## BALANCE: The message is pretty clear

Books—The initial impression of Julianne Swartz's exhibit is that it's a science project rigged up by Rube Goldberg.

On closer inspection, though, the piece reveals itself to be a thoughtprovoking metaphor for the precari-

> ous balance in which natural ecosystems exist, particularly when humans become a factor. It was created

It was created before the catastrophic flooding in New Orleans, but that disaster has highlighted the relevance of

the work to contemporary environmental issues.

Patterson

Swartz's installation is titled Managed Flow Echo System, and it's on view through Nov. 19 in the sunlit Carroll Gallery at Appalachian State University's Turchin Center for the Visual Arts.

The piece is, in effect, an electrically powered system designed to continually circulate water through a number of interconnected tubes and containers. In the process, it hydrates a variety of plants.

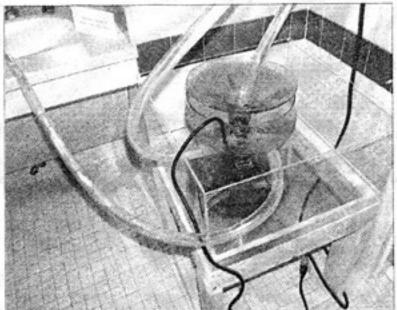
It's a mechanically complicated piece that required some delicate engineering. And it's all the more remarkable since Swartz didn't design it, and didn't know what materials she would use until she arrived at the university to start installing it.

The installation took place during her two-week residency in August. In a recent telephone interview, she said that she saw a floor plan of the gallery before her visit. The availability of ample natural light from windows in the gallery and the proximity of running water in a nearby restroom prompted her design, she said.

But she began her residency with no materials other than some plastic tubing and several electrically powered water pumps that she brought from Brooklyn, where she lives.

Swartz bought extension cords in Boone, and she scavenged the remaining components — recyclable plastic soft-drink bottles, Plexiglas boxes, plastic plumbing pipes, and plant specimens — on the campus.

The plants include water hyacinths, bamboo, algae and several



SH MANNE SHARTZ PHOTO

Managed Flow Echo System was installed by Julianne Swartz, who fine-tuned the pipes and pumps so that a delicate balance is maintained and plants stay alive.

types of moss. They are planted in six Plexiglas boxes that originally were custom-built as vitrines for use in protecting small sculptures for exhibition purposes. Swartz has transformed them into open-topped terrariums, interconnected by the plastic tubes that circulate the water.

The piece was clearly designed for this gallery, which itself becomes part of the art. Swartz had to drill several holes through some of the walls to accommodate the various tubes and pipes.

Water from a sink in the nearby restroom is piped into the system that Swartz has devised, and five electrically-powered pumps continually recirculate the water at a rate of about 400 gallons per hour.

If the pumps fail to function evenly, the system will overflow, she wrote in a piece for the gallery. Should the water come in direct contact with the exposed wiring, it could create an electrical hazard. And if the water stops flowing through the pumps, the pumps will be destroyed and the plants will die.

"When the system is properly balanced, life, in the form of aquatic plants, is sustained, and the orderly, dry gallery space is maintained," she wrote.

Swartz created Managed Flow Echo System "to set order and chaos in opposition," she wrote. "It operates successfully, but on the edge of failure."

Getting the pumps properly calibrated and all of the other components to operate smoothly wasn't easy, Swartz said.

The gallery was flooded several times while she worked on the piece, according to Hank Foreman, the Turchin Center's director and curator.

At one point the building's custodian said that she didn't know whether the water on the gallery floor was art or the result of an accident to be cleaned up, Foreman said.

Eventually, though, Swartz finetuned the system so it worked even when the galiery is closed and the staff is away.

■ Julianne Swartz's installation runs concurrently at Appalachian State University's Turchin Center for the Visual Arts with a sculptural installation by Stephen Hendee. Both artists are scheduled to present lectures about their work on Saturday at 7 p.m. at the Turchin Center, as part of a conference of the Tri-State Sculptors organization. The lectures are free and open to the public. The Turchin Center is at 423 W. King Street in Boone. For more information phone (828) 262 3017.