WASTEWATER DECISION SUPPORT PROJECT
Let's Join Hands to Learn Together

DURATION
03 YEARS
January 2021
November 2023

COLLABORATIVE INSTITUTES
Diné College
University of Arizona

Objectives
- Public awareness about water quality; water contamination & purification
- Promote alternate sources of water
- Train Navajo water scientists, our youth to help solve water problems

AIMS
- Feasibility analysis of reclaimed wastewater use for irrigation of edible crops—by correlating microbial and chemical screening pre and post Nano-filtration

Why it is Important to know your water?
- Many protozoa like Giardia lamblia, and Neglaria fowleri can found in unregulated water resources and cause severe infections
- Some contaminants, either chemical or microbial might cause mutations that results in different genetic disorders
- Inorganic chemicals like Uranium, Arsenic, Lead, Iron, Chromium and Manganese can be carcinogenic
- Organic chemicals like Dyes, humic substances, phenolic compounds, petroleum, surfactants, pesticides, and pharmaceuticals present in water can cause adverse health effects
- ch’oosh doo yit’íini (bacteria or germs) if present in water can cause infections like diarrhea, gastric ulcers, Legionellosis, or Giardiasis

STUDENTS TRAINED
- 2021=06 Navajo Water Scientists
- 2022 - 08 Navajo water Scientists

04 research poster presentations at ASM-Microbe; ABRCMS and Water Conferences in 2022
06 Chapter house presentations within Navajo Nation during 2021 & 2022

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