

Determination of Heavy Metal Distribution in the Gallinas River Using Aquatic Macrophytes

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PURPOSE OF THE STUDY

The Gallinas River watershed is of particular concern to the citizens of Las Vegas, New Mexico, because it provides 95% of the domestic water needs for the city. However, recent studies have reported elevated concentrations of arsenic and other heavy metals during high flow events. Various aquatic plant species have been used as biomonitors of heavy metal pollution in aquatic systems. Researchers will collect various aquatic plant species from four Gallinas River sites and determine if a correlation exists between these results and sediment, water, and invertebrate samples from previous studies.

STUDY UNDERWAY

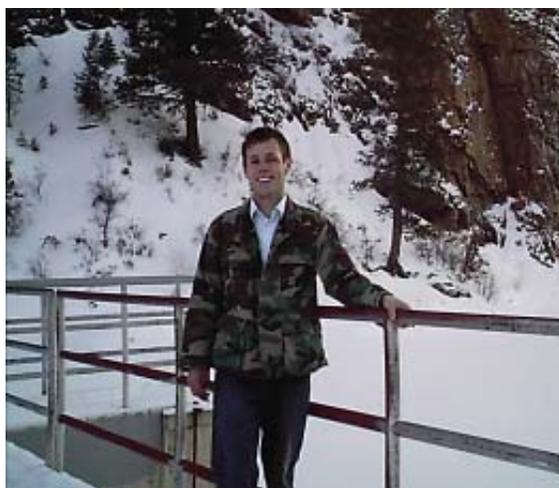
- Researchers have identified four sites in the Gallinas River where they have collected several macrophyte samples and are now in the process of identifying them.
- Protocols are being established for use in preparing the macrophyte samples for laboratory analysis.
- Preliminary information is being added to an existing GIS map of the study sites.

BENEFITS

- This study will contribute biological findings to the results reported in previous studies. The combined results of the many Gallinas River heavy metal studies can be used as a foundation for a comprehensive watershed or water quality study of the region.



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Joel Lowry graduated from Lovington, New Mexico and is working on a B.S. in environmental geology at NMHU. He plans to pursue a graduate degree in hydrology and to work eventually as a hydrogeologist.

