

Water: Our Precious Resource



Presented by Joe Greco

Superintendent: Livingston Water Pollution Control Facility

Water Facts

- Less than 3% of the Earth's water is fresh
- Only 3/10 of 1% is available for human use
- In the US: 26% is used for flushing toilets
- Roughly 22% is used for washing clothes
- Nearly 19% is used for showers/bathing

Reclaimed Water for Beneficial Reuse (RWBR)

- RWBR is taking wastewater treatment plant effluent giving it a specialized level of treatment
- Using the high-quality reclaimed water for beneficial uses
- Reclaimed water replaces or supplements ground water & potable water

Benefits of Water Reuse

- Reuse reduces demands on valuable ground water supplies used for drinking water.
- Reuse helps reduce pollutant loading to surface waters.
- Reuse may postpone costly investment for development of new water sources and supplies.
- Reuse can save money.

Potential RWBR Applications

- Landscape Irrigation
- Agricultural Irrigation
- Industrial Uses
- Fire Protection
- Construction Uses
- Miscellaneous

Township of Livingston

Provides water & wastewater services to
30,000 residents and commercial
customers



Township of Livingston

Obtained a Sustainable NJ grant to conduct a feasibility study to reuse effluent water



Four Categories

- Type I: Public Access Systems
- Type II: Agriculture Edible Crop Systems
- Type III: Restricted Access & Non Edible Crops
- Type IV: Industrial Systems, Maintenance Operations & Construction



Conclusions

- **LWPCF is Type IV-Most Feasible**
 - **Converted its sulfur dioxide feed carry saving 13,000 gallons/day**
 - **Converted its pump water seal system saving 13,000 gallons/day**
 - **Total water saved per day: 26,000 gals**
- **Next Steps: Sewer Jetting, Street Sweeping, Vehicle Washing resulting in thousands of gallons of savings per day**