Aerobic Granular Sludge

Dense Granules Settle in 5 mins

- 75% Less Space
- 40% Less Energy

Picture Courtesy Delft Technical University

Nereda

Aerobic Granular Sludge
Layered Microbial Community

AO / GAO
Anoxenic Nitrifiers

Anaerobic
Anoxic
Aerobic

AECOM
Fairfield-Suisun Demonstration Site

- Utilize Existing Aeration System (Blowers and Diffusers)
- Add Influent Distribution Grids and Effluent Weirs
- No Other Equipment or Chemicals

Full Scale Demonstration Goals
- Reliable Nutrient Removal
- Stress Test and Optimize
- Energy Efficiency and Low Cost
- Suitability for US (Bay Area)
- Quantify Capacity
- Regulatory Acceptance
- Effect of Shallow Tanks
Budget, Timing & BACWA Role
...building a consortium

Water Research Foundation Collaboration

- Tailored Collaboration Program with WRF to demonstrate AGS at full scale 
  “Good Housekeeping Seal”
- AECOMs Pre-Proposal Accepted
- Up to $100K in matching funds
- Goal – Secure partners & submit proposal for full scale
demonstration by May 1st
  ...or as soon as possible thereafter

Proposed Sources
- WRF $100K
- BACWA member “Earmarking” $300K
- Other (In Kind) $200K

Proposed Uses
- Retrofit Cost ~ 80%
- Operating Expense ~ 20%
Original Figure – May be 2x