



AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

AquaSBR® Sequencing Batch Reactor

AquaSBR® System Phases



AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

1 Mix-Fill (MF)

Influent Flow



2 React Fill (RF)

Influent Flow



5 Decant / Sludge Waste / Idle (D)

No Influent Flow



FIVE PHASES
OF OPERATION

3 React (R)

No Influent Flow



4 Settle (S)

Effluent

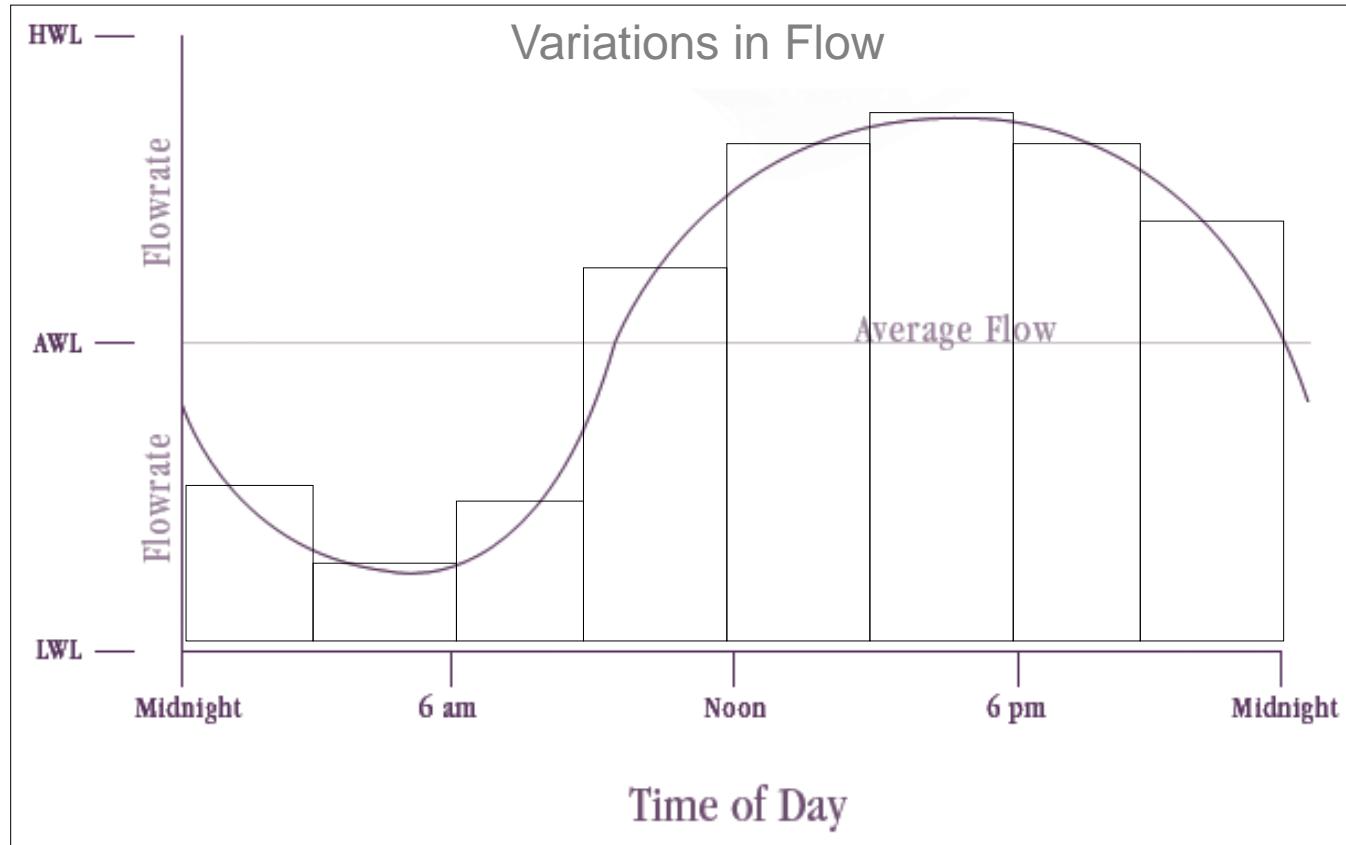
No Influent Flow





AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

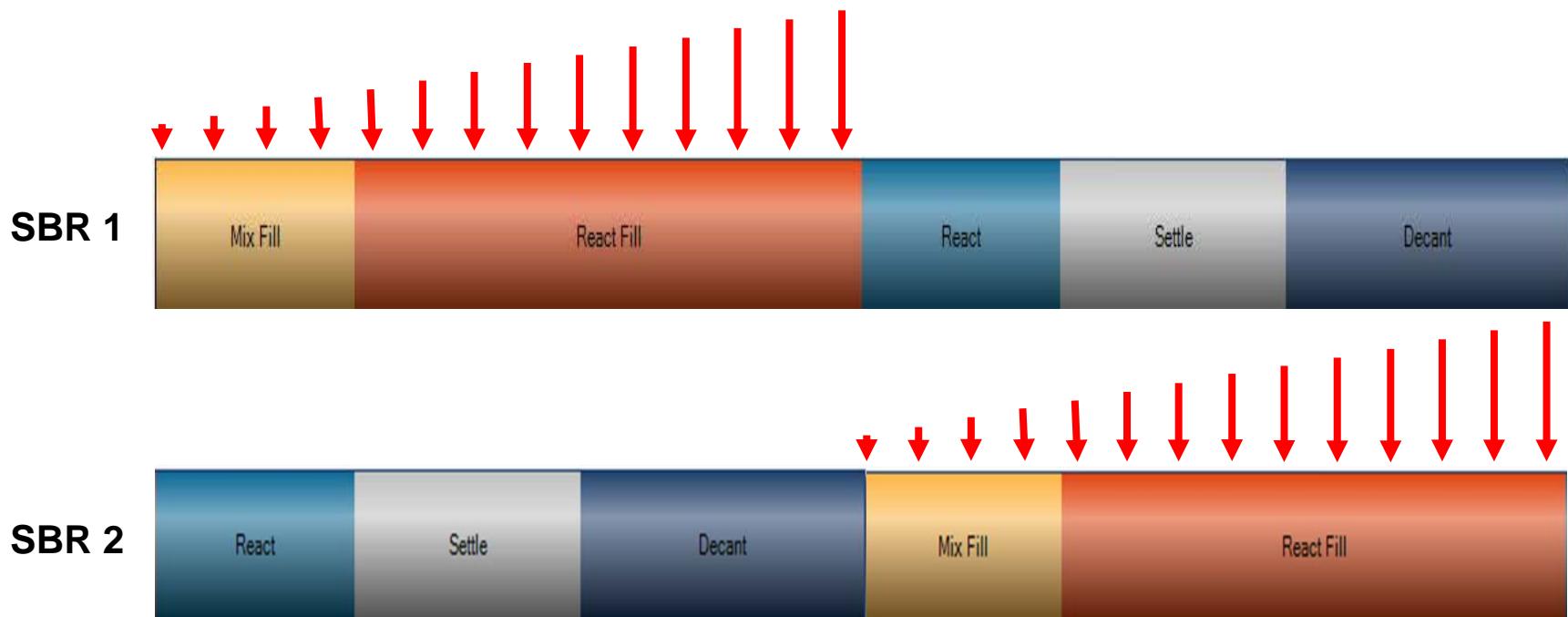
Cycle Times – Batch Volume Determination





AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

Cycle Structure - Typical Dual Basin Relationship



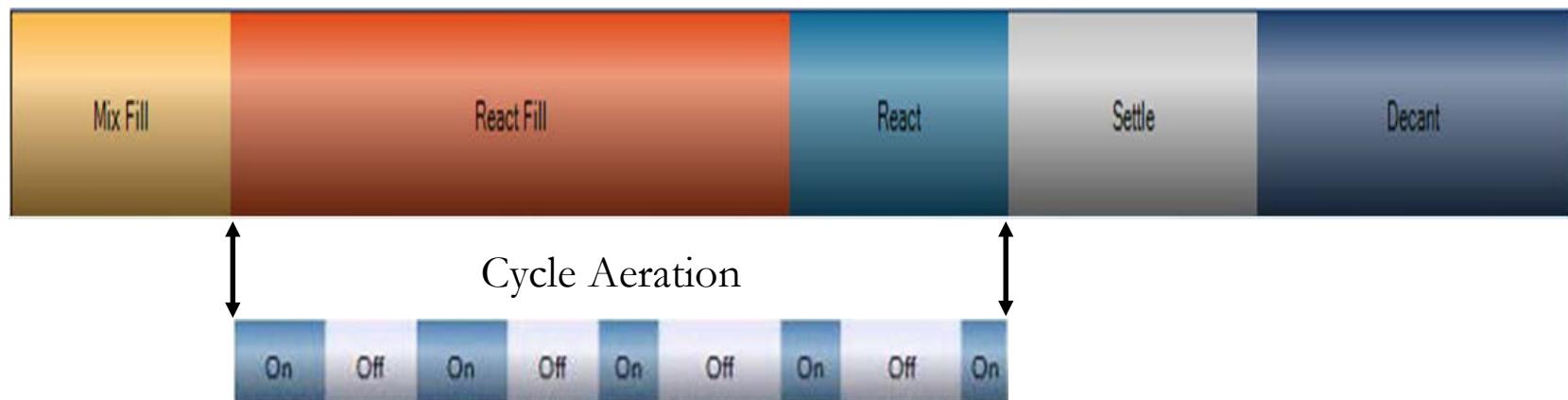


AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

Adaptive Design

Nitrogen Removal

Total Nitrogen Removal

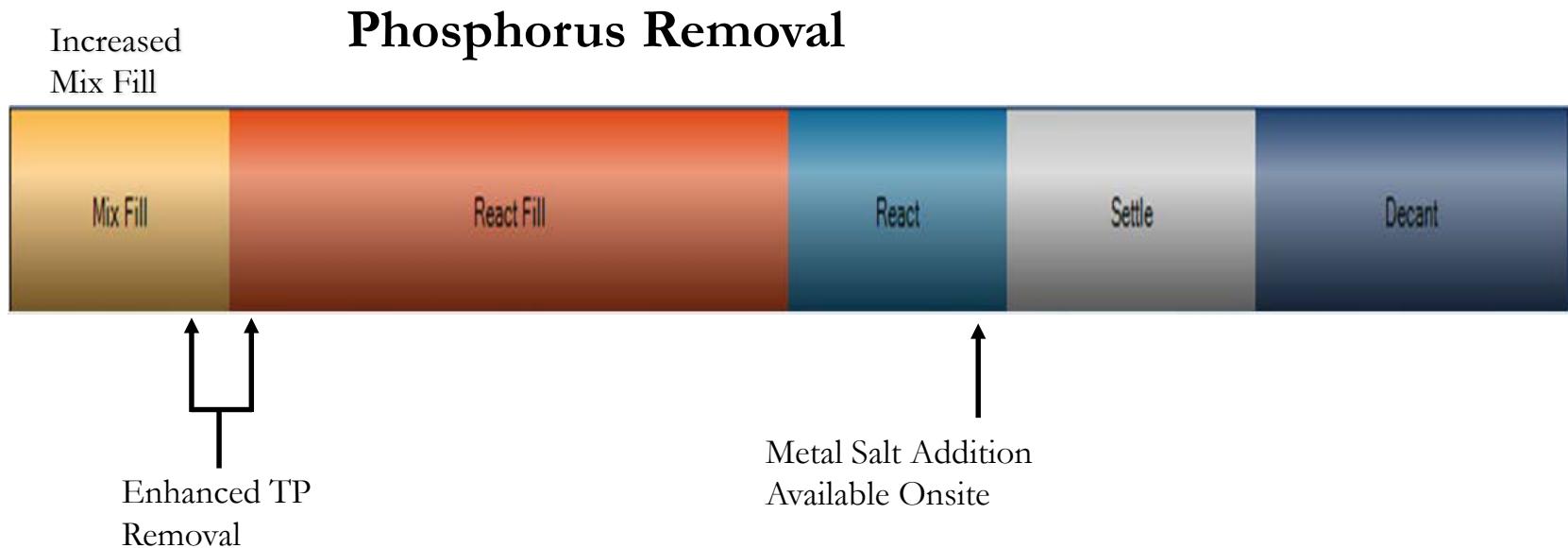




AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

Adaptive Design

Phosphorus Removal



AquaSBR® Components

Unequaled Quality



AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company



Aqua MixAir®



Aqua-Aerobic
Decanter



Aqua-Aerobic Control Solutions

Aqua-Aerobic Decanter



AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

- Two Models Available
 - Electrically Actuated
 - Ballast
- Floating Units
- Subsurface Withdrawal
- Redundancy in Control
- Low Entrance Velocities



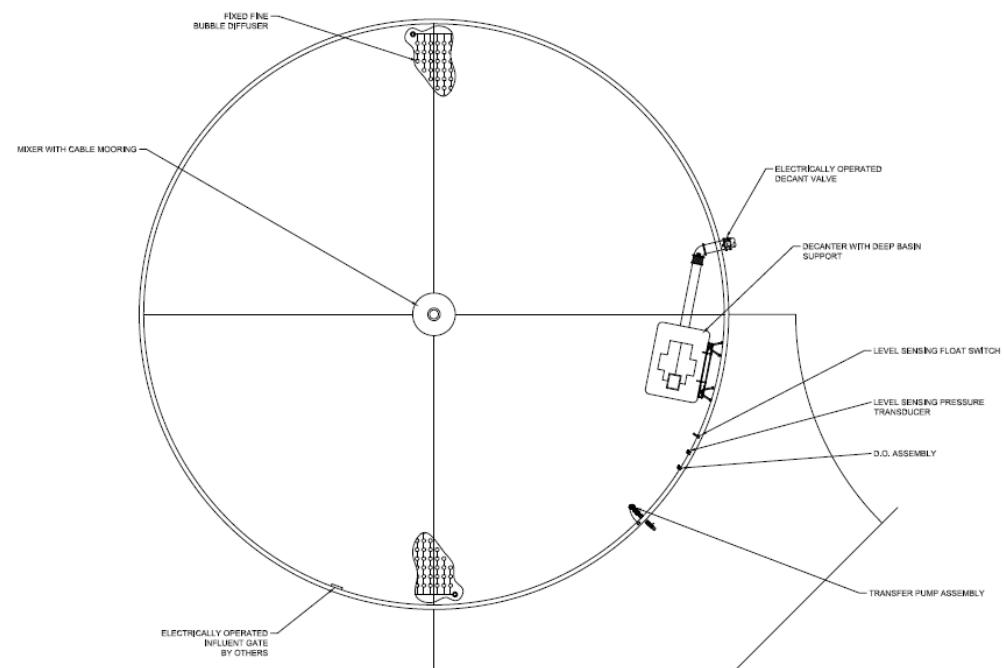


AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

Installation Profile

Valdosta, GA

- Largest AquaSBR in the US
- 12 MGD Average / 22 MGD Peak
- 3 mg/L TN / 1 mg/L TP





AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

Installation Profile

Port Wentworth, GA – Metal Removal

- AquaSBR System with AquaDisk Cloth Media Filters
- IntelliPro System Installed
- Three (3) Basin SBR System / Two (2) Six-Disk Filters
- Effluent Discharge to Savannah River
- Hg, Cu, Pb limits met with SBR system
- Partial particulate Zn removed in SBR and polished by Filter



AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

AquaSBR®

Metal Removal

	Required Limit ($\mu\text{g/L}$)	Plant Influent ($\mu\text{g/L}$)	Filter Influent ($\mu\text{g/L}$)	Plant Effluent ($\mu\text{g/L}$)
Total Hg	0.2	<0.2	<0.2	<0.2
Total Cu	5	16	<5	<5
Total Pb	1.5	1.6	<1.5	<1.5
Particulate Zn		39	5	0



AQUA-AEROBIC SYSTEMS, INC.
A Metawater Company

AquaSBR® Sequencing Batch Reactor
