

# Stream innovation and electricity futures

A group of hearty souls braved cold water and biting winds Friday to slow stream-bank erosion.



**Shannon  
Carey**

Led by Marty Pleasant of Knox County Stormwater, the team worked to protect Gibbs resident Myrtle Booker's stream-side land and outbuilding.

According to Pleasant, Booker contacted the county regarding erosion on her property. She applied for and received cost-shar-

ing aid from the Environmental Stewardship Program. The applicant provides 40 percent of the project, whether through money, materials or labor.

Daniel Horne of Knox County Soil Conservation, Ijams Nature Center's Peg Beute and Allison Brucks, and the AmeriCorps Water Quality Team joined Pleasant.

"This is a cost-share program that is aimed toward alternative and innovative drainage and erosion solutions," said Horne.

The methods used to protect Booker's streambank are bioengineering techniques that rely on substances other than stone and concrete. The team used cedar tree revetment, or a layer of cedar trees anchored along the bank, to protect the bank



AmeriCorps Water Quality Team members Khann Chov and Meagan Jones plant willow cuttings to prevent bank erosion.

surface. They planted willow and red ozier dogwood cuttings along the bank to stabilize it with root systems.

The team also installed willow fascines, an interesting element. The team dug small trenches along the side of the bank and placed bundles of willow branches in them. The branches will take root and grow into willow trees, further strengthening the bank.

Info: Marty Pleasant, 215-5800.

tives for solar and wind-generated green power," she said.

The program provides a \$500 startup credit for installing solar panels or wind turbines. Solar and wind power devices can save money on the installers' electricity bills. The credit is applied to the customer's bill as an extra incentive.

Garrison also said she is aware of tax credits of about 30 percent of the cost of the alternative power system.

KUB's Brian Headrick said Green Power is a program that allows customers to buy blocks of power from alternative energy sources. Currently, most power available to KUB cus-

tomers comes from coal burning, nuclear and hydroelectric sources.

Alternative power sources available now are 19 solar arrays, 18 wind turbines on Buffalo Mountain Wind Farm and methane gas captured from Memphis wastewater. The methane gas is collected and turns a turbine to create electricity.

Burning coal increased pollutants in the air we breathe. Knoxville's air quality is poor, but Headrick said it has been improving in the years since the program was implemented.

"By using these renewable energy sources, you replace what would go online as coal fire generated power," said Headrick.

Right now, renewable energy costs more than older methods. The Green Power program sells renewable energy at a slightly higher cost, \$4 per 150 kilowatt block. This money funds the program's infrastructure, possibly allowing more renewable energy opportunities in the future.

"The program does have a surplus of energy that it can sell to customers," said Headrick. "There is a tremendous opportunity to grow the program."

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