

How To Patchwork Together Funding Sources In Order To Develop A Transfer Station

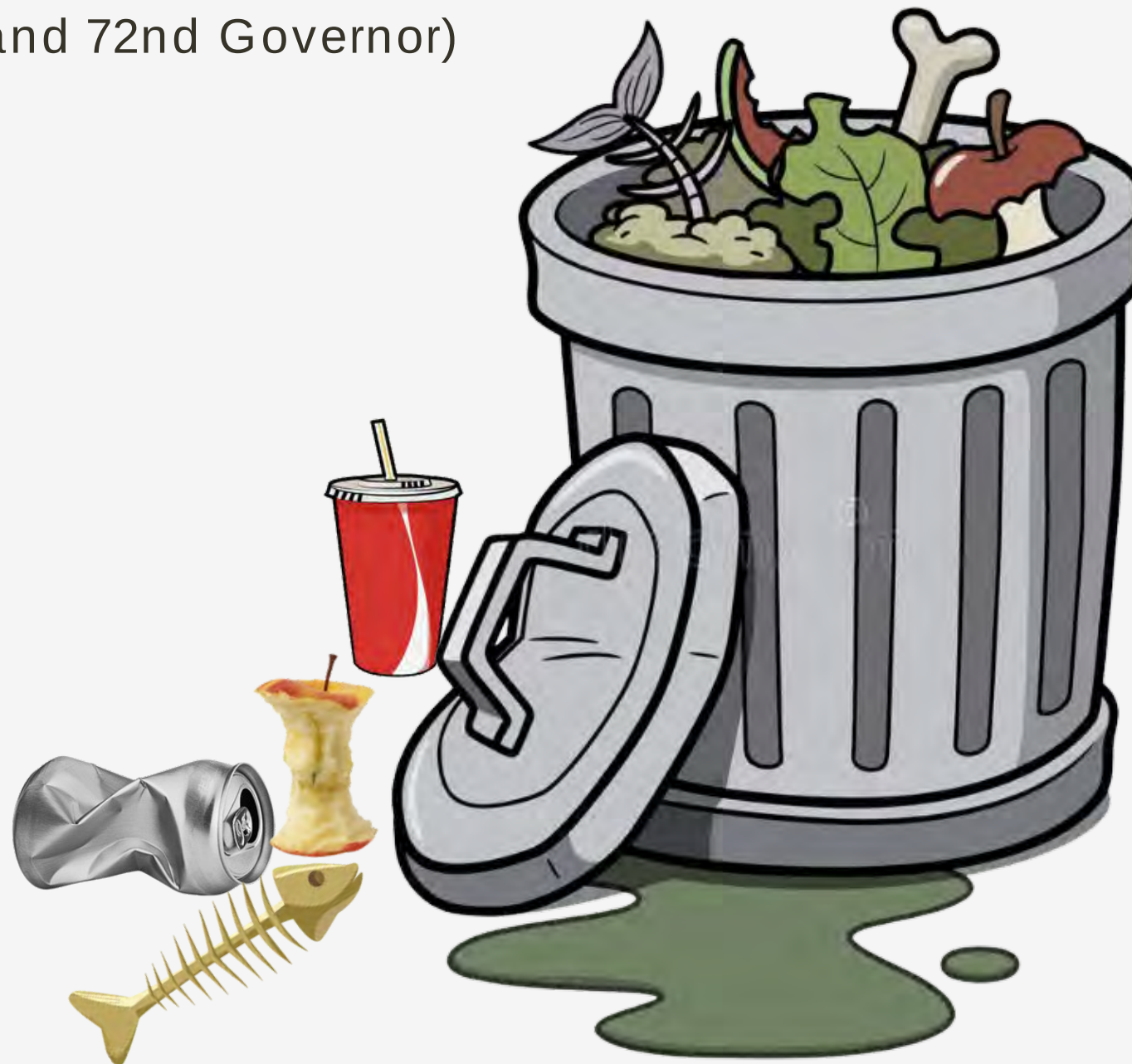
-- Rincon's Experience

Or What To Do When Your Vision Exceeds Your Budget

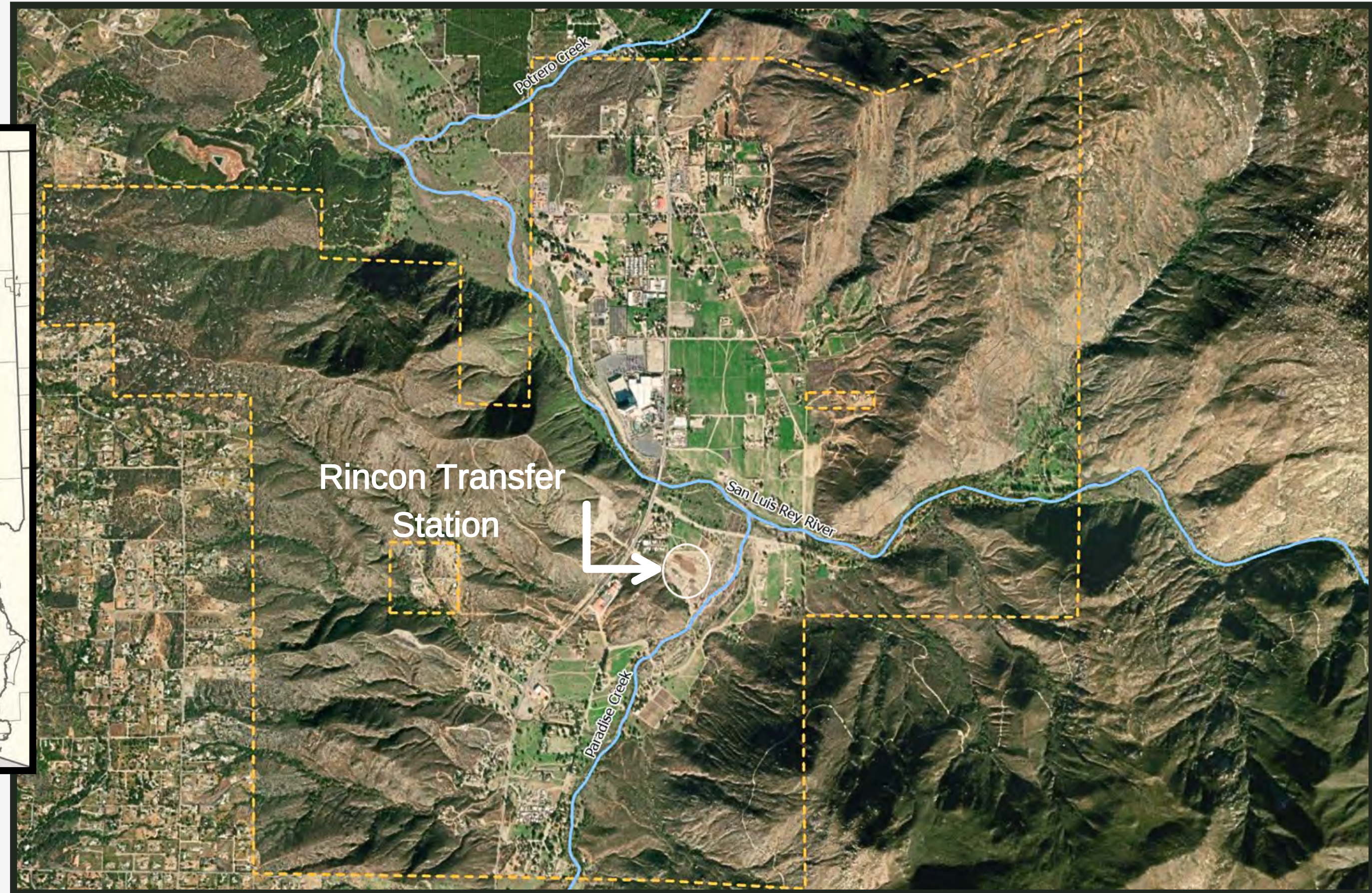


“Benjamin Franklin said there were only two things certain in life: death and taxes. But I'd like to add a third certainty: trash.”

-- Ruth Ann Minner (Delaware politician and 72nd Governor)



Location of Rincon and Location of Transfer Station on the Reservation



2009

The Rincon Tribe operates a transfer station that was created in 2009. The transfer station is located south of the San Luis Rey River and west of Valley Center Road and has an area of 2.23 acres. A material stockpile area of 1.89 acres lies adjacent





Rusty, Random Stuff



Graveyard For Dead Cars



2019-ish

Before Transformation....



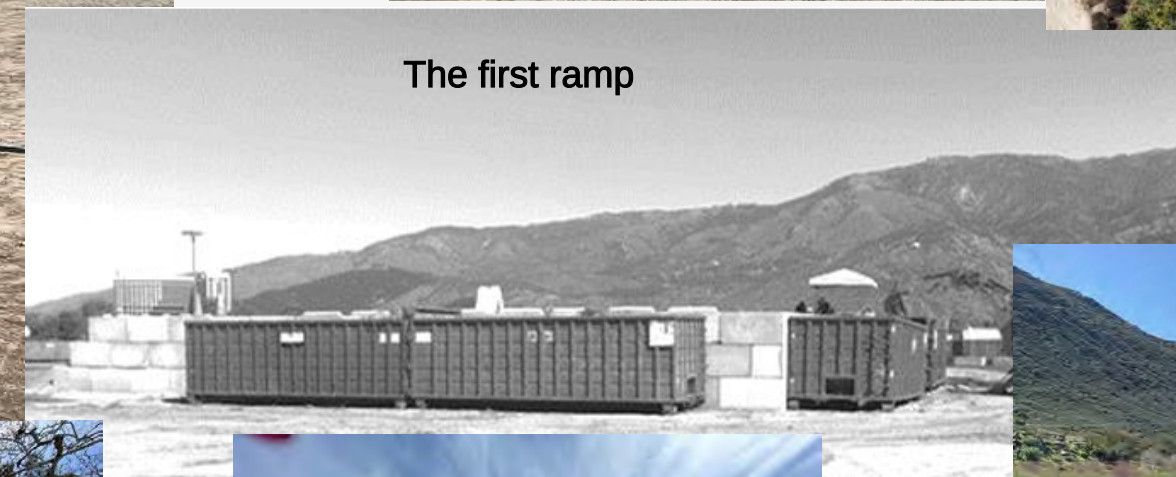
Office



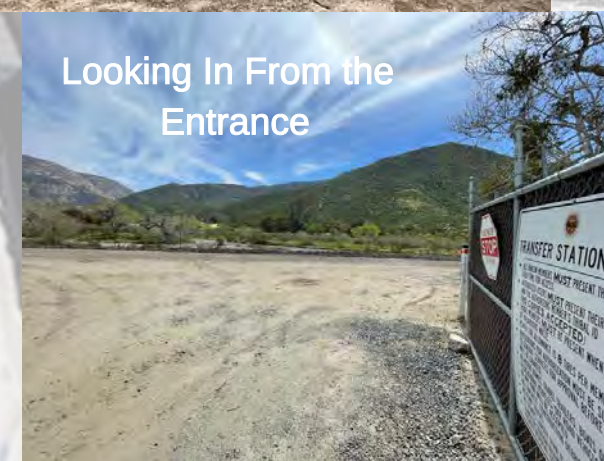
Back Gate



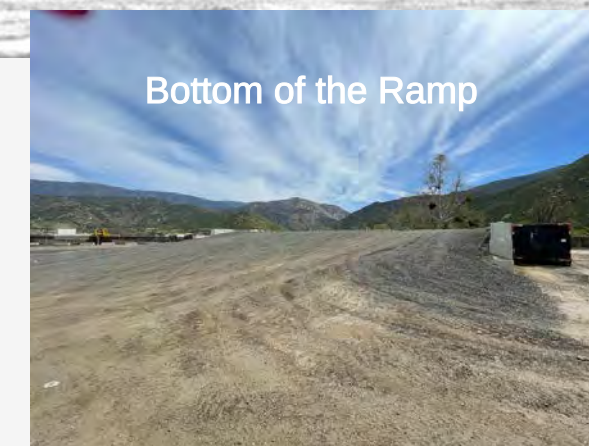
Lots of Wood



The first ramp



Looking In From the Entrance



Bottom of the Ramp



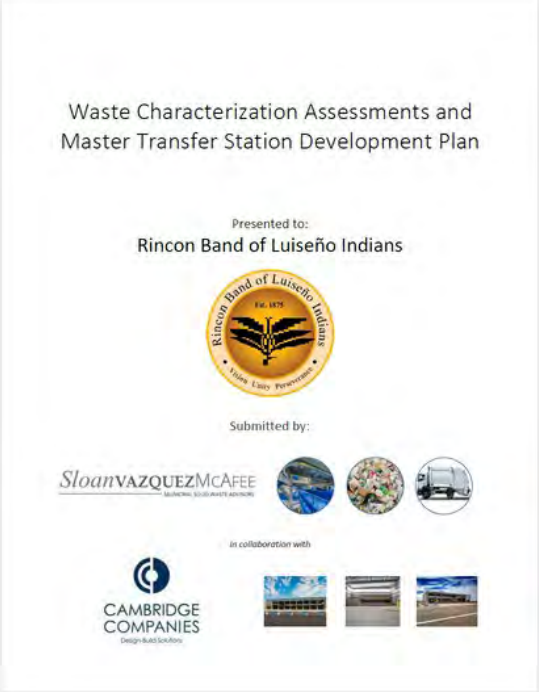
Top of the Ramp

HOW THINGS LOOKED IN 2019/2020



PLANNING AND TRAINING

2020-2021 Rincon ISWMP	Written in-house, good for providing an overview. Can make this part of your GAP workplan.
2020-2021 40-h HAZWOPER (in-person) + Spill Response Training (ITEP, online; 2025 - USFWS, in-person)	Training completed. 8-h HAZWOPER refresh courses every year since then.
2021 Waste Assessment (During Covid)	Compiled statistics from waste company invoices, developed demographic info. Can make this part of your GAP workplan.
2023 Transfer Station Master Development Plan	Contractor performed. Rincon collected residential data. Can make this part of your GAP workplan.
2023 Waste Assessment (At EDCO in Escondido)	Contractor performed. Sorts included residential, business, and government trash. Can make this part of your GAP workplan. Part of the Transfer Station Master Development Plan.
2024 Rincon Master Development Plan Update	Tribally Funded. Provides Council's priorities with respect to solid waste issues.





Rincon Master Transfer Station Development Plan

A Development Plan Provides	Purpose
A Conceptual Facility Plan	Provides a multi-phased approach to the development of the site, assisting the Tribe with future funding needs and a vision for long term site planning.
Improved Facility Layout	To better segregate materials, add secondary containment and/or canopies/roofing, to improves storm drainage, to enhance traffic flow
Phased Implementation	Can more easily phase implementation and support a more integrated system for waste management, utilize innovative technology, provide better customer service and education.
Clear Deliverables	A phased, a prioritized list of projects and approximate associated costs, which providing the Tribe a roadmap for efficient, ordered, and thoughtful implementation

Rincon's Plan - Future Improvements

Planning Component	Purpose
Modified Grading Plan	For site, drainage plans
Concrete or Asphalt Pads/Areas Under Roofing	To help prevent ground and surface water contamination
An Improved Office Structure	With electricity, a/c and water, spill kit, first aid, PPE storage, on-site flush toilet & sink with running water
Electric/Automatic Gate	To control site access more efficiently
Weigh Scale/Weigh Bridge	At entrance/exit to accurately calculate volume of waste brought in
Security Camera/Surveillance System With Wi-Fi Connection	Upgrade site security to better protect valuables, monitor site access, utilize software that requires internet or network access, to upload Transfer Station drop-off data automatically to a database, to accurately calculate volume of waste brought in, automatically produce graphs to more easily see trends
Multi-Bay Structure With Secondary Containment	For HHW, e-waste, tires
Purchase of Another Recycling Trailer	To better provide a one-stop disposal/recycling facility (we currently have a mobile trailer that is taken to different neighborhoods to provide convenience for tribal members)
Roofing Over the Ramp	Helps keep tribal members and staff cooler and dryer when emptying waste
Electronic Software to Document Incoming Waste Quantities	Allows data entry by Attendant(s) on iPads/tablets, and data analysis by the Environmental and General Services Departments. Allows for instant updates of Allowed Users list. Automated upload of data to the network



2022 - New trash truck (Volkswagen Settlement + GAP funded)



**2023 - New spill containment pallets, carport canopy, and spill kits for HHW
- GAP funded)**



2022 - 2023 - Flammable Cabinet Purchased - GAP Funded



2022-2023 - New 20' shipping container for getting tires off the ground, out of the sun, protected from rain/vectors and snakes Also allow us to not be tied to a particular vendor for removal, and allow walk-in access to the tires - tribally funded.

**2025 – 2026 Bolt it onto a concrete pad - Tribally Funded
Roofing over the pad + shipping container - SWIFR**



2023 - New office and septic system constructed. Has heat, A/C, electricity, a fridge, a restroom, running water, and shade (Tribally funded)

2024 - A new giant sign indicating accepted items was posted (Hazardous Waste Grant). Old trailer office in the background was removed



2023 - New wood chipper - GAP funded

2024 - New wood chipper/dump truck combo with removable roof - (Volkswagen settlement and Tribally-Funded)





2024 - New stump grinder (BIA Invasive Species Grant)

2024 - New Composter and Maturation Bins

--- Plus Food Scrap Collector Bins

GAP Funded



2024 HAZARDOUS WASTE GRANT

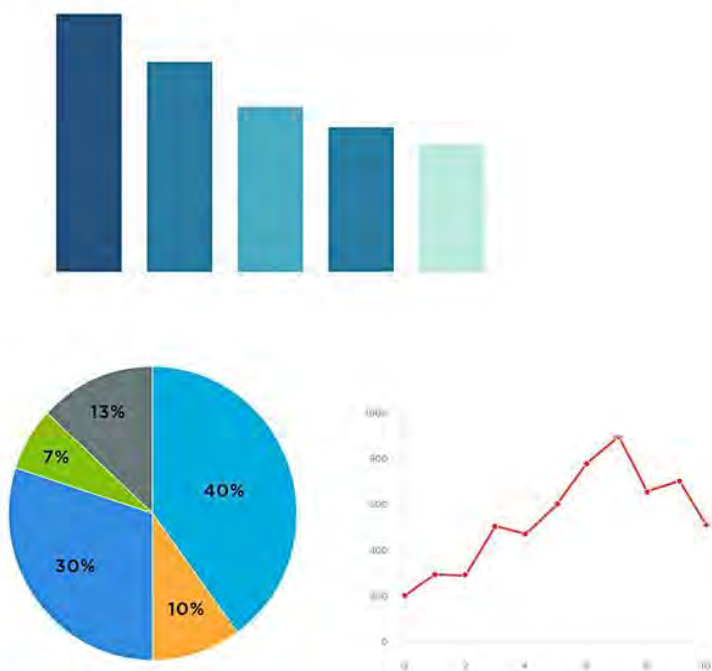
Water, Electricity, and Security

ACHIEVEMENTS:	DETAILS
Developed New Check-in/Inventory Management Software	Purchased tablets and contracted with a software company to create a network-based, electronic check-in/inventory management software for HHW and other wastes accepted by the Transfer Station
Purchased and Installed Multiple Security Cameras	Multiple locations within the Transfer Station and purchased 3 years of extended warranty, storage and monitoring services for each, providing comprehensive security camera coverage of the Transfer Station.
Extended Electrical and Water Service to Multiple Locations Within the Transfer Station and Installed an Eye Wash Station in the HHW Area. Installed a 50 Amp Electrical Subpanel	Provided adequate water and electrical access across the site. Improved safety of HHW area.
Installed an Automatic Gate, a Government Employee Badge Reader, Number Pad Opener, and enabled “Clicker” access. Installed a Loop Sensor for Automatic Closing of the Gate. Button Installed in Office For Attendants to Open the Gate From There.	Improved site access control.
Established a dedicated network Connection and/or WiFi access at the Transfer Station	Allows upload of data to the network database. Allows for instant updating of allowed tribal members and their approved designated users.

2024 - Check-in Form Designed, Up-to-Date Lists of Tribal Members and other Authorized Users, Reporting. Keeps Track of Volumes of Substances, Ensuring Timely Disposals.

Reporting (In Progress)

- Estimate weight of HHW
 - Use average volume to weight average to convert
- Percent of each waste category
- Email notification what percentage HHW to limit



SafetyStatus						
Waste Transfer Station Form						
Start Date: 12/25/2023 End Date: 03/26/2024						
Incident #	Incident Type	Reporter	Created	Last Updated	Status	
WASTE-0158	Waste Transfer Station Form	BenVau, Jeanne	Mar 25, 2024	Mar 25, 2024	Open	View Archive
WASTE-0157	Waste Transfer Station Form	BenVau, Jeanne	Mar 25, 2024	Mar 25, 2024	Open	View Archive
WASTE-0156	Waste Transfer Station Form	Administrator, SafetyStatus	Mar 15, 2024	Mar 15, 2024	Open	View Archive
WASTE-0155	Waste Transfer Station Form	BenVau, Jeanne	Mar 5, 2024	Mar 5, 2024	Open	View Archive
WASTE-0154	Waste Transfer Station Form	BenVau, Jeanne	Mar 5, 2024	Mar 5, 2024	Open	View Archive
WASTE-0153	Waste Transfer Station Form	Administrator, SafetyStatus	Mar 5, 2024	Mar 5, 2024	Open	View Archive
WASTE-0152	Waste Transfer Station Form	Administrator, SafetyStatus	Mar 5, 2024	Mar 5, 2024	Open	View Archive
WASTE-0151	Waste Transfer Station Form	BenVau, Jeanne	Mar 4, 2024	Mar 4, 2024	Open	View Archive
WASTE-0150	Waste Transfer Station Form	Administrator, SafetyStatus	Mar 4, 2024	Mar 4, 2024	Open	View Archive
WASTE-0149	Waste Transfer Station Form	BenVau, Jeanne	Mar 4, 2024	Mar 4, 2024	Open	View Archive
WASTE-0148	Waste Transfer Station Form	Administrator, SafetyStatus	Feb 22, 2024	Feb 22, 2024	Open	View Archive
WASTE-0147	Waste Transfer Station Form	Administrator, SafetyStatus	Feb 22, 2024	Feb 22, 2024	Open	View Archive
WASTE-0146	Waste Transfer Station Form	Administrator, SafetyStatus	Feb 15, 2024	Feb 15, 2024	Open	View Archive
WASTE-0145	Waste Transfer Station Form	Hernandez, Manolo	Feb 15, 2024	Feb 15, 2024	Open	View Archive
WASTE-0143	Waste Transfer Station Form	Administrator, SafetyStatus	Feb 14, 2024	Feb 14, 2024	Open	View Archive
WASTE-0142	Waste Transfer Station Form	Administrator, SafetyStatus	Feb 14, 2024	Feb 14, 2024	Open	View Archive
WASTE-0141	Waste Transfer Station Form	Administrator, SafetyStatus	Feb 8, 2024	Feb 8, 2024	Open	View Archive

Customized Digital Waste Check -in and Inventory Tracking System

SafetyStatus

Support

Document New Waste Record

Waste Transfer Station Records [In Progress]

Waste Summary Reports

Waste Transfer Station records (closed)

Administration

Dashboard

Data Manager

Edit Settings

Edit Inspection

Edit Forms

View Email Log

Administrator User Guide

User Guide

General User Guide

Administrator User Guide

Waste Transfer Station Form

Please complete the form in full and submit when you are done.

Name of attendant completing form

Search for User

Type of Guest dropping off waste

☐ Tribal Member ☐ Authorized User ☐ Lineal Head of Household (no haz waste drop off, no authorized users) ☐ Government Staff ☐ Government Contractor

Attach Photo of ID

Attach File

Vehicle Plate Number

required

Waste category dropping off

☐ Household trash/solid waste ☐ Green Waste (no palm fronds) ☐ Scrap Metal ☐ Furniture

☐ Major appliances ☐ Used tires ☐ Electronic waste ☐ Household Hazardous waste

General Notes

Add Photo Save Progress Submit Form



THE TRANSFER STATION IS GOING DIGITAL!



OVERVIEW

The Transfer Station staff will now be using tablets to electronically enter information as Tribal Members and Authorized Users drop off waste. The electronic system will also clearly categorize types of household hazardous waste that are accepted at the Transfer Station and will track when a waste disposal needs to be scheduled. We appreciate your patience as everyone gets used to this new system

Q&A

Q DO I NEED ANY ADDITIONAL IDENTIFICATION WHEN I DROP OFF WASTE AT THE TRANSFER STATION?

A Just as before, at the Transfer Station Tribal Members need to show their Tribal IDs and Authorized Users need to show their Driver's License and the Tribal ID of the Tribal Member authorizing them to use the Transfer Station.

Q HOW DO I ADD SOMEONE AS AN AUTHORIZED USER?

A Tribal Members can contact Public Works (760) 297-2330 to request an Authorized User be added to the list. Non-Tribal Members not on the list will not be allowed to use the Transfer Station.

Q WILL THE TRANSFER STATION STAFF BE ASKING ME ANY ADDITIONAL QUESTIONS WHEN I DROP OFF TRASH?

A If you are dropping off household hazardous waste they will ask what type of waste it is, such as paint, used motor oil, etc. The Transfer Station cannot accept any unknown material.

Q CAN I DROP OFF CONSTRUCTION DEBRIS OR WASTE/HAZARDOUS WASTE FROM MY BUSINESSES?

A No, the Rincon Transfer Station does not accept construction or business waste/hazardous waste. The Transfer Station only accepts household trash, household green waste, and certain household hazardous materials.

Q IS THE TRANSFER STATION GOING TO CHARGE FOR WASTE DROP OFF NOW?

A No, the Transfer Station is a free service for Rincon Tribal Members and their authorized users, and Head of Household Lineals.

Software Roll-Out and Outreach

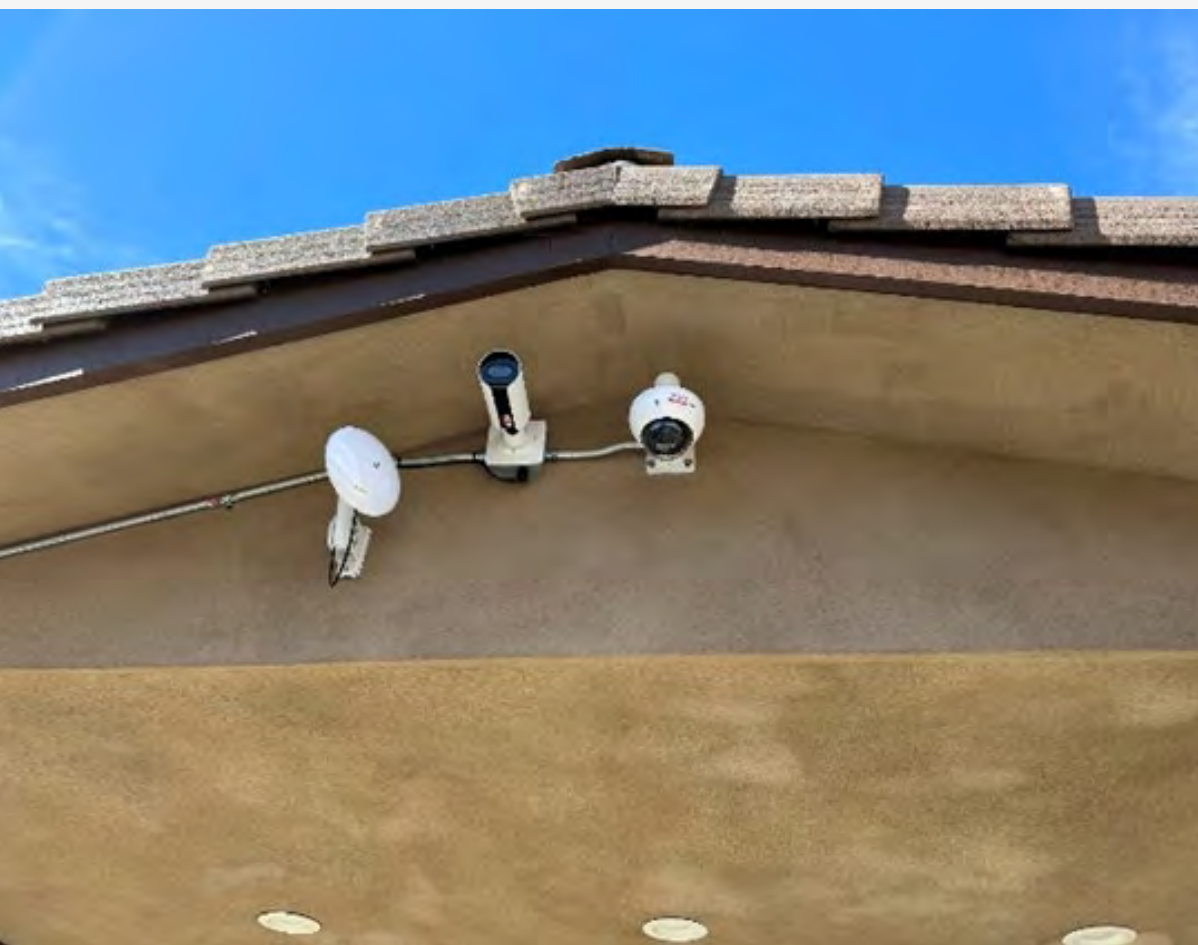
- FAQ flyer mailed out a month before
- Info flyer handed out in person
- Sign posted at Transfer Station office with items accepted and not accepted
- Staff training on tablets

Outcomes

- Faster check in speed
- More data collected
- History and trends easily illustrated in graphs
- Automated Tribal Member and other Authorized User lists
- Tracking of HHW volumes and weights
- Less human error in transferring data
- Much easier reporting
- Easier to stay a "Very Small Quantity Generator"
- No losses of loose-leaf pages of data

2024 - Security System: 3 Years of Monitoring Services Included A Dedicated Network Connection and WiFi Access Provided at the Transfer Station

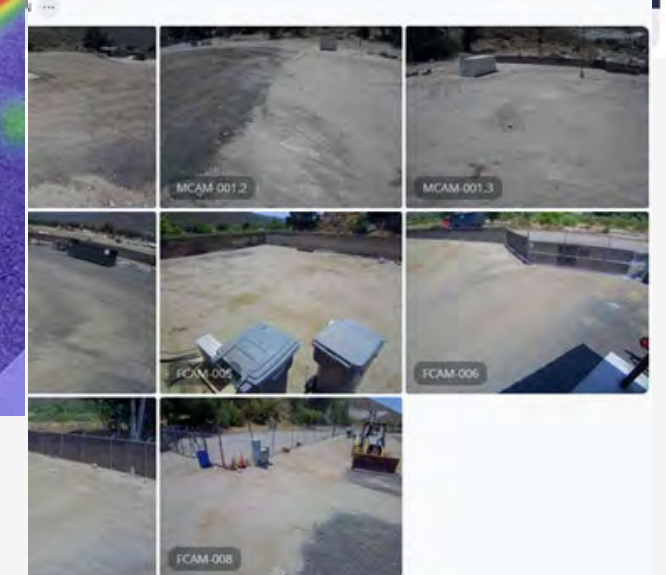
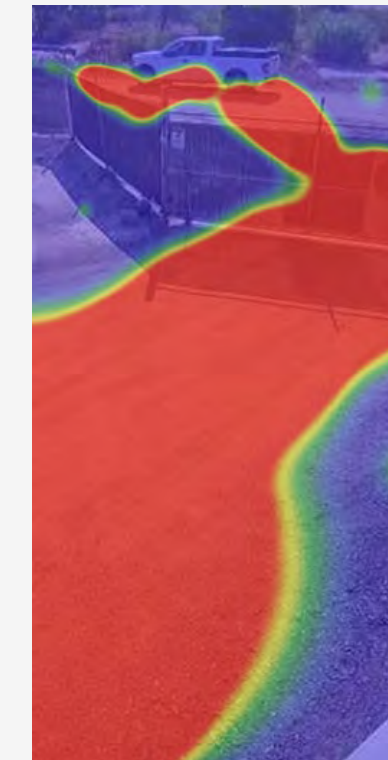
Eight Cameras Installed To Cover the Perimeter of the Site, Providing Comprehensive Security Camera Coverage of the Site



Telephoto Camera with License Plate Reader Installed



One Quad Camera



Security Camera Control Hub – Verkada Command: Stores 30 days of high quality or standard quality footage

Trackers to show what direction or path that people take at a glance

Heat Map Shows areas of high activity

2024 - Installation of Water, Electricity, and an Eye-Wash Station



Installed 9 hose bibs, providing adequate water access across the site

Installed 8 dual port 120 volt outlets around the perimeter.



Installed 50 amp sub panel



Eyewash Station installed next to the household hazardous waste area

2024 - Installed an Automatic Gate For Providing More Secure Access to the Transfer Station

Integrated Gate Access With Government Employee Badge Readers



Gate fully functional with Keypad Opener and “Clicker” Style Remote Access



Installed a Button Inside the Transfer Station Office to Provide Attendants With Gate Access Control



2023-2024 Cabinets For Household Hazardous Waste Bolted Onto Concrete Pads (IHS SDS List-Funded)

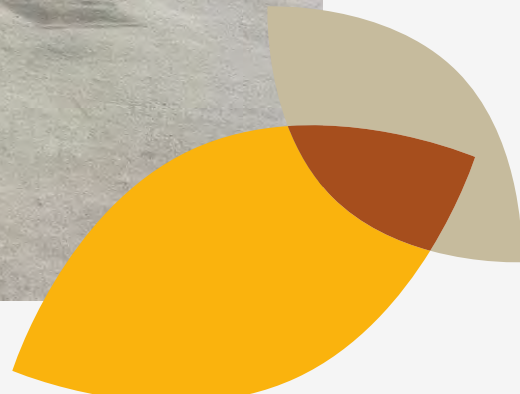


2024 - Concrete Ramp, Driveway, And Base For Roll-Off Bins (Tribally-Funded)



2025 - Safety Gates For The Ramp

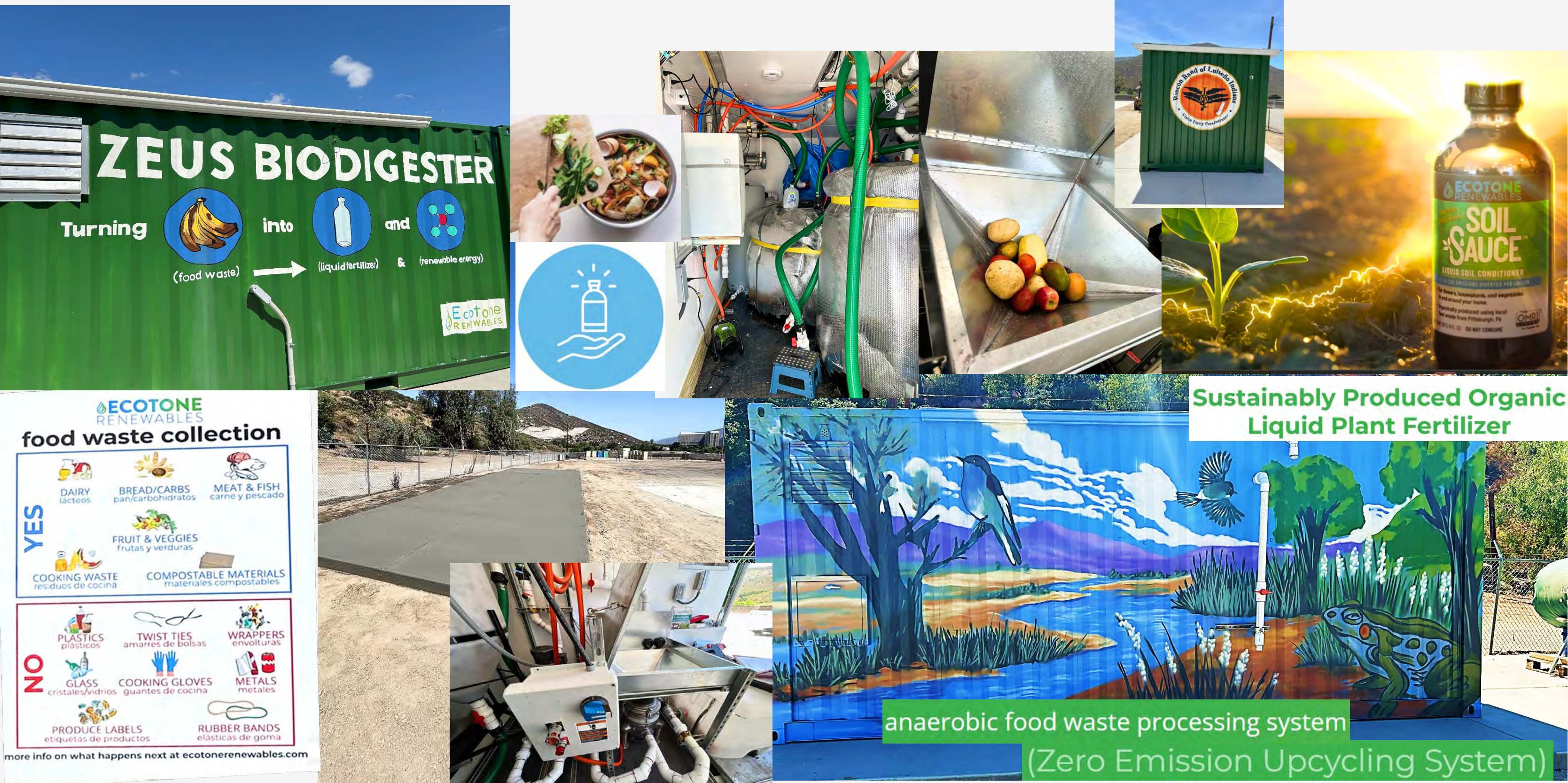
(Tribally Funded)



2025 - Concrete Pad – Tribally-Funded

2024 - Purchase Of Composters And Biodigester - GAP-funded

2025 - Painting Of Biodigester Container - BIA-funded



STEP 1

Food waste is collected onsite and fed into the system.



STEP 2

Food waste is mixed with water and ground into a liquid slurry.



STEP 3

Slurry is digested by microbes in ZEUS's air-tight "stomach."



STEP 4

The liquid byproduct is bottled into [Soil Sauce](#), our nutrient-rich plant fertilizer.

Biodigesters convert waste into valuable resources — reducing landfill use and creating clean energy.

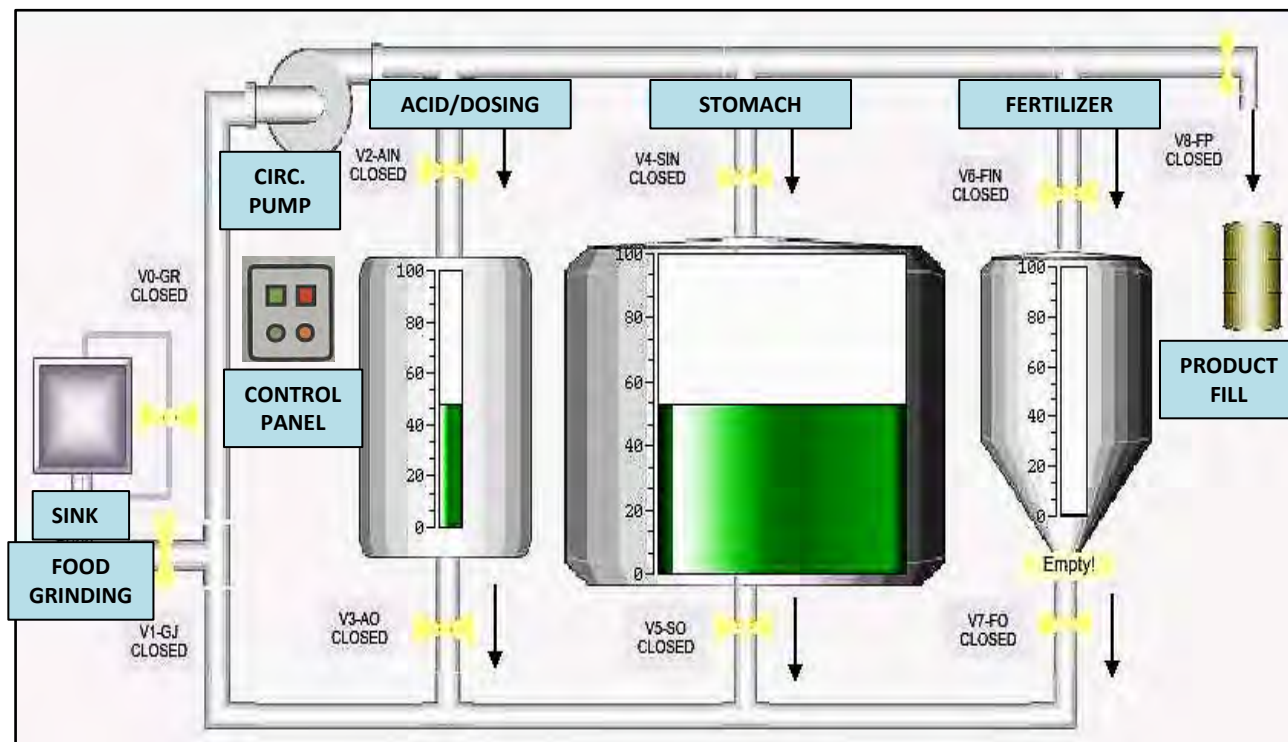
A biodigester is a system that uses microorganisms to break down organic waste (like food scraps, yard waste, and manure) in the absence of oxygen — a process called anaerobic digestion.

Outputs:

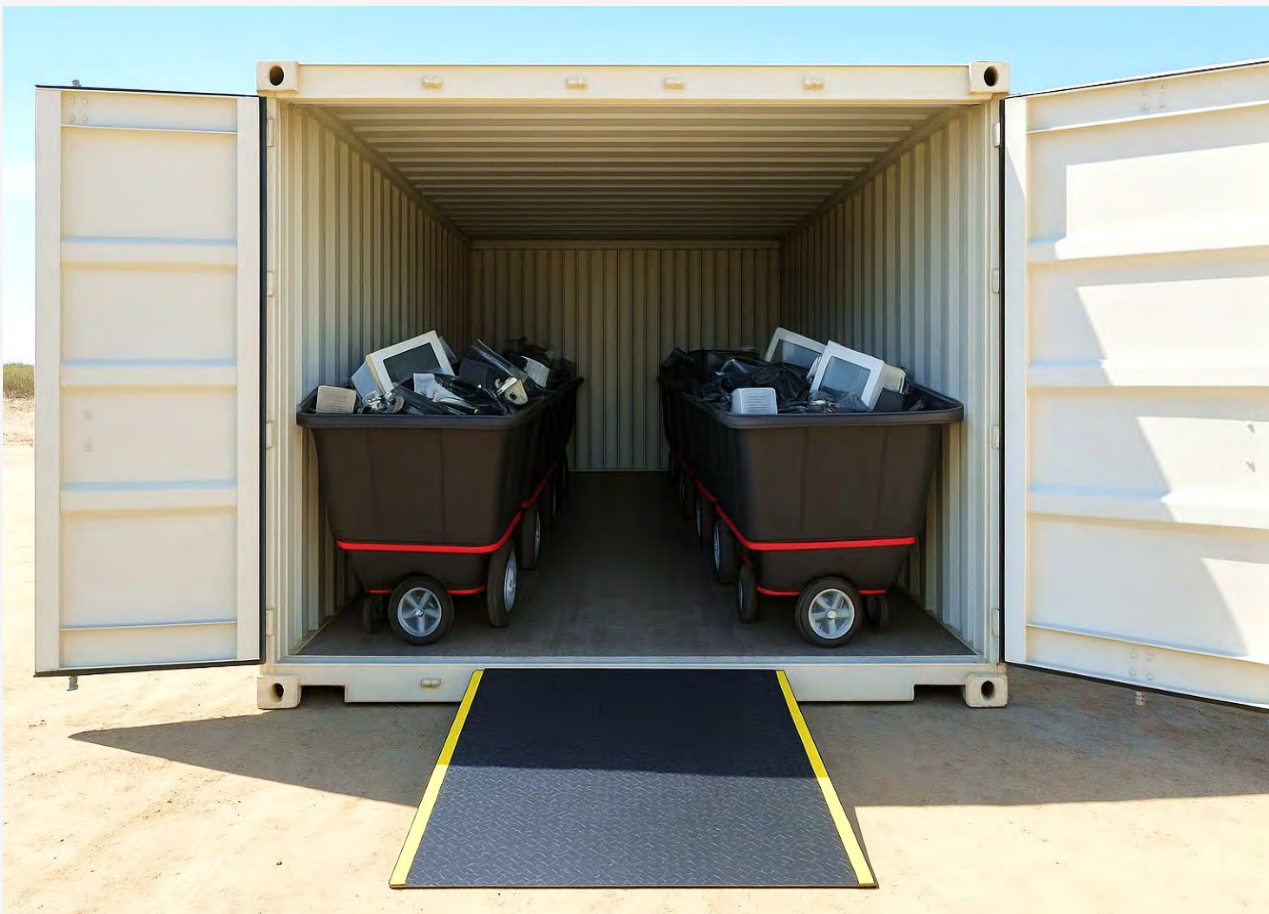
→ **Biogas** - A renewable energy source (mainly methane and carbon dioxide)

→ **Digestate** (“Soil Sauce”) – A nutrient-rich liquid plant fertilizer

Why Purchase a Biodigester For a Transfer Station? What Does It Do?



2025-2026 - Improved Storage For E-Waste (GAP and Tribally-Funded)



Shipping Container Will be bolted onto a concrete pad and have roofing over it

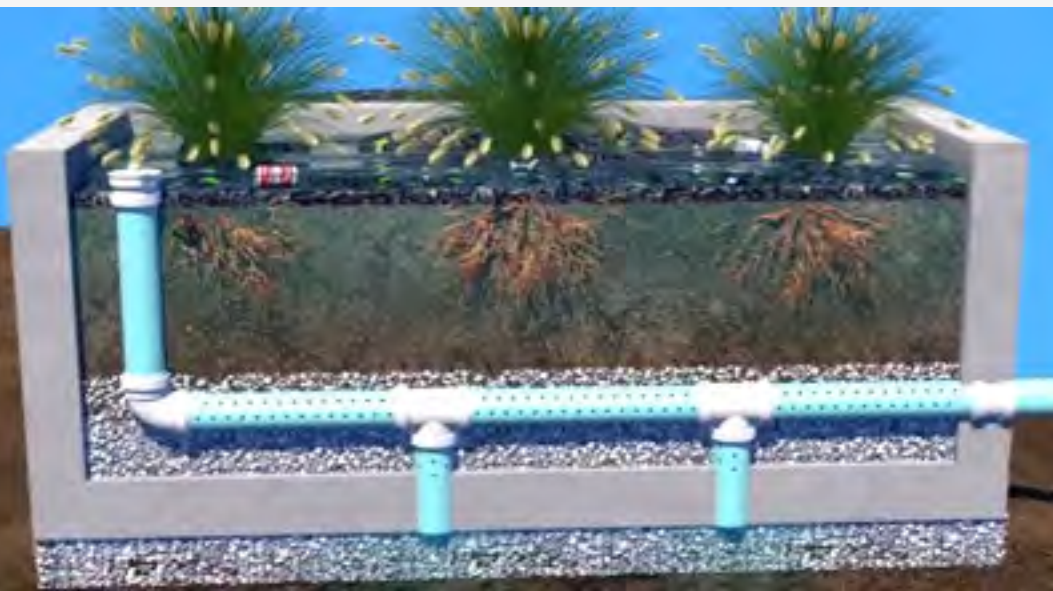


SOLID WASTE INFRASTRUCTURE FOR RECYCLING (SWIFR)

2025-2027 Facility Improvements

Add Filtered Drainage

- To treat runoff from the newly paved site
- To remove pollutants such as hydrocarbons, particulates, nitrogen, copper, phosphorus, zinc, and total suspended solids, prior to the runoff leaving the site.
- To protect nearby endangered species
- Filterra / Bioretention



Pave The Site

- To improve ease of use and traffic flow
- To reduce dust production,
- To prevent the direct infiltration of pollutants such as oil, gas, grease, sediment
- To provide a graded surface for better site drainage
- To allow for more efficient and cost-effective operation of equipment.
- To make site cleanup easier.



Build Roofing

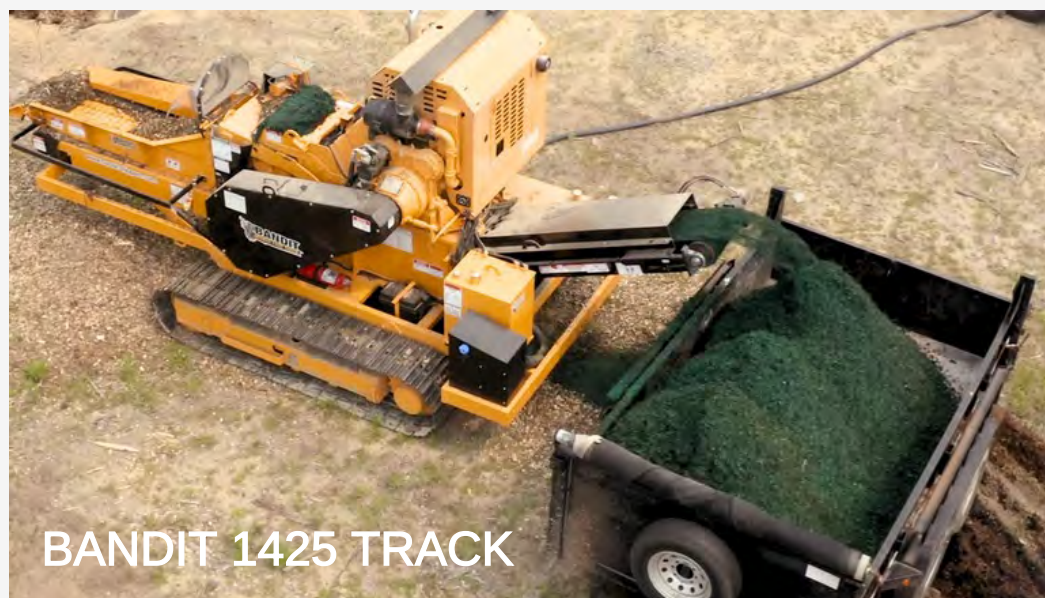
- Over waste collection areas
- Roofing will extend over the tire container, recycling trailer, composting/ biodigester island, household hazardous waste cabinets, and e-waste collection areas).
- Prevent collection of rain, prevents leaching, prevents vector issues
- Make use of facility more comfortable in extreme heat and rain
- Saves the Tribe money because weights of materials for disposal aren't made heavier due to water collection



SWIFR Equipment Purchases

Horizontal Grinder

- Mulch plays a role in the circular economy by extending the life cycle of organic materials, reducing waste, and minimizing the need for new, unused resources.
- Prevents the spread of invasive insects such as GSOB and ISHB as wood can be cut down to a size small enough to kill all life stages, thereby protecting tribally valued trees such as oak trees
- Mulch can be used in the production of compost and fertilizer.
- Mulch can be used in landscaping or erosion control
- Mulch reduces nitrous oxide and methane emissions produced in the landfill, while enhancing carbon sequestration, and conserving soil moisture



Recycling Trailer

- Adds recycling collection capacity to the Transfer Station, making the Transfer Station a “one stop shop” for both solid waste disposal and recycling
- Recycling diverts waste away from landfills and incinerators, which reduces the harmful effects of pollution and emissions
- Helps conserve natural resources and reduces the need for new materials
- Improves materials management infrastructure
- Helps enhance programs that support circularity
- Adds convenience that will help increase facility use by Tribal Members



Industrial Signage For Each Area



More Cameras For Under Roofing



SUMMARY



YEAR	ITEM(S)	GRANTS
2021 - 2022	New trash truck and trash cans	GAP Grant and Volkswagen Settlement Round 3
2022 - 2023	Spill kit + spill containment pallets; Carport canopy	GAP Grant
2022-2023	Large Flammable Cabinet	GAP Grant
2023	20' Shipping container for storing tires	Tribally -Funded
2023	New office, water, electricity, heat, a/c, water, and septic system connections	Tribally -Funded
2024	New stump grinder	BIA Invasive Species Grant
2023 - 2024	New woodchipper	GAP Grant
2021- 2024	New chipper truck/dump truck combination	Volkswagen Settlement Round 4 and Tribally -Funded
2024	New composter and maturation bins + food scrap collection bins	GAP Grant
2024	Creation of a network -based, digital check -in/inventory system	Hazardous Waste Grant
2024	Purchase and installation of multiple security cameras plus 3 years of monitoring (subscription)	Hazardous Waste Grant
2024	Expansion of water and electrical systems and the installation of an eye wash station	Hazardous Waste Grant

YEAR	ITEM(S)	GRANTS
2024	The establishment of a dedicated network connection and/or WIFI access at the Transfer Station	Hazardous Waste Grant
2024	The installation of an automatic gate with card reader and number pad for providing access to the Transfer Station	Hazardous Waste Grant
2025	Purchase of a biodigester, as a means for reducing food waste/food re-use on the reservation	GAP Grant
2025	Create a concrete pad for the biodigester and composter and maturation boxes	Tribally -Funded
2025	Purchase a horizontal grinder	SWIFR
2025	Purchase a recycling trailer	SWIFR
2025-2026	Install a modular wetland to filter stormwater before leaving the site	SWIFR
2025-2026	Grade and pave the site (asphalt)	SWIFR
2025-2026	Install roofing and secondary containment over drop off areas	SWIFR
2025-2026	Painting a mural on the biodigester’s shipping container, illustrating the riparian habitat on the reservation and the endangered species that live there (outreach)	BIA
2025-2026	Purchase a shipping container for e-waste, tilt trucks, and a ramp for e-waste. Set it and the shipping container used for tires on concrete pads	GAP and Tribally -Funded
2025-2027	Industrial signage (metal?) identifying all areas of the Transfer Station and more cameras under the new roofing	SWIFR and/or Tribally -Funded

THANKS!

DO YOU HAVE ANY QUESTIONS?

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