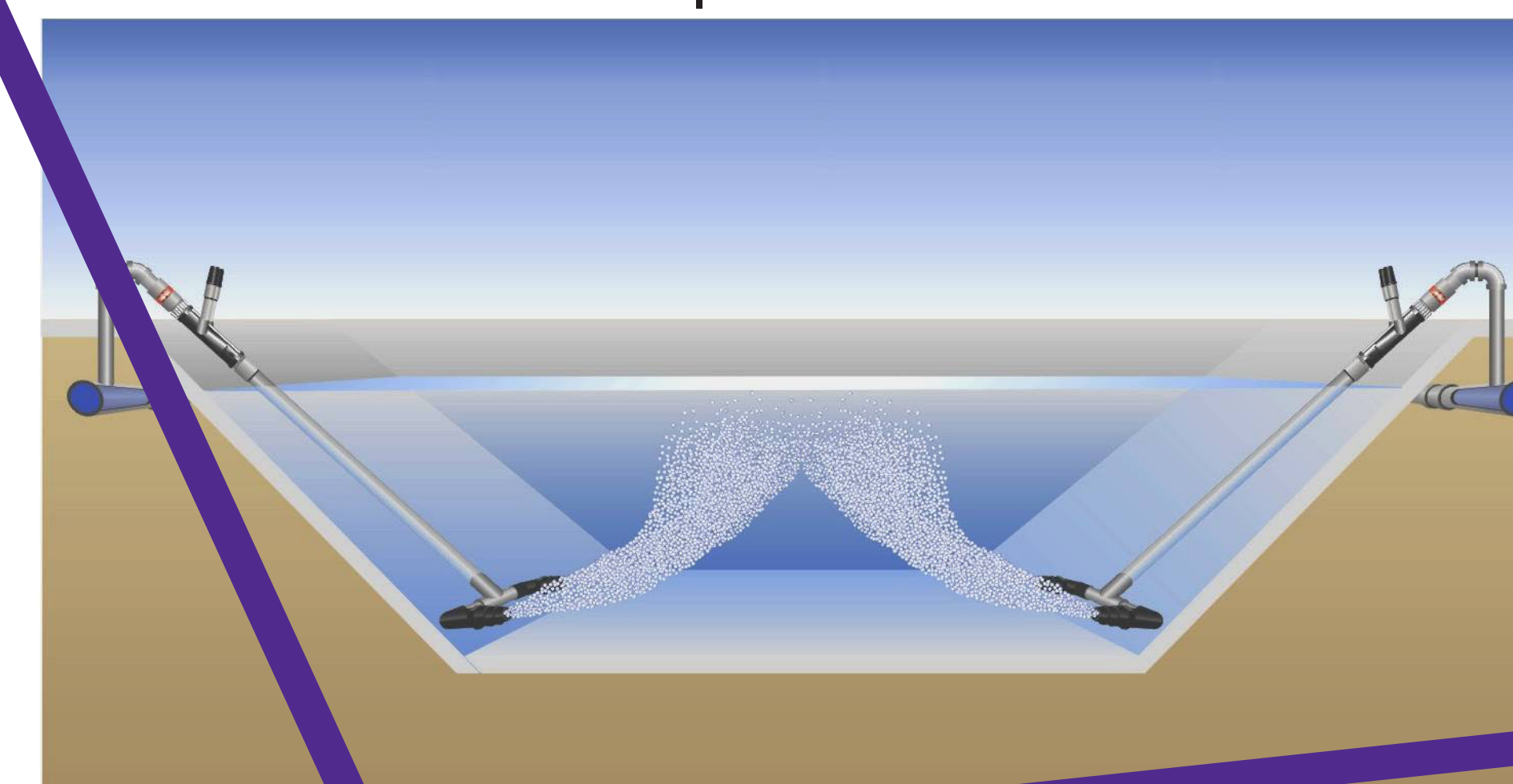


Wastewater Lagoon Management... for odor control, reducing biochemical oxygen demand (BOD) levels and increasing dissolved oxygen—AirJection® Aeration. With AirJection Aeration you get a complete systems approach to design that results in:

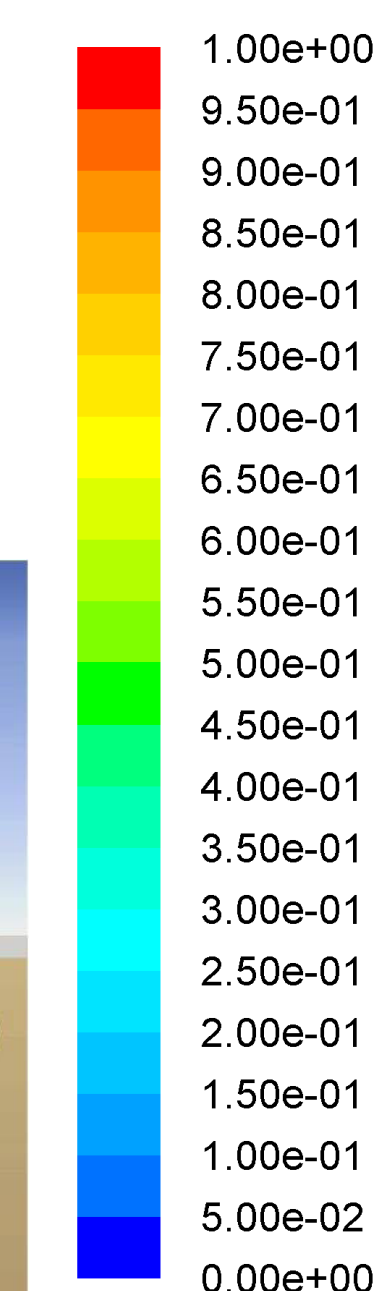
- low maintenance,
- simplicity,
- energy efficiency,
- and complete mixing,

with less

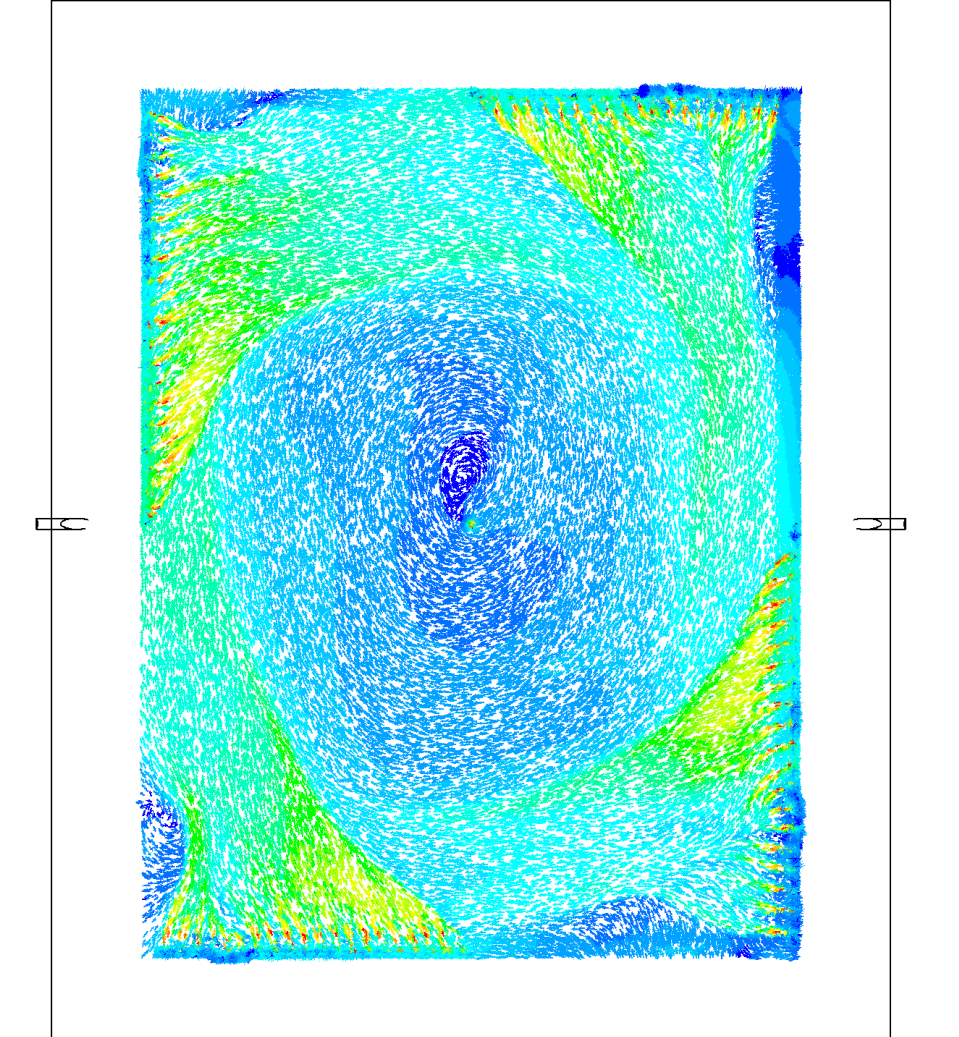
- surface or groundwater contamination,
- noxious odors,
- greenhouse gases,
- mosquitoes,
- and aerosol exposure.



Computational Fluid Dynamics (CFD) Analysis for Mixing

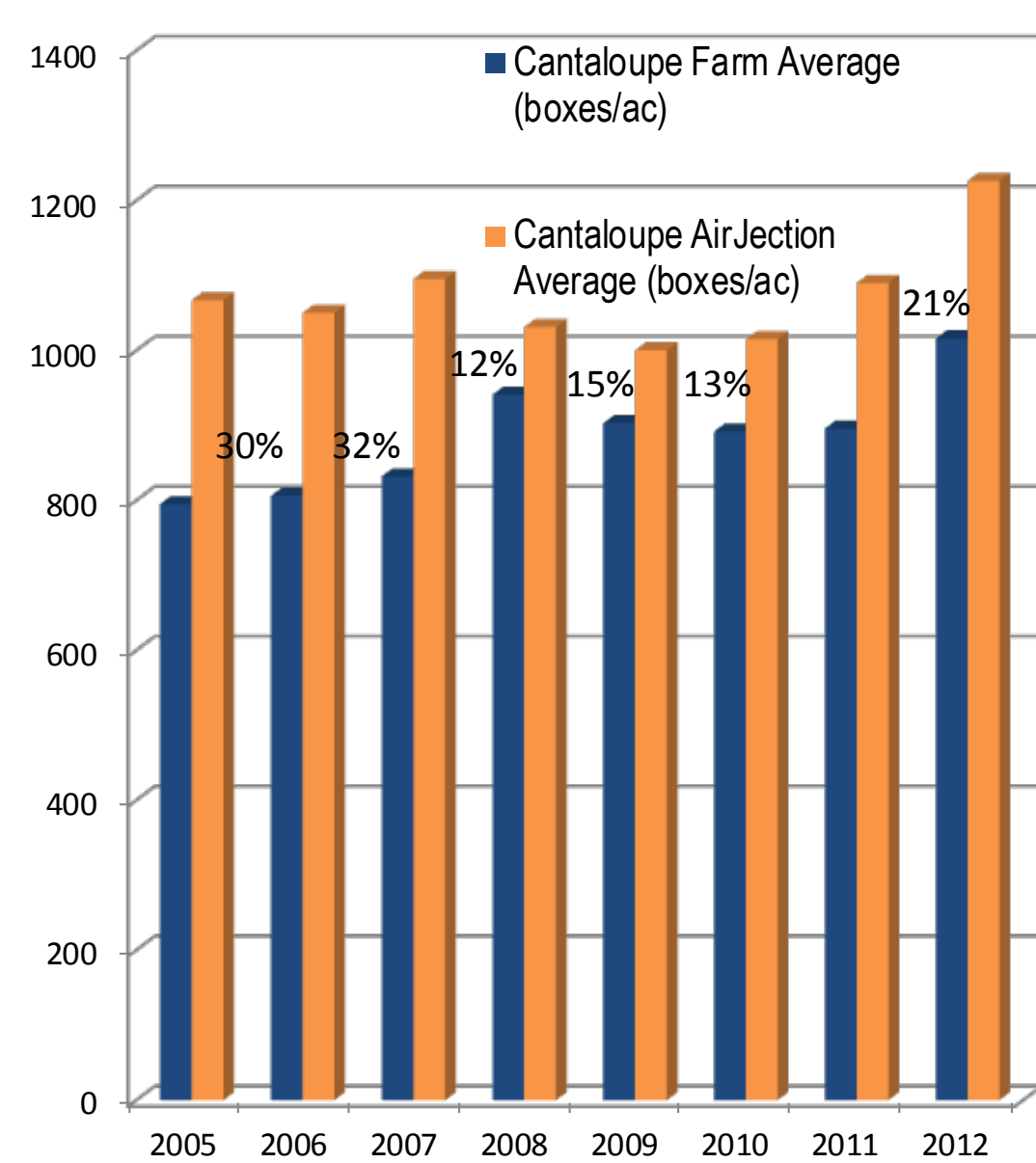


10 MM gal Lagoon (Plan View)



Velocity Vectors Colored by Velocity Magnitude (ft/s)

8-Year Update — Cantaloupe



- Increases water use efficiency (WUE) – the yield per unit of water used.
- Produces same crop size while irrigating less acreage.
- Water use and fertilizer efficiency greatly enhanced.
- Microscopic bubbles of air aerate soil and promote growth of beneficial soil microbes.
- Fewer chemicals needed, so less fertilizer in water supply of future generations.

Carrot Length AirJection vs. Fungicide

