

National Park Service
2013 Environmental Achievement Awards

Award Winner

Grand Canyon North Rim, LLC, Concessioner
Grand Canyon National Park
Waste Reduction in Grand Canyon North Rim

In 2012, Grand Canyon North Rim, LLC (GCNR), concessioner at Grand Canyon National Park, completed a project to install new technologies that will reduce and divert waste material generated by their operations, focus waste management, and promote creative employee actions.

This project was initiated when GCNR investigated food waste digester technologies that were available for hospitality operations operating in national parks. The investigation identified a new method of organic waste digestion. Before implementation of the plan, it was discovered that there were compatibility issues with the park's wastewater discharge and treatment system. However, by working through these challenges using laboratory analyses, discharge rates, and even operational considerations, the new food digester was accepted and installed at North Rim.

Eventually, it was determined the treatment unit was not large enough to support the amount of food waste being generated by GCNR, so it was replaced with a more advanced and robust system. During this same year, GCNR began exclusive use of "biodegradable" service ware which could be discarded into the digester for disposal, further reducing landfill waste and eliminating the need for waste segregation.

Achievements include:

- Diversion of 89 percent of food waste from the landfill at a cost savings of over \$50,000 annually; and
- Elimination of over 132 metric tons of carbon dioxide (CO₂) equivalent greenhouse gas emissions from diverting the waste from the landfill.

In addition to reducing food waste sent to the landfill, GCNR installed a fully functioning, hand-sorting, waste handling center that removes all recyclable material from the waste stream. This, along with the organic waste diversion, increased their overall waste diversion rate to nearly 100 percent.

GCNR has developed a waste diversion system that should serve as a model for other large concession operations in national parks. Their waste reduction efforts have led to significant environmental benefits to the park and the surrounding communities.