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NEWS RELEASE

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Rock Your Watershed! game teaches about land use and conservation

AMES, IA—A video game that is fun, educational, and attracts an audience of both kids and adults is almost unheard of. The new online computer game "Rock Your Watershed!" does just that; it entertains while it teaches players of all ages.

As part of the youth water awareness campaign Water Rocks!, the object of the "Rock Your Watershed!" game is to earn a high score by balancing productivity and environmental impacts, based on land management choices on 10 parcels of land within a watershed. Factoring in fertilizer use and tillage, players try to make the best balance of costs, profit, soil, nutrients and water quality on each piece of land. The big variable in the game is the amount of precipitation, just as in real life; the same land management practices under different rainfall scenarios can yield very different results! High scorers are recognized on the game's leaderboard.

The game requires making decisions on the computer screen just as a producer would make on an actual farm. What crops are grown? Are cover crops used? How much erosion is leaving the field? Is the field tilled or not? These are only a few decisions that the player and the farmer encounter. It is a correlation of soil erosion, nutrient transport, precipitation, and land management practices.

While developed for youth, "Rock Your Watershed!" is essentially the Iowa Nutrient Reduction Strategy (NRS) presented in a unique, interactive format. The NRS suggests a suite of practices

that fit the land best to reduce nutrients entering streams and rivers. It is part of the larger plan to reduce nutrients in Iowa waters and the Gulf of Mexico. To learn more about the NRS, visit the website: http://www.nutrientstrategy.iastate.edu/.

The "Rock Your Watershed!" game is designed using scientific data specific to Iowa. Scoring computations are based on research findings related to hydrology, nutrient transport, soil erosion, costs of conservation practices and soil loss, and the benefits of strategic placement of conservation practices on reducing nonpoint source pollution.

This summer, "Rock Your Watershed!" earned a Blue Ribbon Award of Excellence in Educational Aids at the American Society of Agricultural and Biological Engineers (ASABE) International Meeting, held in Kansas City. Accepting the award were the game's creators: Matt Helmers, Iowa State University associate professor in Agricultural and Biosystems Engineering; Jacqueline Comito, Water Rocks! program director; and Ann Staudt, Water Rocks! science director. Entrepreneurial Technologies of Urbandale is the web designer for the game.

For most kids, electronic media is their primary source of communication. Engaging youth through this medium was essential to draw awareness about water and their relationship with it, especially in Iowa, where they are surrounded by agriculture. The more that young people understand about the relationships between agriculture practices and natural resources, the more likely they will protect soil and water as adults.

"To ensure the effectiveness of the game, it was beta tested with 7th graders," said Staudt. "One student told us that he had to play the game 17 times before he figured out how to get a high score. The game is teaching youth to think, analyze and solve agricultural and environmental problems. It also keeps them engaged—can you imagine a 7th grader sitting through a textbook-based water quality lesson 17 times?"

"Rock Your Watershed!" can be found on the Water Rocks! website. The website also has videos, music videos, songs, geocaching, and enhanced learning activities about all things water. Visit the website to learn more and to play "Rock Your Watershed!:" www.waterrocks.org, and follow us on Facebook.

Partners of Water Rocks! are Iowa State University Extension and Outreach, Iowa Department of Natural Resources, Leopold Center for Sustainable Agriculture, Iowa Water Center and Iowa Learning Farms.