

[A Systems Approach to Food Resilience - Joseph Fiksel, Ohio State University](#) [1]

Submitted by Annie Keyes on Tue, 2014-12-09 14:17 Tuesday, January 6, 2015 - 08:45 to 09:15

Event: [Winter Meeting 2015](#) [2]

Session Type: [Plenary](#) [3]

Expertise Level: [Beginner](#) [4]

Abstract/Agenda:

Pursuing sustainability, whether at the national or local level, requires systems thinking to understand the complex linkages among food, energy, water, materials, waste management, ecosystem services, economic development, and social issues such as environmental justice. The speaker will describe a systems approach based on the Triple Value (3V) framework, which captures the dynamic interactions between human society and natural ecosystems. This approach is being implemented through a number of ongoing efforts being led by the EPA Office of Research and Development (ORD). For example, ORD has launched collaborative projects in New England and several other U.S. regions to improve coastal resilience and sustainability. These regions are experiencing water quality problems due to excess nutrients released from agriculture, organic wastes, and other sources, and these problems are compounding by increasing storm intensity due to climate change. To help policy-makers develop sustainable solutions, ORD has developed a dynamic, interactive modeling tool that is capable of analyzing the costs and benefits of alternative policy interventions on a watershed scale.

About the Speaker

Dr. Joseph Fiksel is a faculty member in the Department of Integrated Systems Engineering at The Ohio State University, where he co-founded the Center for Resilience. From 2010 to 2014 he served as Special Assistant for Sustainability at ORD, working closely with the leadership to establish collaborative initiatives with EPA program and regional offices. He is an internationally recognized authority on sustainability and resilience, with over 25 years of research and consulting experience for government agencies, multi-national companies, and industry consortia. Dr. Fiksel received a B.Sc. from M.I.T. and a Ph.D. from Stanford University in Operations Research. He has held a number of positions in the private sector, and prior to joining Ohio State he was Vice President for Life Cycle Management at Battelle.

Notes: Risk - new risks emerging incl. stress on planet (catastrophic events)

currently live in a global village - learn live in a new era

Plan - take a systems approach

resilience - capacity of a system to survive, adapt, and flourish in the face of turbulent change and uncertainty.

Q - 3V framework - human and social capital - may not have the capital that we need - this is often overlooked

Session Leads:

Name: [Joseph Fiksel](#) [5]

Organization(s): [Center for Resilience](#) [6], [Ohio State University](#) [7]

Notes takers:

Name: [Kelly Monteleone](#) [8]

Organization(s): [TERA](#) [9], [a CH2M Hill Company](#) [10]

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