

Water Pollution in the eastern Coachella Valley

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Introduction

- This presentation aims to educate its audience about water pollution in the eastern Coachella Valley, including its demographic, social, and economic causes and policies. Students will be able to critically analyze the information given to understand the issues surrounding the valley.
- This presentation is important because it highlights and spreads information about public health, the environmental impact, economic factors, and community awareness. Addressing water pollution in the eastern Coachella Valley is crucial to supporting existing ecosystems, the local economy, and the people living in the area.





Background of Conservation Issue

Demographics

- The environmental issue takes place in the eastern Coachella Valley, which includes the cities of Thermal, Oasis, Mecca, Coachella, and Northshore.
- Most of the population in the eastern Coachella Valley are impoverished and lack safe and affordable housing.
- Many residents do not have the economic and political resources to communicate the environmental risks they face.
- The cities' demographics are primarily Latino, Indigenous, migrant, and agricultural working families
- These rural communities lack resources that would protect their health.

Concentration of Pollution

- The eastern Coachella Valley has the highest concentration of water pollution compared to the western Coachella Valley and Riverside County.
- Drinking water wells have been found with far above state and federal levels of arsenic, chromium 6, perchlorate, and nitrates.
- Researchers state that the eastern Coachella Valley contains higher levels of pesticides, adding to air and water pollution.



Causes of Conservation Issue

- Of 20 mobile home parks in the Torres Martinez Desert Cahuilla Indians Reservation, only 13 were regulated by the County of Riverside.
- Seven mobile home parks within the reservation had never been regulated in arsenic treatment systems and were not aware of the current conditions of the drinking water.
- Several mobile home parks lack water infrastructure.
- In 2013, researchers stated that dump sites and waste facilities are in the eastern Coachella Valley.
- Researchers also state that there are limited air and water quality monitors.

Impacts of Conservation Issues

- Loma Linda University researchers found 41% of water samples indicated water contamination in drinking water and soda water fountains at fast food restaurants in the eastern Coachella Valley.
- The molecular analysis revealed Salmonella, Pseudomonas aeruginosa, and Escherichia.
- The analysis displays biofilms that represent serious problems in environmental, industrial, and medical settings.
- According to researchers, the bacteria found in the water samples exceeded in the level set by the Environmental Protection Agency.
- Mobile home parks in compliance with arsenic limits under the Safe Drinking Water Act, resulting in dangers to public health.

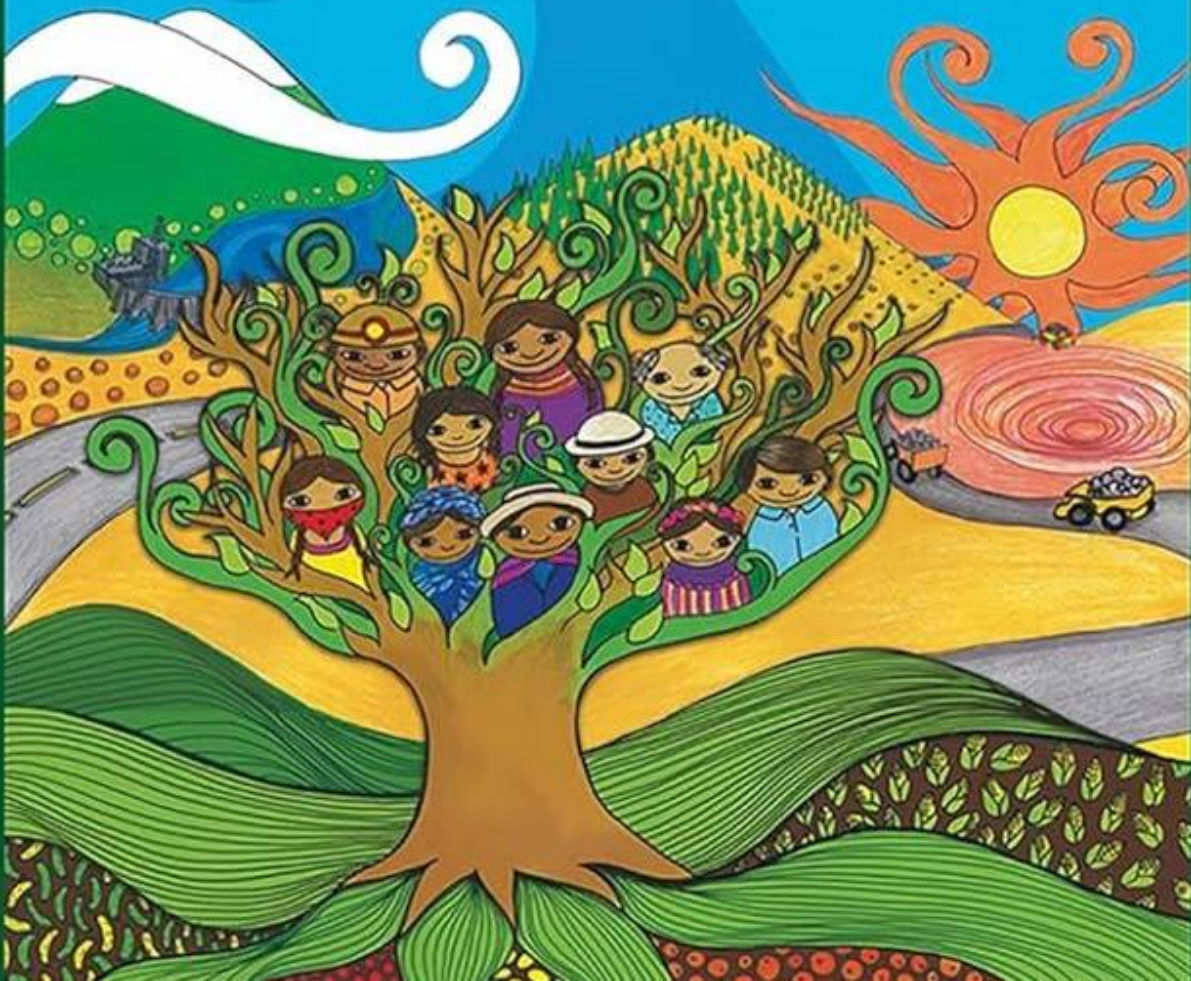
Conservation Efforts

- In response to the studies mentioned, the Environmental Protection Agency (EPA) developed strategies to address the issues one of them being partnering with local non-profit organizations such as Pueblo Unido Community Development Corporation (PUCDC).
- From December 2021 through September 2022, the EPA took action by calling for a Safe Drinking Water Act Emergency Administrative Orders to 9 mobile home parks where the arsenic levels surpassed the federal limit of 10 part per billion.



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Conservation Efforts Cont.

- In fact, each emergency order required installation of regulated arsenic treatment systems, safe drinking water alternatives, and compliance with other federal laws and regulations.
- In coordination with Pueblo Unido Community Development Corporation, the EPA also pursued assistance to other mobile home parks to ensure residents drink safe water according to federal law, including arsenic limits, and monitoring and reporting cases.



Success Stories

- The EPA has installed point-of-use arsenic treatment devices in over 220 homes.
- The EPA has released six mobile home parks from the emergency order, such as Arellano, Castro Ranch, Desert Rose, Gonzalez, Gamez, and Sandoval because they have returned their compliance with the limit of arsenic and the above requirements.
- Fortunately, the EPA continues to monitor and report the progress of the mobile home parks under the Emergency Administrative Orders and continues to provide assistance to 20 mobile home parks.

Success Stories Cont.

- The Coachella Valley Water District (CVWD) and the Disadvantaged Community Infrastructure Task Force have developed two plans called Domestic Water Supply Master Plan and Sanitation Master Plan.
- These plans will connect failing water and sanitation systems to the CVWD.
- According to these plans, these projects will provide the eastern Coachella Valley with safe and reliable drinking water and a dependable water service.
- The Domestic Water Projects mentioned on the CVWD website provide plans such as the Ion Exchange Treatment Plan that will provide treated water supply for future affordable housing projects in Mecca.
- Another water project is the Reservoir 7101-2 in Northshore which will store 1 million gallons of domestic water, with a fund of \$1.1 million from the U.S. Department of Agriculture.
- One project from the Sanitation (Sewer) Projects is the Valley View Sewer Mobile Home Park Consolidations Project which will include 13 consolidations to CVWD's wastewater and collection of treatment system, with a fund of \$14.2 million from the state.
- Another project is the Monroe Street Trunk Sewer Project, that has been completed. It connects the Torres Martinez Tribal Housing area to CVWD's wastewater collections and treatment system, with a federal fund of \$1.3 million.

Success Stories Cont. Coachella Valley Water District Projects

Sanitation (Sewer) Projects

Oasis Gardens Mobile Home Park Consolidation/Polk Street Sewer Lift Station Upgrade

- State Water Resources Control Board Clean Water State Revolving Fund – \$2.8 million

Avenue 66 Sewer/Sunbird Mobile Home Park Consolidation

- State Water Resources Control Board Clean Water State Revolving Fund – \$10 million

Valley View Sewer Mobile Home Park Consolidations Project will include 13 consolidations to CVWD's wastewater collection and treatment system.

- State Water Resources Control Board Clean Water State Revolving Fund – \$14.2 million

Mecca Lift Station 55-11

- American Rescue Plan Act Funds Appropriation by Riverside County Supervisor V. Manuel Perez – \$4.1 million

Monroe Street Trunk Sewer Project connected the Torres Martinez Tribal Housing area to CVWD's wastewater collection and treatment system. (Complete)

- U.S. Department of Agriculture – \$1.3 million

St. Anthony's Mobile Home Park Sewer Consolidation Project replaced the failing onsite sewer treatment lagoon system. It connected St. Anthony's and Huerta Mobile Home Park to CVWD's wastewater collection and treatment system. (Complete)

- U.S. Department of Agriculture Grant and the California Department of Water Resources and assistance from Pueblo Unido CDC – \$2.5 million

Task Force members include representatives from CVWD and the following:

[Riverside County Fourth District Supervisor's office](#)

[Assemblymember Eduardo Garcia's office](#)

[Pueblo Unido Community Development Corporation](#)

Domestic Water Projects

Avenue 66 Transmission Main/St. Anthony Mobile Home Park Consolidation will construct the critical backbone infrastructure for three immediate consolidations and up to 35 future consolidations/connections. The pipeline will also bring supply reliability to the underserved communities of Mecca, North Shore, and Bombay Beach.

- State Water Resources Control Board – \$23.4 million
- State Budget Appropriation by Assemblymember Eduardo Garcia – \$7 million

Ion Exchange Treatment Plant at Wellsite 7991 will provide additional treated water supply for future affordable housing projects in Mecca.

- American Rescue Plan Act Funds Appropriation by Riverside County Supervisor V. Manuel Perez – \$8.1 million

Valley View Domestic Water Mobile Home Park Project will consolidate 9 mobile home parks near Airport Boulevard.

- State Water Resources Control Board – \$10.7 million
- Congressionally Directed Spending through Community Project Funding by Congressman Raul Ruiz, M.D., and supported by Senator Alex Padilla, and the late Senator Dianne Feinstein – \$6.1 million

Dale Kiler Water Main Replacement to improve service and reliability.

- U.S. Department of Agriculture – \$1.6 million

North Shore Water Main Replacement to improve service and reliability.

- U.S. Department of Agriculture – \$1.5 million

Reservoir 7101-2 in North Shore will store 1 million gallons of domestic water.

- U.S. Department of Agriculture – \$1.1 million

Rehabilitation of three booster stations (1 in Mecca, 2 in North Shore).

- U.S. Department of Agriculture – \$1.6 million

Highway 86 Transmission Main, Phase 2 consolidated and connected Salton Sea Beach, Desert Shores, Salton City, and unincorporated areas of Riverside County and improved reliability for 7,400 residents. (Complete)

Highway 86 Transmission Main, Phase 2 consolidated and connected Salton Sea Beach, Desert Shores, Salton City, and unincorporated areas of Riverside County and improved reliability for 7,400 residents. (Complete)

- State Water Resources Control Board Drinking Water State
- Revolving Fund Grant – \$5 million

Highway 86 Transmission Main, Phase 3 and 4 Design will replace the transmission main south of Avenue 86 to Salton City.

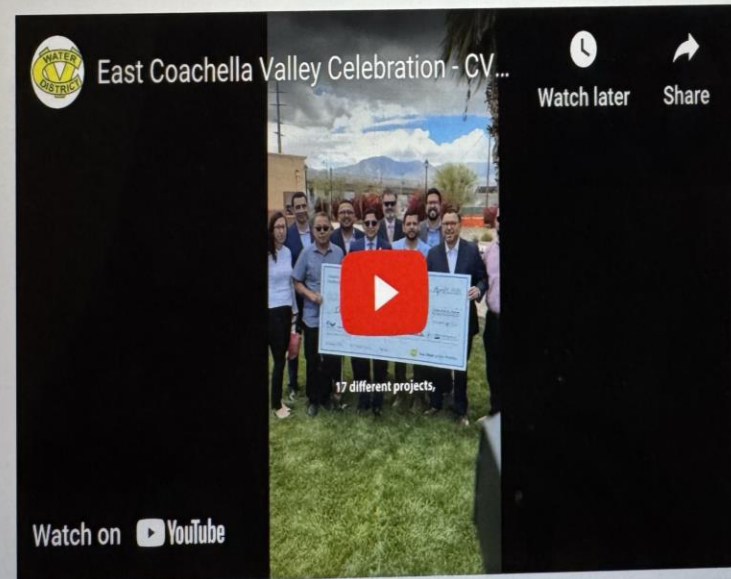
- State Water Resources Control Board – \$500,000

Thermal Mutual Project connected 36 residential properties that relied on a 50-year-old failing well. Oasis Gardens Mobile Home Park Project connected approximately 156 mobile homes to CVWD's domestic water system. (Complete)

- State Water Resources Control Board – \$2.4 million

Westside Elementary School Project connected the school to CVWD's domestic water system for improved water quality, reliability and fire flow. (Complete)

- State Water Resources Control Board SAFER – \$815,290



Challenges

- In 2013, a research paper from UC Davis stated that the Salton Sea poses serious threats to the residents and the air quality. In fact, bad smell sickened nearby residents and spread up to 150 miles from the lake.
- The water of the Salton Sea is part of both the Riverside and Imperial counties, making it difficult to address water pollution issues.
- The community of the eastern Coachella Valley has historically been affected by water pollution due to a lack of economic resources and awareness about the water conditions.
- In the unincorporated cities such as Oasis, Mecca, Thermal, Northshore, and Salton City is a high rate of poverty, low high school graduation rates, residents living in poor-quality housing, and residents living in close-proximity to environmental hazards.
- Salton Sea residents are currently facing a major ecological and public health crises.





Future Directions

- The Alianza Coachella Valley Organization has partnerships with other organizations regarding Environmental Justice to campaign to ensure the Salton Sea is a priority to the state of California.
- The Salton Sea Management Program was created to protect the environment and community health in the Salton Sea. This program is a 10-year plan to construct 30,000 acres of habitat and dust suppression around this area.
- Coachella Unincorporated joined Alianza in 2018 to campaign for Environmental Justice in efforts to assist the community of the eastern Coachella Valley.
- The Coachella Valley Water District has taken measures to provide the communities of the eastern Coachella Valley with drinkable and safe water, with over \$100 million in grants from local, state, and federal partners.
- The Environmental Protection Agency has taken action in monitoring and reporting cases of undrinkable water and contamination in water in mobile home parks in the eastern Coachella Valley.



Conclusion

- It is important to acknowledge the water pollution in the eastern Coachella Valley in order to gain an audience that will be part of the Environmental Justice campaign.
- The eastern Coachella Valley consists of Coachella, Thermal, Mecca, Oasis, and Northshore.
- Historically, the eastern Coachella Valley lacks economic resources from local, state, and federal governments.
- The population of the eastern Coachella Valley is majority Latino and Indigenous, living in poor-quality housing and in dangerous environmental circumstances.
- Researchers have found that in 41% of water samples, there was an indication of contaminated water.
- Some efforts from the EPA have been to call for an emergency order for mobile home parks that have been unregulated.
- The CVWD has started projects to ensure drinkable and safe water for eastern Coachella Valley residents.
- It is essential to take into account the high rates of poverty and low high schools graduation rates of affected communities by the Salton Sea.
- Fortunately, local organizations, the EPA, and the CVWD have taken measures and obtained funds to combat the issues surrounding water pollution in the eastern Coachella Valley.

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