

Sustainable Actions in the Garden State: Where We Are and Where We Need to Go

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Increasingly severe climate events and exploding population due to migration, political, and socio-economic factors highlights the importance of sustainability to the forefront of scientific thought. New Jersey, with its dense, ever growing population is an ideal state where these practices can be adapted and there is an urgent requirement to create and test innovative sustainability ideas in New Jersey.

“The scientific approach to sustainability uses interdisciplinary research and practice to maintain the ongoing needs of the present, while preserving the future of the planet and its population,” says Dr. Shana Weber, Director of Sustainability at Princeton University and the President of the New Jersey Higher Education Partnership for Sustainability (NJHEPS). She further describes the science of sustainability as “the science of complex systems interactions that necessarily includes economic, cultural and ecological systems. Sustainability asks the question: How can humans (given growing populations, resource pressures, and a shifting climate) serve as regenerative and not destructive actors in these complex planetary life-support systems?”



Shana S Weber,
Director, office of sustainability

So as we review our present environment and look to the future, key issues immediately pop up. At the forefront are questions about the demand for food security, clean water and energy production to accommodate the exponentially growing population. One questions, “what is required as an immediate plan of action to create real solutions to address such an outcome”? Undoubtedly, sustainability becomes an issue of primary importance that needs to be implemented immediately.

In New Jersey, a densely populated state these challenges are self-evident. Super Storm Sandy showed no favorites: luxury shore homes were obliterated and low-income and at-risk populations suffered without power, water, supplies, in some cases for weeks. It does however create new opportunities for innovations in sustainability that will, hopefully over time, mitigate the effects of natural events like these.

Sustainable Jersey

An example of what is being done in the pursuit of sustainable innovation is [Sustainable Jersey](#), a nonprofit based established in 2009 out of the Sustainability Institute at the College of New Jersey in Ewing. This organization has provided tools, training and financial incentives to support municipalities and communities as they pursue sustainability programs.

“I think there are very promising improvements in NJ and there is tremendous potential for broad leadership” states Dr. Weber. She further adds “The best evidence of this leadership potential is the new State report published by Sustainable Jersey recently. It identifies key sustainability indicators for the State; current status based on available data, and analysis gaps that are the perfect fodder for research. Given the strength of New Jersey’s higher education community, those gaps identify rich areas for research and innovation that matter to New Jersey and other states”.

Last June, Sustainable Jersey released the 2015 Sustainable State of the State Report with not just goals that define a “vision of sustainability”, but indicators for each of the 57 goals to assess progress. The goals are organized into seven capitals including:

- Natural (biodiversity and ecosystem services, water, agriculture, soils and air);
- Human (health, education and human development);
- Social,
- Political (governance),
- Economic and physical capital (housing, transportation and development patterns) and
- System metabolism, namely energy and waste.

The report’s results, according to co-author and co-director Randall Solomon, “suggest a mixed bag, with progress being made in some areas and not in others.” The report is available on their site to download.

NJ Higher Education Partnership for Sustainability

[The New Jersey Higher Education Partnership for Sustainability](#) is an example of educators and researchers across disciplines from over 30 institutions strategize together with common agendas and goals. The volunteer organization welcomes all faculty, administrators and students to join and collectively inspire and teach the educational community to consistently practice sustainability and create shared methods to do so. Dr. Weber contributes “One of the strengths of the sustainability field in higher education in particular, where I spend most of my time, is that most of us are motivated by the collective impact potential of our campus activities. There is a very strong collaborative spirit at state, regional and national scales because it is abundantly clear that we need to leverage each other’s strengths to succeed in stabilizing and regenerating the complex systems we rely on”.

Permaculture Network of New Jersey

Should you aspire to shift to more sustainable practice close to home, you should be familiar with permaculture design. Permaculture can be described as a systematic method that incorporates principles of both agricultural and social design for the purpose of using patterns and features found in natural ecosystems. Founded in 2009 by Wanda Knapik and Paul Nick, Permaculture Network of New Jersey based in Bernardsville is dedicated to connecting, educating and inspiring people to regenerate NJ landscapes and communities using permaculture principles, ethics and methods. Their website is a one-stop repository for more than just permaculture and organic gardening, as with one click you can view environmental and sustainability education, activism, awareness and community happenings.

Few critical problems are likely to be resolved without engagement and collaborative efforts working across interdisciplinary lines of science, politics, business and social sciences. This begins with creating a sense of collective knowledge about our current challenges, a shared sense of responsibility, agenda and actions that ultimately can make a collective impact. This methodological approach gives educators a great opportunity to take a lead in contributing to making a collective impact in the sustainability movement.