

Grant sought to study whether water turbines can be used to harness the power of the Salem River to produce electricity

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By



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Staff photo by Britney Lillya

A study will be conducted to determine whether the strong currents of the Salem River can be harnessed to produce power.

SALEM — In cooperation with Rowan University, South Jersey Economic Development District will be applying for the i6 Green Challenge Grant to conduct water turbine research in the Salem River.

The U.S. Commerce Department's Economic Development Administration (EDA) will award up to \$1 million to each of six teams around the country with the most innovative ideas to drive technology, commercialization and entrepreneurship in support of a green innovation economy.

The hope for the grant is to increased U.S. competitiveness and new jobs.

South Jersey Economic Development District Executive

Director Gordon Dahl said their application will center around underwater turbines.

"We are looking at three different types of turbines: Vertical, horizontal, and kite technology," said Dahl.

Dahl said the vertical turbine is similar to that of airplane propeller. The horizontal turbine is built much like a top, and the kite technology is a stingray type device that is pushed around in the water along with the current making looping movements to create energy.

"The Salem River has swift currents and the models we are looking to incorporate into the research are a fiberglass design," said Dahl.

He said this study could help the local boating industry by creating a new market for fiberglass parts.

"This is a very competitive grant, but we have a unique approach, one that can benefit renewable energy research and assist some of the distressed boating industries in New Jersey," he added.

The Salem River area where the research would be conducted is tidal and connects the Delaware River with Mannington

Meadows and flows underneath The Veterans of Salem County Memorial Bridge.

Students from Rowan University's Engineering Department will be the major force behind the grant.

Dahl said the students will also work to design a hybrid wind and solar street light.

Freeholder Beth Timberman was excited by the possible research opportunity in the Salem County area. Even though the grant is very competitive, she feels this could be a great opportunity for Salem County students.

"Anytime we can be involved in research it is a great opportunity for the students," said Timberman. "It might even bring some business our way."

The deadline for grant submission is May 26.

"Initiatives like the i6 Green Challenge support the president's vision for out-innovating the rest of the world by moving great ideas from the lab to the marketplace to spur the development of 21st Century jobs and industries," said U.S. Commerce Secretary Gary Locke. "We know that in the last 30 years, nearly all net new jobs were created by startups, and they will continue to play a critical role in our nation's economic prosperity."

The i6 Green winners will be awarded more than \$6 million in additional funding.

"The multi-agency competition builds on the success of last year's initiative by encouraging proof of concept centers and promoting green growth to increase our nation's competitiveness and accelerate the economic recovery," said U.S. Chief Technology Officer Aneesh Chopra.

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