

Sussex Regional Recharge Facility

Phase 2

AWMI

Public Hearing
Presentation

February 23rd, 2022



Phase 1 - Existing Facilities

- 90 million gallon treated effluent storage lagoon
- High volume pump station
- Monitoring and sampling equipment
- Monitoring wells
- Over 380 acres of cropland for reuse
- Over 200 acres of woodlands for reuse
- Connecting pipelines, meters, controls and other equipment
- Solid set sprinklers and spray irrigators



90 Million Gallon
Storage Lagoon

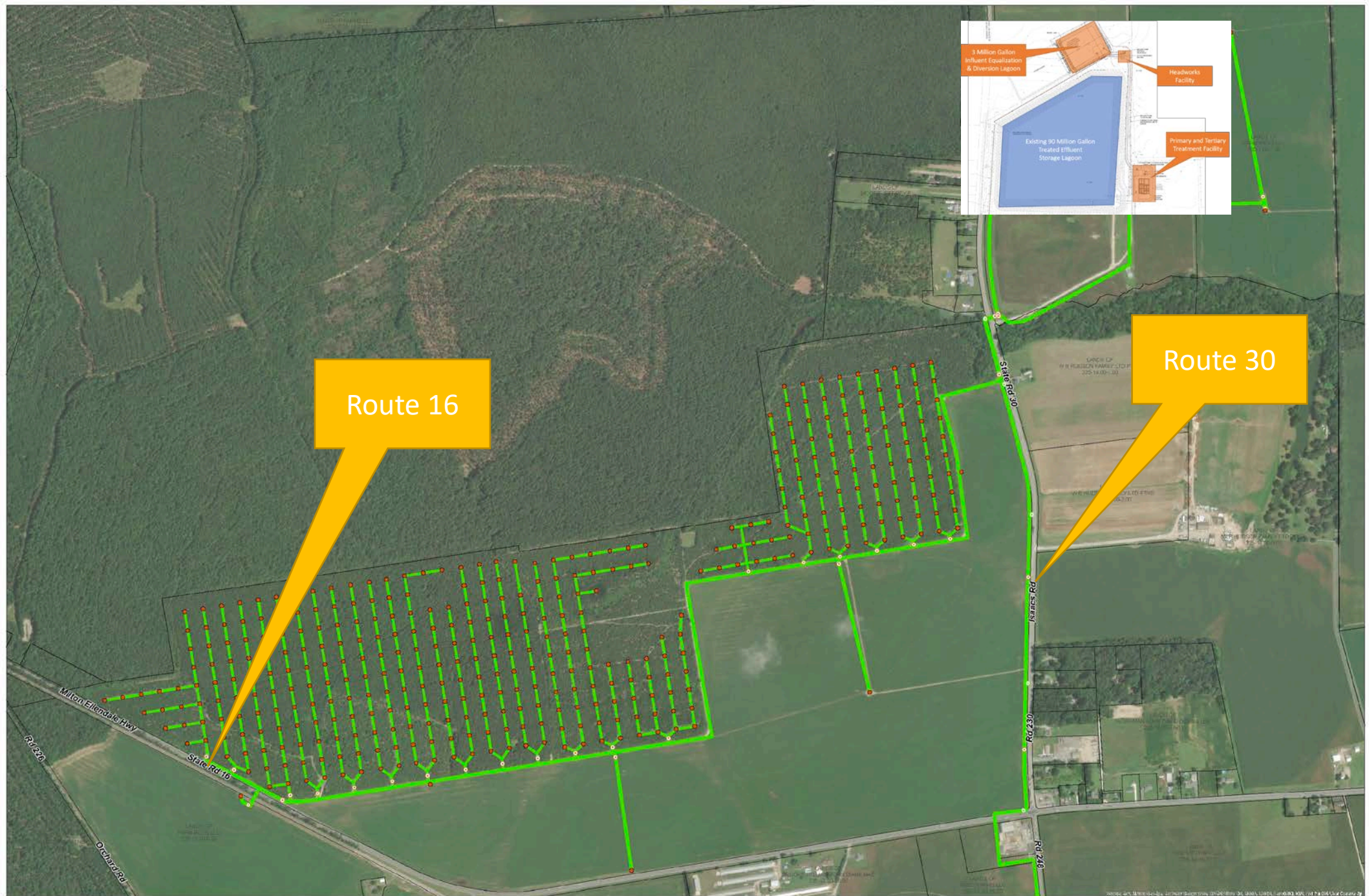
This is an aerial photograph of a rural landscape. A large, irregularly shaped green area is labeled 'Woodlands Recharge Area'. A large yellow area is labeled 'Crop Recharge Areas'. A blue polygon in the upper right is labeled '90 Million Gallon Storage Lagoon'. A green line runs along the boundary between the green and yellow areas. Roads are labeled 'Rd 250' and 'Rd 246'. A small blue line points from the text label to the blue polygon.

Woodlands
Recharge Area

Crop
Recharge
Areas

Phase 2 - Proposed Facilities

- 625,000 gallon per day Primary Wastewater Treatment Facility
- 3 million gallon lagoon for both influent equalization and emergency diversion
- Headworks with screening equipment
- Tertiary Treatment Facility including:
 - Cloth media filtration
 - Ultraviolet (UV) disinfection
- Onsite lab and monitoring facility
- Construction is anticipated to take 18 months from receipt of permit

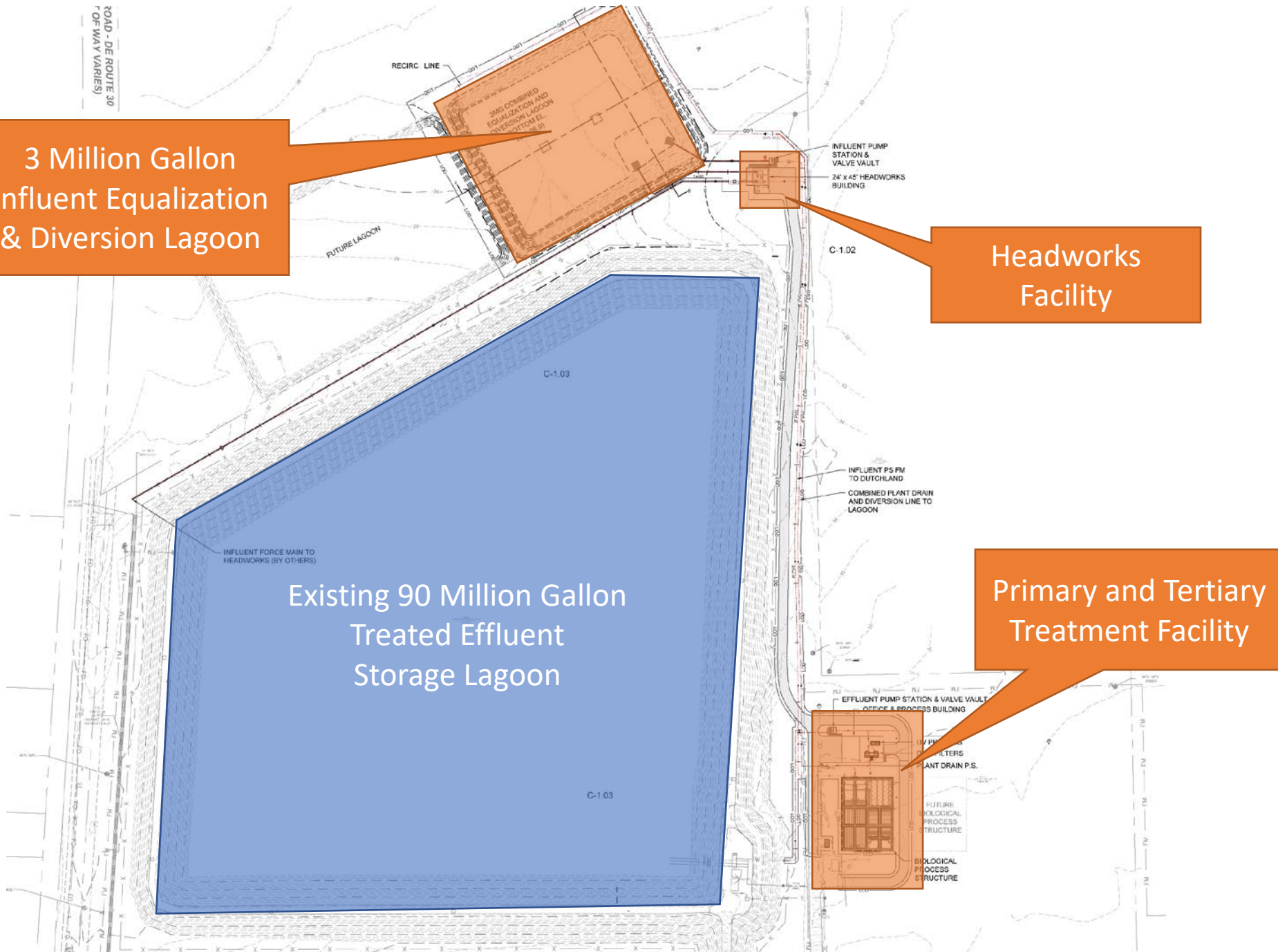


3 Million Gallon
Influent Equalization
& Diversion Lagoon

Existing 90 Million Gallon
Treated Effluent
Storage Lagoon

Headworks
Facility

Primary and Tertiary
Treatment Facility



Phase 2 - Capabilities

- Extensive equalization volume which will allow for buffering of fluctuations in flow
- Process and treat up to 625,000 gallons per day of wastewater from residential, commercial and industrial sources
 - System has been designed to handle peak flows far in excess of this to account for weather related events
- Divert and hold up to four days of inflow in the event of an emergency
 - Volume also available for diversion of off spec flow from Allen Harim
- Meet all Unlimited Public Access treatment levels and reduce nitrogen concentrations to below the drinking water limit of 10 mg/l
- Extensive monitoring will allow for a fine degree of control by operators

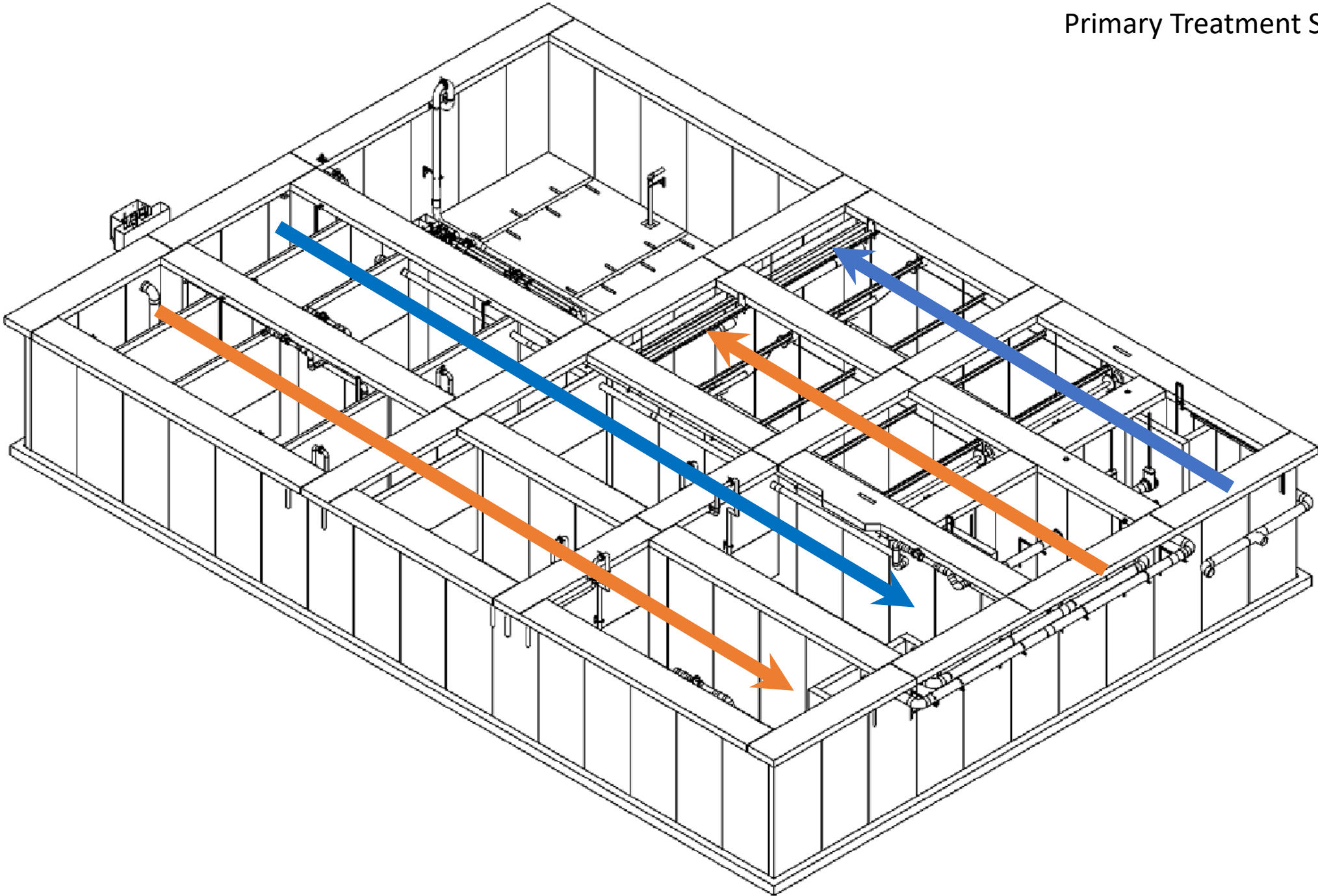
Phase 2 – Environmental Benefits

- Reduce use of supplemental fertilization on agricultural fields
- Reclaim water that would have been wasted for beneficial agricultural use
- Reduce groundwater withdrawals for agricultural irrigation preserving aquifer resources
- Reduces or eliminates discharges to local streams, rivers and the Inland Bays
- Equalization and diversion facilities safeguard against impacts from weather events that might be detrimental to smaller treatment plants

What Will It Look Like?

- Facility has been placed on the SRRF site to minimize its profile from the public
 - In the back and behind the lagoon
- Primary treatment facility will consist of above ground concrete basins
- The buildings for the Headworks and Tertiary Treatment facilities will be pole barns like those used extensively on the surrounding farms
- A landscape buffer around the edge of the site will further obscure the view from the road

Primary Treatment Schematic



View from Route 30 at the SRRF Entrance

Primary Treatment
Basins



View from on the SRRF site 1200 feet from Route 30



Primary Treatment
Basins