

From the Desk of the DairyDoc

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Can Worms be the Answer to Removing N and P and Turning it into a Marketable Product?

NMSU Dairy Extension, DairyMax, using BioFiltro technology started two pilot projects earlier this year on two different dairies in New Mexico and the Texas Panhandle to demonstrate and evaluate how worms (vermiculture) can be a part of a producer's environmental toolbox, and effectively remove nitrogen, phosphorus and solids from dairy tail end water and convert these into a marketable vermicompost. This leaves the dairy with a clean, odorless water, also known as "worm tea," which in turn can be used to flush the parlor or as clean irrigation



water, not adding additional nitrogen and phosphorus to irrigation fields. Now that the systems have been finetuned, it appears that the systems are doing just what was expected: removing somewhere between 85-95% of the nutrients and concentrating these nutrients in the worm beds.

These pilots will run for a full year to see how the worms do in our Southwestern climate, and to evaluate the use of different wood chips and the nutrient removal rates during the summer and the winter. Stay tuned for additional information soon. To see how these pilot projects get upscaled to a large full-size operation and how this project changed the environmental footprint, please have a look at this video from Royal Dairy on Vimeo at:

<https://vimeo.com/434798390>.