Environmental Services

Division Update

Subregional Technical Advisory Committee April 4, 2024







Trucked Waste Program



Analysis of Drugs in Laguna Treatment Plant Influent



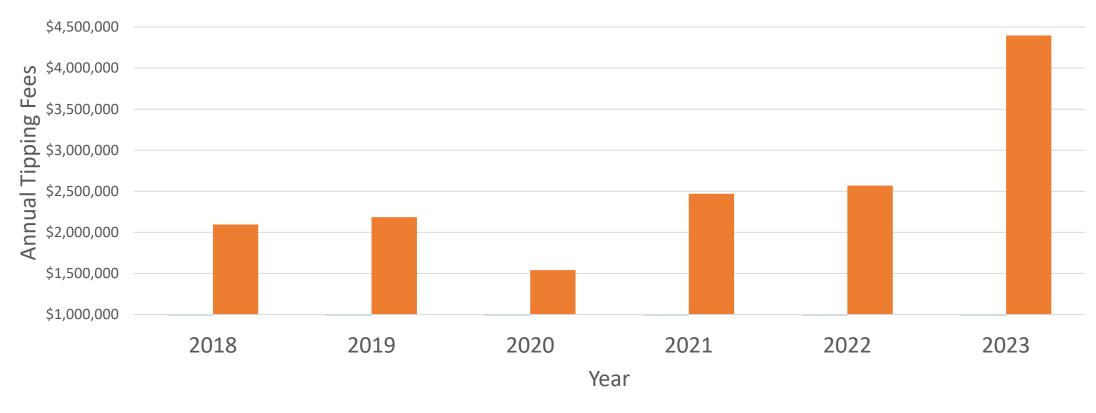


Trucked Waste



- Increased use
- Increased sampling and oversight
- Increased tipping fees
- Increased costs to manage

Trucked Waste Billing





Trucked Waste Growing Pains

- High strength waste receiving station full most days
- Ensuring discharges do not negatively impact plant processes
 - Leachate inhibits Ultraviolet Transmittance
 - pH issue
 - Solids blocking pumps
- Increased truckloads in the plant

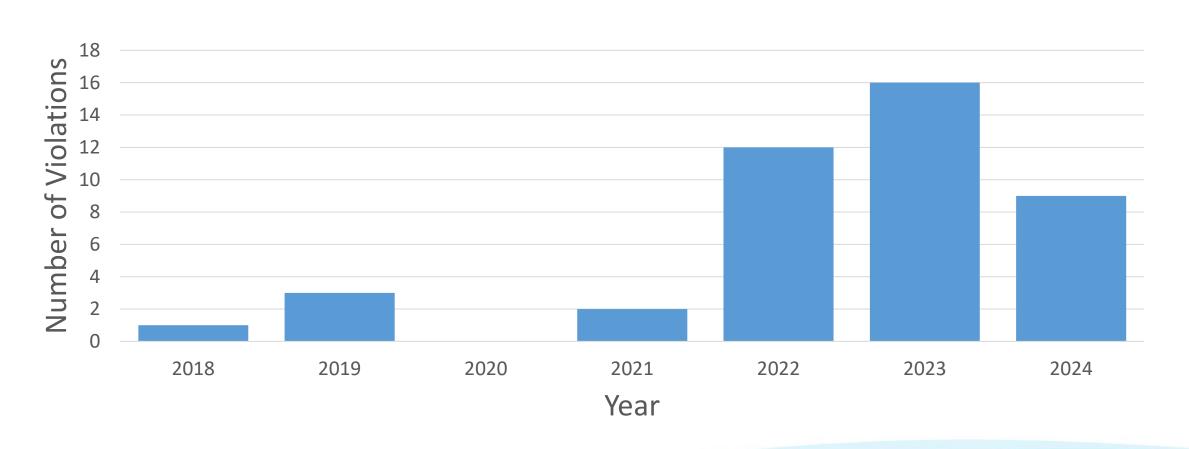
Trucked Waste Studies

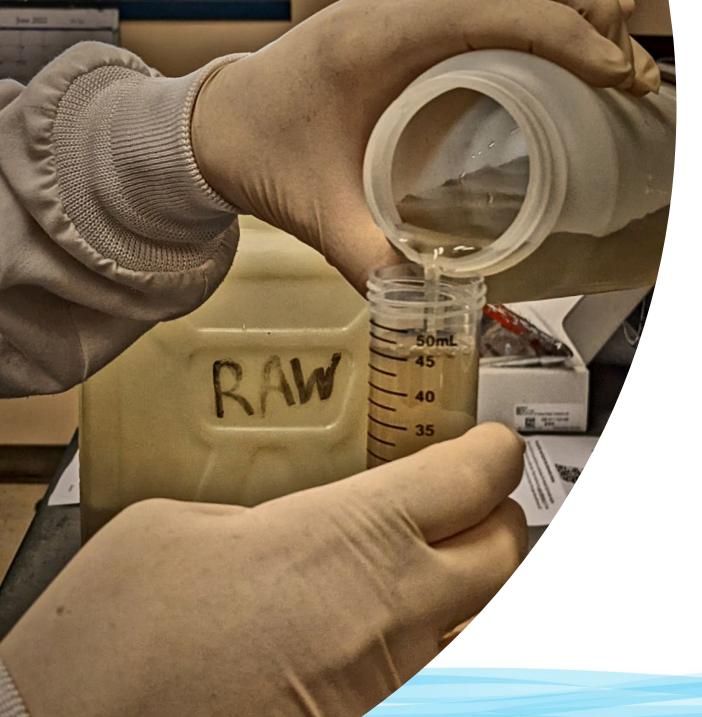
- Wine waste and wine rinsate study Completed
- Ultraviolet Light Transmittance Blocking (UVT) In Progress
- Plant capacity to handle waste streams (Local Limits Study) –
 Will start next fiscal year

Tipping Fee Schedule

Waste Stream	2022 Fees		2023 Fees		2024 Fees		2025 Fees	
Septic	\$	130	\$	130	\$	130	\$	131
Medium Strength	\$	40	\$	43	\$	46	\$	49
HSW -Receive								
Station	\$	40	\$	40	\$	40	\$	40
Gray Water	\$	40	\$	41	\$	42	\$	43
Leachate	\$	17	\$	20	\$	23	\$	26
Meacham Leachate	\$	14	\$	20	\$	23	\$	26
Low Strength	\$	20	\$	22	\$	24	\$	26

Trucked Waste Violations





Analysis of drugs in wastewater

- Trans-3'-Hydroxycotinine (Nicotine Metabolite)
- Fentanyl
- Cocaine
- Methamphetamine

Need/Context of the Data

- Development of data for public health needs in disadvantaged communities.
- Data is collected from wastewater influent.
- While not specifically looking at illicit drugs, the WateReuse Research Foundation studied Pharmaceuticals and Personal Care Products (PPCPs) in recycled water and found concentrations of PPCPs much lower than acceptable levels and extremely low for effective doseage.





WHAT'S THE RISK?

A Comparison of Exposure to PPCPs from Recycled Water vs. Conventional Uses

This chart compares typical exposures to three Pharmaceuticals and Personal Care Products (PPCPs) — antidepressant, ibuprofen, hormone — with exposure to the same chemicals in recycled water under four different scenarios in which a person may come into contact with the water. For each scenario - child at play, agricultural worker, landscaper, and golfer - the chart shows how many years one could participate in that activity before reaching a single daily dose of the chemical from typical exposures.



Exp

Number of years of exposure to recycled water to equal conventional dose.



Acetamino





Ibuprofen = Caffeine One Advil Tablet



17-beta

Replacement



One Dose



Prozac



















4,000 6,000 8,000 10,000 12,000 14,000 16,000

8,600 Years



26,000

Years

26,000 Years



28,000 Years



83,000

Years

67,000 Years

20,000 40,000 60,000 80,000 100,000



91,000

Years



a our child will

ne day per

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of play before

ivalent of one



estradiol = One Dose Hormone



5,000 Years



13,000 Years



16,000 Years



150,000 200,000 250,000

Years

160,000 Years

I YIIIS UI Salety rio not only school

KEY: Four common scenarios where people may come into contact with recycled water.



Child at Play

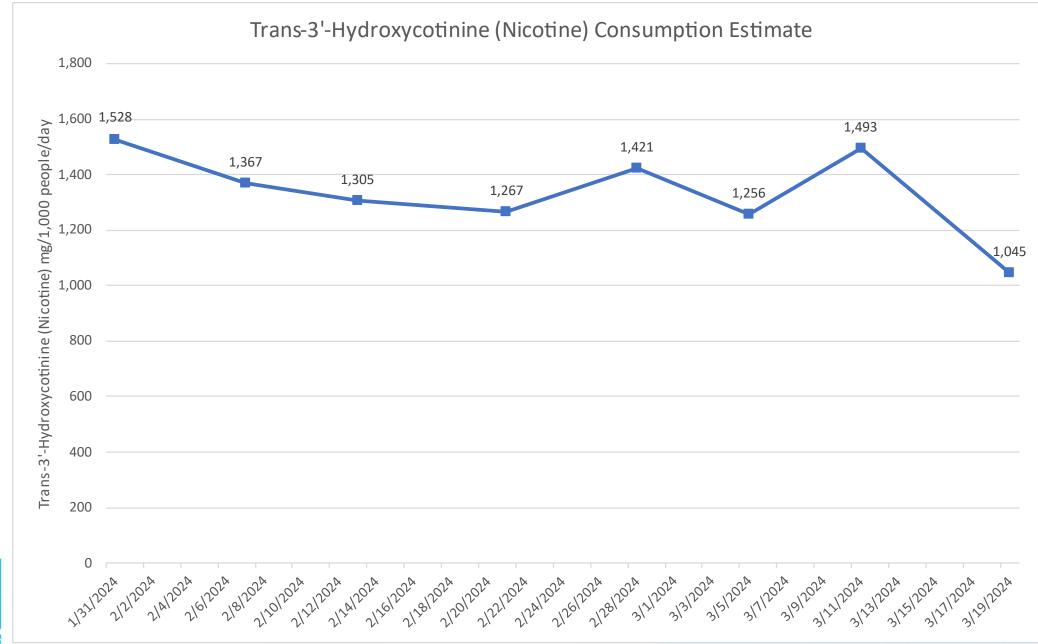


Worker

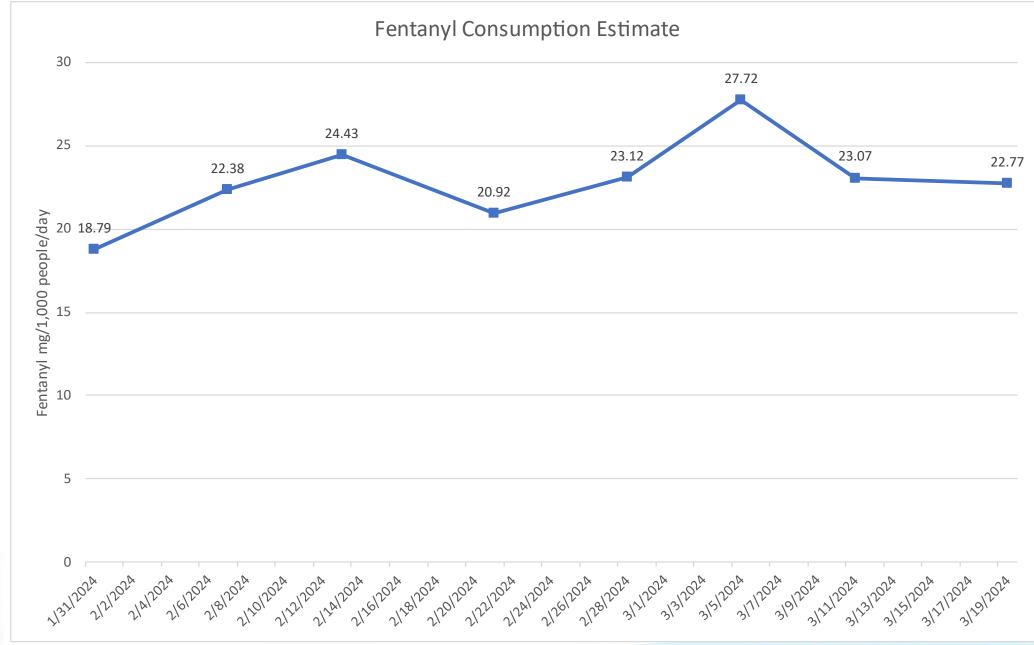


Landscaper

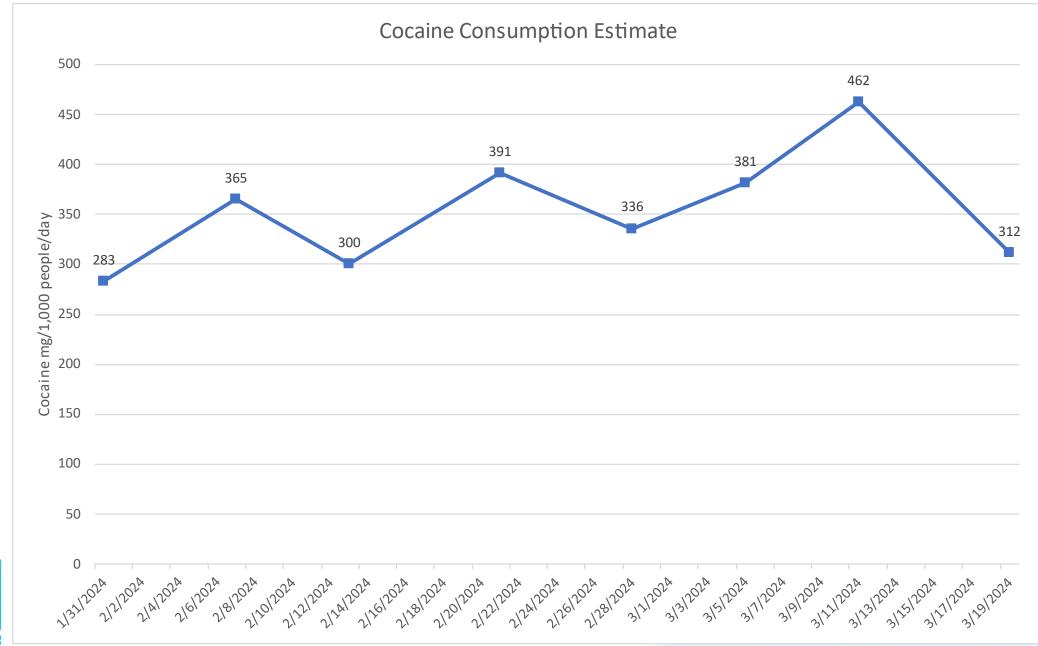




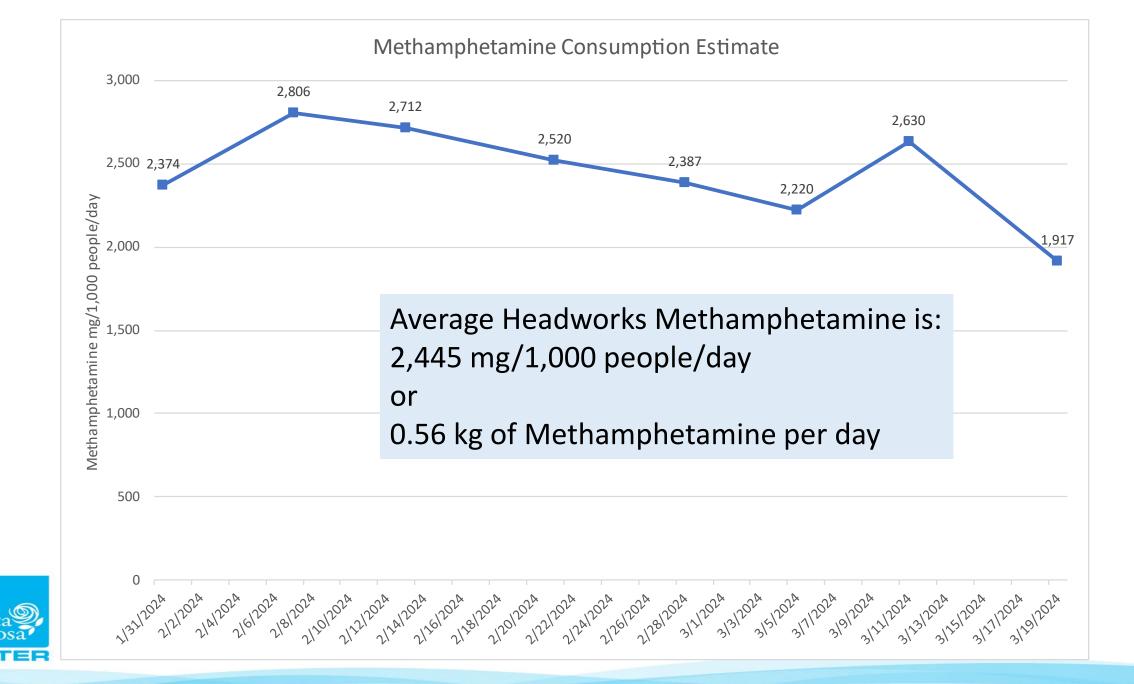












Questions



