



Sanitary Sewer Overflows

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Regulatory Programs

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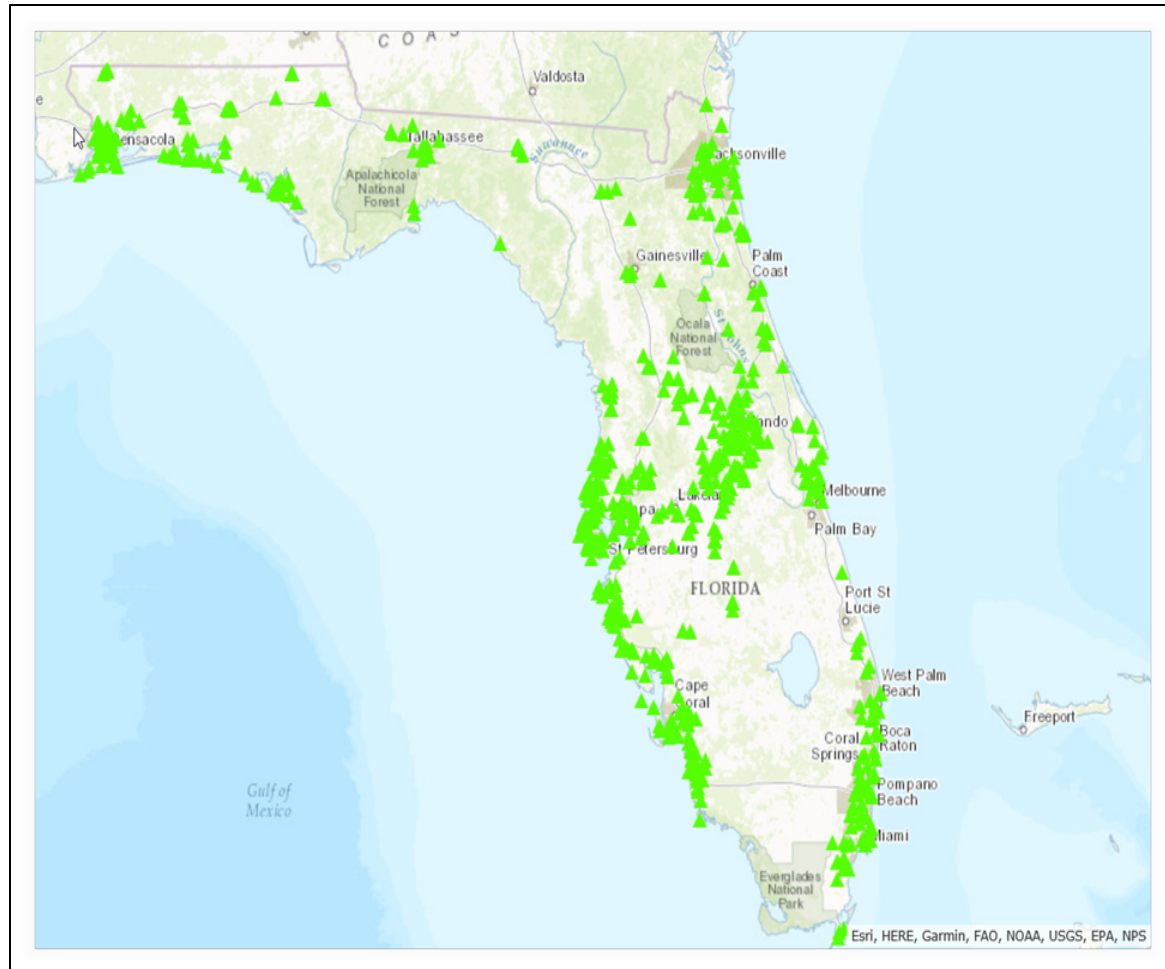
Wastewater Treatment Facilities

- **DEP, through its district offices, works with wastewater utilities and Florida residents to protect and conserve our water resources while meeting the basic public health need for effective wastewater treatment.**
- **These activities are part of DEP's coordinated efforts to promote safe, efficient, and environmentally sound management of Florida's domestic wastewater.**
- **The Domestic Wastewater Program is responsible for the development and administration of rules and policy for proper treatment of wastewater from domestic facilities.**



Wastewater Treatment Facilities

- **DEP regulates approximately 2,000 domestic wastewater facilities**
- **Providing a total treatment capacity of over 2.5 billion gallons per day**



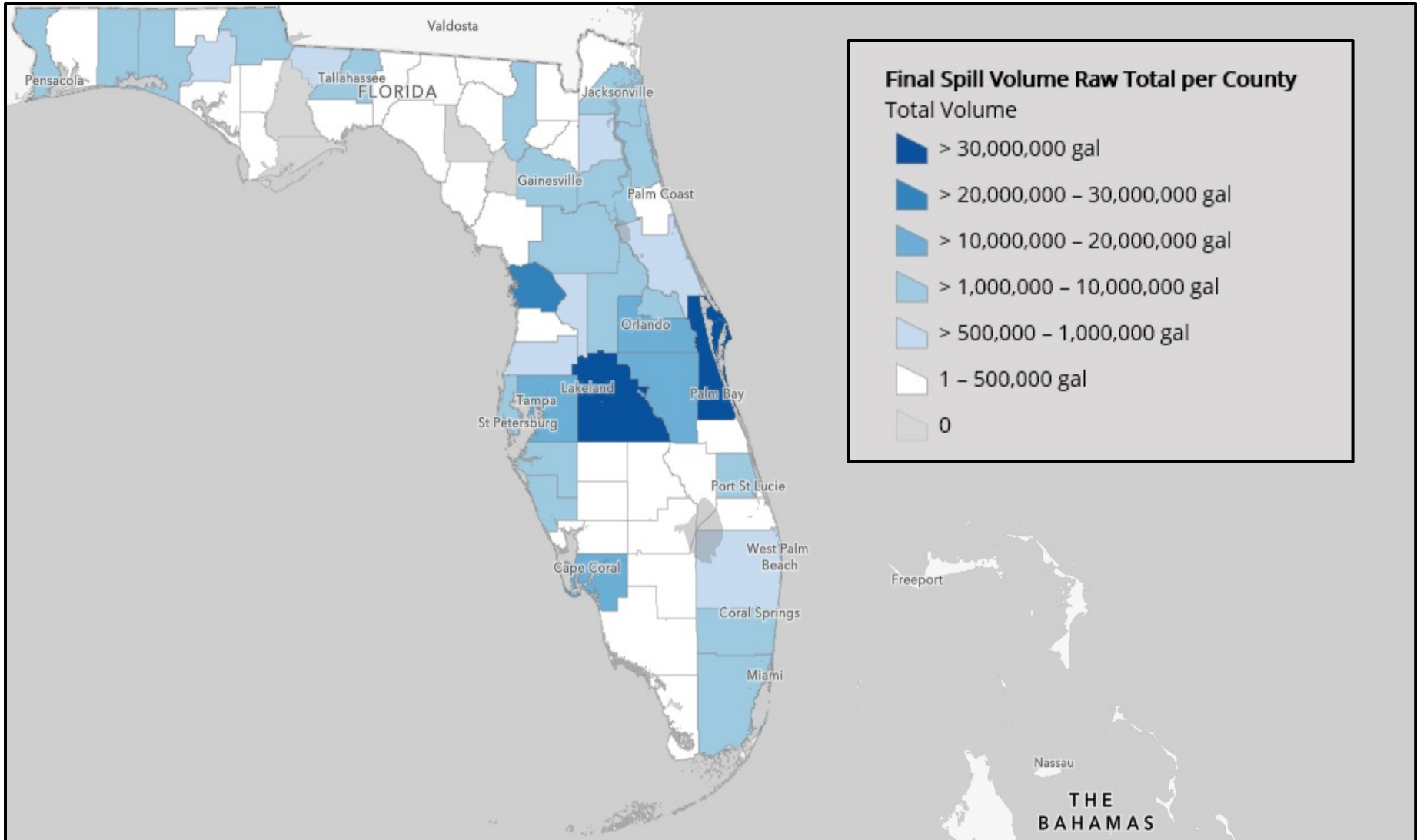


Sanitary Sewer Overflows

- **Sanitary Sewer Overflows (SSOs) occur when there is an obstruction, system failure, or capacity exceedance at a wastewater facility.**
- **SSOs can contain partially treated or untreated domestic wastewater and can have adverse effects to public health and the environment.**
- **DEP has made significant progress in improving the data collected regarding SSOs by implementing the GeoForm software.**

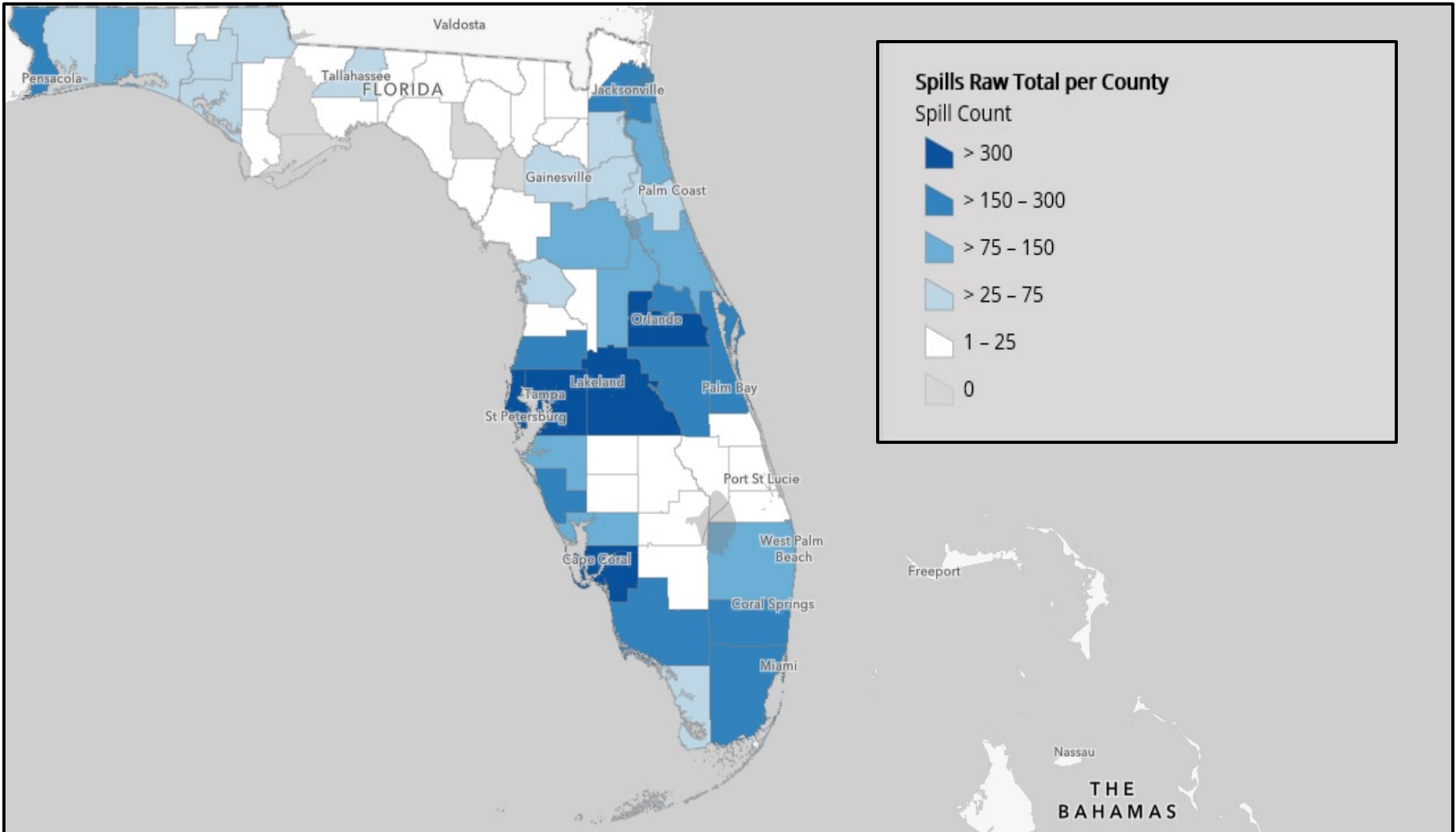


SSOs by Volume





SSOs by Number





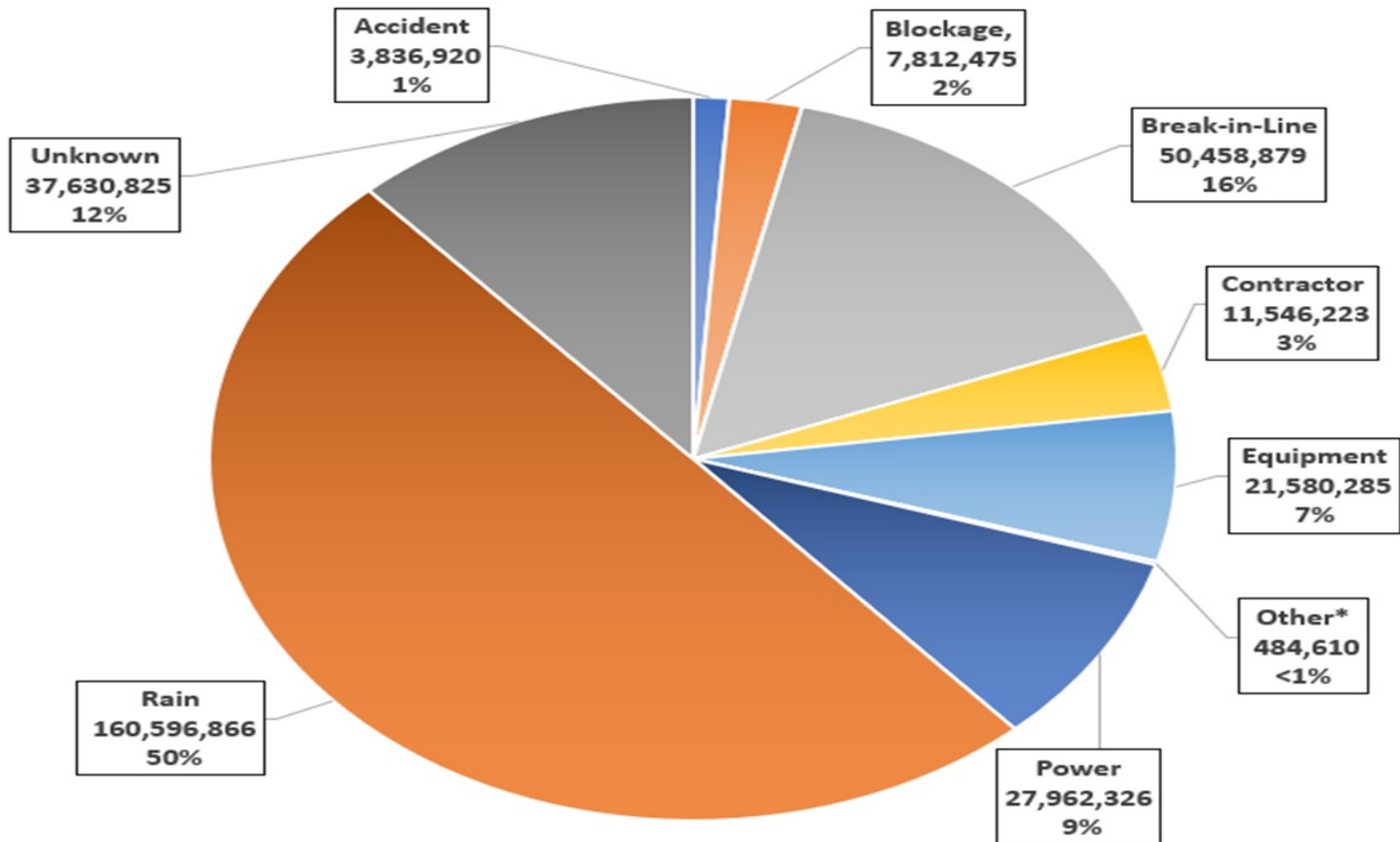
Common Causes

January 2017 through December 2018

Cause	Number of Spills	Volumes (Gallons)	Percentage (Volume)
Rain	730	160,596,866	50%
Break-In-Line	1142	50,458,879	16%
Unknown	558	37,630,825	12%
Power	937	27,962,326	9%
Equipment	947	21,580,285	7%
Contractor	446	11,546,223	4%
Blockage	855	7,812,475	2%
Accident	152	3,836,920	1%
Other*	117	484,610	<1%
Total	5884	321,909,409	100%



Common Causes by Volume (Gallons)





SSO Evaluation for Storm Events

- **DEP conducted an investigation of SSOs following storm events of 2016.**
- **The third-party study provided an evaluation of SSO events, causes of events, and recommendations to minimize overflows.**
- **Infiltration and inflow (rain) and loss of power were identified as primary causes of SSOs in storm events.**
- **Recommendations include:**
 - **Address power loss issues**
 - **Sewer system cleaning and maintenance**
 - **Reducing infiltration and inflow through system rehabilitation and repairing broken or leaking lines**
 - **Enlarging or upgrading capacity and/or reliability**
 - **Construction of wet weather storage and treatment facilities to treat excess flows**



Outreach Initiative

- Quarterly meetings with facilities
- Conduct statewide resiliency training for facilities
- Outreach brochures to distribute to facilities and the public
- Storm Preparation Guide and Checklist provided to utilities and posted on DEP's website: <https://floridadep.gov/water/water/documents/storm-preparation-guidance-and-checklist-wastewater-facilities>
- Post-Storm Outreach
 - Hurricane Response Call Center
 - Investigate reports of spill
 - Site visits to facilities to determine operational status



Common Corrective Actions

- **Replace/install backup generators and pumps**
- **Survey and fix I&I issues**
- **Create Smoke Test Pilot Project**
- **Sample all surface water bodies impacted by SSOs**
- **Lift station improvements**
- **Complete Resiliency Assessment**
- **Quarterly/annual status reports**
- **Conduct Capacity Management Operation and Maintenance (CMOM)**
- **Update and Submit O & M**
- **Create/Update/Submit Emergency Action Plan**
- **Provide a compliance schedule**
- **Training program for electrical and mechanical staff**
- **Evaluate and provide results of facility deficiencies in need of repair/upgrade (Rehabilitation Process Plan)**



In-Kind Penalty Project

- **Provides violator with opportunity to reduce total cash amount owed.**
- **Not designed to provide credit for the cost of corrective actions.**
- **In-kind penalties are limited to the following specific options:**
 - **Material and/or Labor Support for Environmental Enhancement or Restoration Projects**
 - **Environmental Information/Education Projects**
 - **Capital or Facility Improvements**
 - **Property**



Pollution Prevention Project (P2)

- **P2 project defined as a process improvement that can be classified in one of the following categories:**
 - **Source Reduction**
 - **Waste Minimization**
 - **On-Site Recycling**
- **P2 project does NOT include:**
 - **Off-site recycling**
 - **Treatment**
 - **Disposal**

