# Building Sustainable Communities Around Core American Values & The Economy



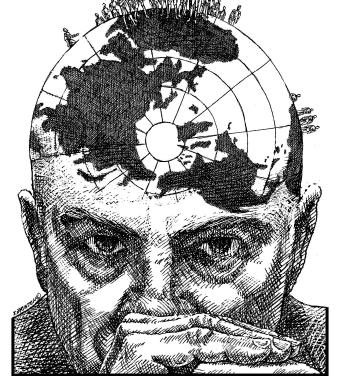


Sustainable Community Forum
Thrasher's Opera House
Green Lake, WI

(7/27/12)











## WISCONSIN River Falls

#### Sustainability



St. Croix Institute for Sustainable Community Development



#### UW-RF Receives "A-" Rating from Sustainable Endowments Institute

UW-RF Press Release
52 Best Overall Grades &
Regional Map of Rated Schools 
UW-RF Report Card &

#### Leadership ~or~ Risk of Irrelevance

The SCISCD is a "think and do tank" founded in May of 2007. The Institute is a "go-to" resource for every context of "Sustainability in the St. Croix River Watershed." Besides the "walk the talk" coordination service it provides to the UWRF campus community, it is the primary resource for regional, county, town, and municipal leaders seeking assistance with sustainable community development (SCD) in response to the myriad of environmental, social, and economic challenges.

Through a holistic, systems-thinking approach, Institute staff, faculty experts, student interns, and research teams from UWRF are coordinated to address the breadth and depth of sustainability-based comprehensive planning, development, and commercial opportunities that ultimately













A Rare

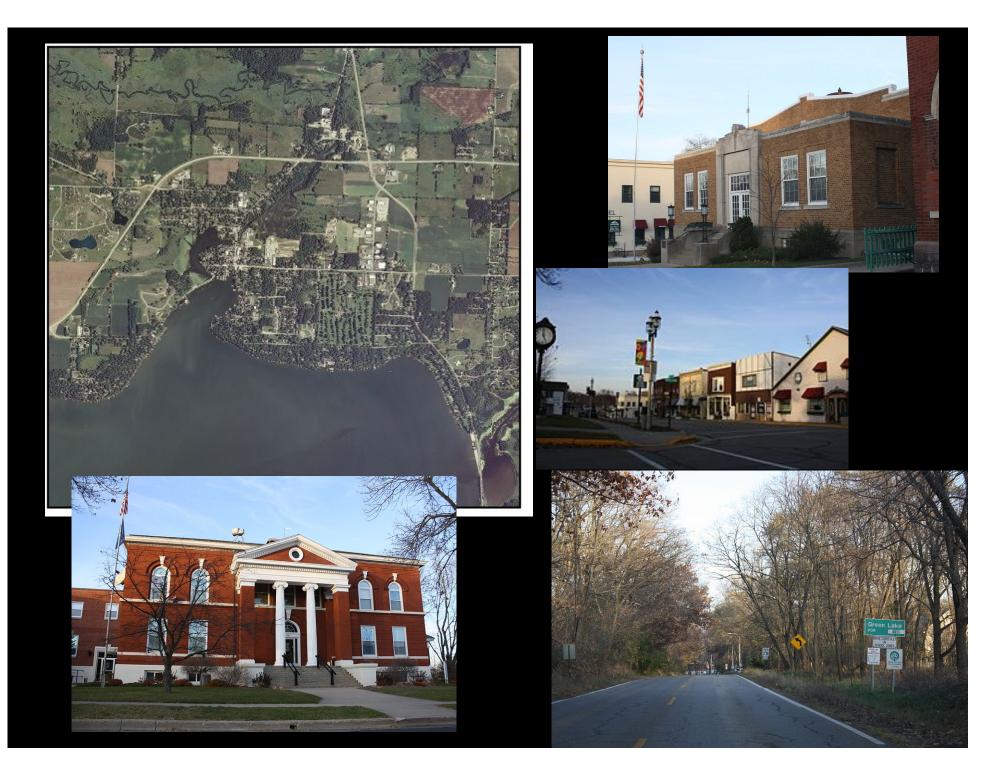
Moment of

Inactivity in

Life on the

Farm





# Green Lake County & School District

- GL County Government Center LEED Silver
- 25 By 2025 Energy Plan as an Energy Independent Community









## Wisconsin Energy Independent Community Partnership

## 25X25 Plan for Energy Independence

Green Lake County and School District





Adopted on December 21, 2010 by the Green Lake County Board

Approved on December 22, 2010 by the Green Lake School Board

#### **Energy Vision Statement**

Green Lake County values energy efficiency, energy conservation, and renewable energy as a means of reducing energy costs and increasing the use of local, clean energy sources. New development utilizes the most cost-effective energy-efficient methods available. The County is producing enough renewable energy to supply its own needs and sells excess back to the grid. Improvements in efficiency and new energy sources are reducing total carbon dioxide emissions associated with buildings and transportation in the County.

Wisconsin Office of Energy Independence

# Sustainability Prognostication: The Most Dangerous of Professional Sports

Be Careful Who You Ask & What You Ask For ....

"It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change." Charles Darwin



# Elephants in the Room .... A Race to Collapse ... or the Reclaiming of America

Our greatest & most immediate ... Macro-Threats?

- Population .... a whole lotta lovin' goin' on?!
- Personal, State & National Debt
- Climate Change+ Peak Oil = Low "E" Future
- Socio-Economic Disparity & Stress
- Exclusionary Social Ethics & Process
- Water Quality, Quantity, & Security
- Food Vulnerability, Shortages & Price
- The Silver Tsunami & Health Care
- Pandemics, Droughts, & Asteroids
- Political & Religious Polarity vs Best Available Science
- Agenda 21 & Life in Community as We Have Known It
- "The Bubble of American Civilization?"



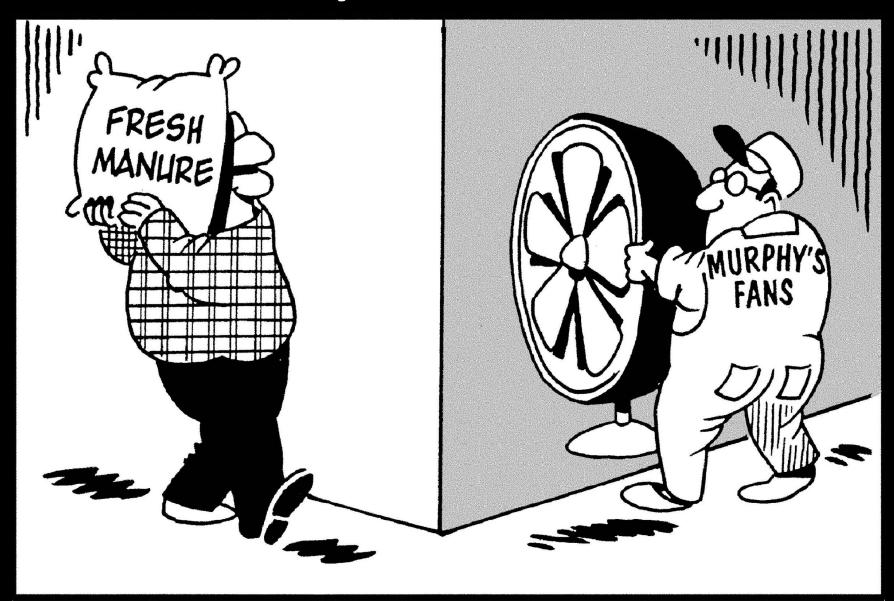


## "How long has THAT been there?"!

© Debbie Tomassi Used w/ Permission



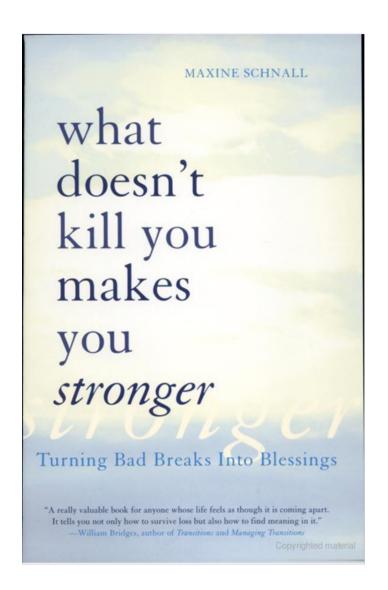
## Unsustainability Is Not Without Its Green Humor ....



## Consolation ....?

 What doesn't kill us makes us stronger

- -Personally
- -Professionally
- -Civicly





## Sustainable "Community" Development

#### US PARTNERSHIP

Green Lake

DE OF EDUCATION FOR SUSTAINABLE DEVELOPMENT UNITED NATIONS DECADE (2005-2014)



..... is (among the 70+ other definitions published since 1979)

"development which meets the needs of the present without compromising the ability of future generations to meet their own needs."

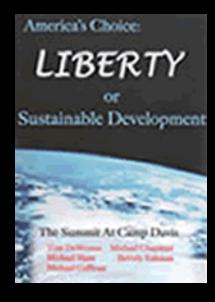
(UN - The Brundtland Commission, 1987)





## Run For Your Lives .....?

"And I will tell you now, if you want to keep your guns, your property, your children and your God... if you love liberty... Then Sustainable Development is your enemy!"



Sustainable Development The Evil Facing America
Tom DeWeese
August 6, 2004
NewsWithViews.com

http://www.newswithviews.com/DeWeese/tom13.htm

#### RESOLUTION EXPOSING UNITED NATIONS AGENDA 21

WHEREAS, the United Nations Agenda 21 is a comprehensive plan of extreme environmentalism, social engineering, and global political control that was initiated at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, in 1992; and,

WHEREAS, the United Nations Agenda 21 is being covertly pushed into local communities throughout the United States of America through the International Council of Local Environmental Initiatives (ICLEI) through local "sustainable development" policies such as Smart Growth, Wildlands Project, Resilient Cities, Regional Visioning Projects, and other "Green" or "Alternative" projects; and,

WHEREAS, this United Nations Agenda 21 plan of radical so-called "sustainable development" views the American way of life of private property ownership, single family homes, private car ownership and individual travel choices, and privately owned farms; all as destructive to the environment; and.

WHEREAS, according to the United Nations Agenda 21 policy, social justice is described as the right and opportunity of all people to benefit equally from the resources afforded us by society and the environment which would be accomplished by socialist/communist redistribution of wealth; and,

WHEREAS, according to the United Nations Agenda 21 policy National sovereignty is deemed a social injustice; now therefore be

RESOLVED, the Republican National Committee recognizes the destructive and insidious nature of United Nations Agenda 21 and hereby exposes to the public and public policy makers the dangerous intent of the plan; and therefore be it further

RESOLVED, that the U.S. government and no state or local government is legally bound by the United Nations Agenda 21 treaty in that it has never been endorsed by the (U.S.) Senate, and therefore be it further

RESOLVED, that the federal and state and local governments across the country be well informed of the underlying harmful implications of implementation of United Nations Agenda 21 destructive strategies for "sustainable development" and we hereby endorse rejection of its radical policies and rejection of any grant monies attached to it, and therefore be it further

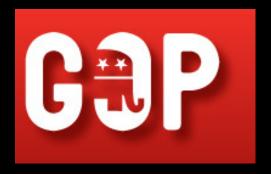
RESOLVED, that upon the approval of this resolution the Republican National Committee shall deliver a copy of this resolution to each of the Republican members of Congress, all Republican candidates for Congress, all Republican candidates for President who qualify for RNC sanctioned debates, and to each Republican state and territorial party office and recommend for adoption into the Republican Party Platform at the 2012 Convention.

As Approved by the Republican National Committee, January 13, 2012

## Republican National Committee January 13, 2012

Resolution for Inclusion in Platform for 2012 Convention

Resolution Exposing United
Nations Agenda 21 .... as a
Socialist / Communist Plot for
Wealth Redistribution ... Among
Other Things



http://www.gop.com/lmages/CommsLogo/20 12\_wintermeeting\_resolutions.pdf



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### Agenda 21 critics grow more vocal



July 15, 2012 5:00 am . BILL LUEDERS | Wisconsin Center for Investigative Journalism

(13) Comments

Al Hulick remembers, to the day, when Agenda 21 came into his world.

It was May 17, 2011, at an informational meeting on whether Janesville should join the state's Green Tier program. Some attendees reacted skeptically, handing out literature about Agenda 21, a non-binding pact to promote sustainable growth drafted by the United Nations in 1992.

"I had never heard of it," said Hulick, a management analyst for the city. He assumed fears about Green Tier, through which the state Department of Natural Resources and the nonprofit 1,000 Friends of Wisconsin help communities pursue environmentally friendly practices, would fade over time.

Instead, Hulick said, opposition to the city's participation in Green Tier has "grown at every meeting and become more vocal." The Janesville City Council has twice delayed action on the program due to concerns raised by citizens, some from other counties.

Those critics see Green Tier as a step toward advancing the U.N. pact and eroding their liberty. At one meeting, Georgia Janisch of Janesville warned such efforts threaten to "take us over from within without firing a shot."

There are other, more conventional reasons some oppose programs such as Green Tier, which involve public funds and may not always bring desired results.

But proponents were unprepared for the organized opposition that has sprung up around a littleknown U.N. plan depicted as part of plot to destroy private property rights, dictate personal behavior and impose a single world government.



#### Most Popular

Articles

Comments

- · Police: Husband finds wife with other man, hits him in head with tire jack handle
- · Court records: Killed child was pinned under father's SUV during attack
- Teen victims identified in motorcycle-semi crash in Columbia County
- · Fitchburg businessman charged with bank fraud, money laundering
- · Soglin calls for citywide food policy to curb problem of 'food deserts'

#### What we're saying on Twitter

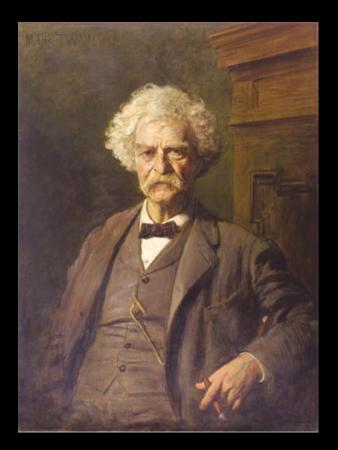


MSpicuzzaWSJ There are loud cheers from the balconies after Democrats take the majority in the state Senate. 14 minutes ago · reply · retweet · favorite



# But, as Mark Twain puts it ....

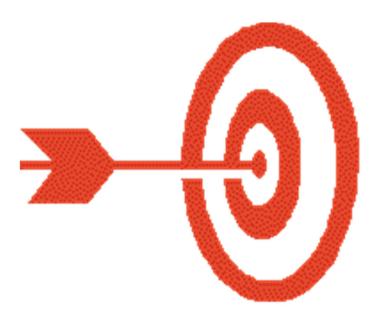
"What gets us into trouble is not what we don't know, .... it's what we know for sure that just ain't so."



bancroft.berkeley.edu/.../122/twain.html







# Community Leadership .... in the attempt to avoid Un-Sustainability.

Cain/SCISCD, 2009

.... with some sense of Urgency ....

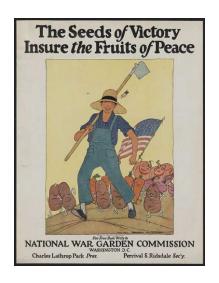
Make no small plans...



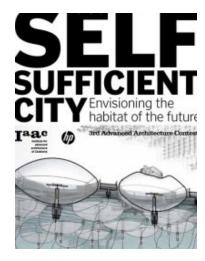
## Reclaiming of Core American Values ...

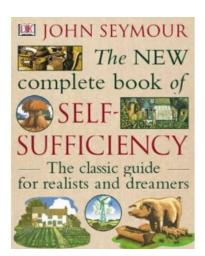
Life, Liberty, & the Pursuit of Happiness

- Self-Sufficiency
- Self-Reliance
- Self-Determination
- Creativity & Ingenuity
- Innovation
- Entrepreneurship
- Responsibility for Self, Family, Neighbors, & Community











# From 1XBL to 3XBL – The Basic, But Distinct Differences

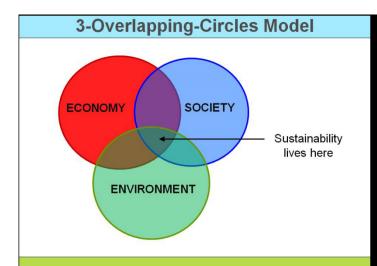




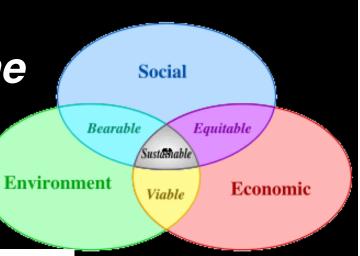








The Triple
Bottom Line
- 3XBL





Environment Society Economy

**Business Sustainability** 



## 3-Legged Sustainability Stool

COMMUNITY 4XBL

Sustainability

#### **Economic Leg**

Good Jobs
Fair wages
Security
Infrastructure
Fair Trade



#### **Environmental Leg**

0 Pollution & Waste Renewable Energy Conservation Restoration

#### Social Leg

Working conditions
Health services
Education services
Community & Culture
Social justice

Quality of Life / Genuine Wealth / Genuine Progress

# Green Lake City Food Self-Sufficiency <u>Macro Economic Value & Leakage</u>

- Population (Green Lake City Webpage) = 1,100
- Per Capita Expenditures (Eat In & Dine Out) =

Midwest \$2513 (BLS, 2009) X  $1,100 = \frac{$2,764,300}{}$ 

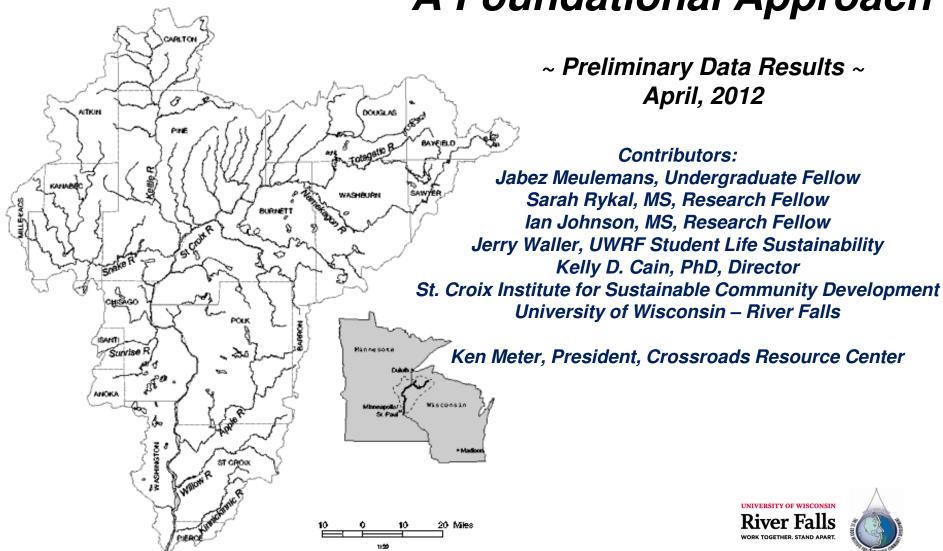
... w/90% Leakage of ~\$2.5M





St Croix Watershed Food Self-Sufficiency & Economic Opportunity Model:

A Foundational Approach



# <u>Purpose</u> of the SCWFSSC&EOM:

#### To provide:

- Locally relevant, publicly accessible, & scientifically credible data for debate & decision-making at the municipal, county, & regional level regarding food security & vulnerability, comprehensive planning, job training / employment, & economic opportunity;
- Macro-level assessment of gross carrying capacity of a county & regional population for a 12 month, subsistence-based diet;
- Macro-level assessment of foundation for re-localization of a vertically integrated food system & entrepreneurial value chain economy; &
- Foundation for micro-level analysis of a comprehensive, regionally adapted food item consumption estimate, production capacity, market valuation, employment, & economic opportunity.

Cain/SCISCD/UWRF

# Green Lake City Food Self-Sufficiency Food Preference Diversity of the Population

- Population = 1,100
- Omnivore (86.8%) = <u>955</u> (Harris Interactive Service, 2008)
- Vegan, Vegetarian, & Vegetarian Inclined (VVVI) = 145

  (Harris Interactive Service, 2008)
  - Vegan (.5%)
  - Vegetarian (2.7%)
  - Vegetarian Inclined (10%)





# Green Lake City Food Self-Sufficiency <u>Acres to Support Population</u>

Per Capita Acres to Support Food Preference
 Diversity of the Population (Peters, Cornell University, 2006)

VVVI = 0.44 acres X 145 = 64

**OMNI** = 2.11 acres X 955 = 2,015

**Total = 2,079 acres** 



- ?% of Total Farm Acres (xxx,xxx) (2007 Ag Census Data)
- ?% of Total County Acreage (xxx,xxx) (2000 U.S. Census)
- ?% of Class 3 & 4 Total Acreage (xxx,xxx) (NRCS, UW-RF GIS Dept.)



# Green Lake County Food Self-Sufficiency <u>Macro Economic Value & Leakage</u>

- Population (2010 Census) = 19,051
- Per Capita Expenditures (Eat In & Dine Out) =

Midwest \$2513 (BLS, 2009) X 19,051 = \$47,875,163

... w/90% Leakage of ~\$43M





Green Lake County Food Print, Self-Sufficiency, Security, & Economic Opportunity ??

Priceless!

# Green Lake County Food Preference Diversity of the Population

- Population = 19,051
- Omnivore (86.8%) = <u>16,536</u> (Harris Interactive Service, 2008)
- Vegan, Vegetarian, & Vegetarian Inclined (VVVI) = <u>2515</u>
   (Harris Interactive Service, 2008)
  - Vegan (.5%)
  - Vegetarian (2.7%)
  - Vegetarian Inclined (10%)





Green Lake County Food Print, Self-Sufficiency, Security, & Economic Opportunity ?? <u>Priceless!</u>

# Green Lake County Food Self-Sufficiency <u>Acres to Support Population</u>

• Per Capita Acres to Support Food Preference Diversity of the Population (Peters, Cornell University, 2006)

VVVI = 0.44 acres X 2515 = 1,107

OMNI = 2.11 acres X 16,536 = 34,891

Total = <u>35,998 acres</u>



- ~25% of Total Farm Acres (142,757) (2007 Ag Census Data)
- ~16% of Total County Acreage (223,642) (2000 U.S. Census)
- ?% of Class 3 & 4 Total Acreage (xxx,xxx) (NRCS, UW-RF GIS Dept.)



Green Lake County Food Print, Self-Sufficiency, Security, & Economic Opportunity ??

Priceless!



#### Horticulture contributes to Green Lake County diversity

Green Lake County sales of Christmas trees, fruits and vegetables, greenhouse, nursery and floriculture products add up to \$9.4 million. Landscape, grounds maintenance and tree-care businesses create additional full-time jobs and many seasonal jobs.

#### Direct-marketing sales add \$210,000 to economy

More and more Green Lake County farmers sell directly to consumers through roadside stands, farmers' markets, auctions, pick-yourown operations and community supported agriculture (CSA). In all, 49 farms generate \$210,000 in direct-marketing sales.

#### Farmers are stewards of 64% of the county's land

Green Lake County farmers own and manage 142,757 acres, or 64 percent, of the county's land. This includes cropland, pasture, tree farms, farm forests and wetlands. As stewards of the land, farmers use conservation practices, such as crop rotation, nutrient management and integrated pest management, to protect environmental resources and provide habitat for wildlife.



Produced in 2011 by: University of Wisconsin-Extension, Cooperative Extension

#### Economic data (2008) provided by:

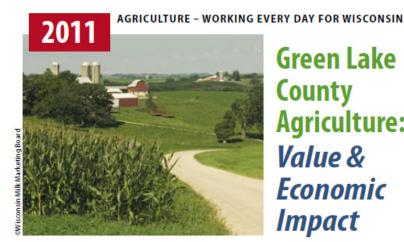
Steven C. Deller, professor of agricultural and applied economics, College of Agricultural and Life Sciences, University of Wisconsin-Madison; and community development specialist, University of Wisconsin-Extension, Cooperative Extension.

Other economic data from: USDA 2007 Census of Agriculture For more information, contact:

Green Lake County - UW Extension 492 Hill Street - Courthouse Box 3188 Green Lake, WI 54941-3188

920-294-4037 http://greenlake.uwex.edu/

An EEO/AA employer, the University of Wisconsin-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements.



Green Lake County **Agriculture:** Value & **Economic Impact** 

Agriculture works hard for Green Lake County every day. Familyowned farms, food processors and agriculture-related businesses generate thousands of jobs and millions of dollars of economic activity while contributing to local income and tax revenues.

Green Lake County offers an array of agricultural products and practices, including organic dairy and vegetables, rotational grazing, conventional dairies of all sizes, corn, soybeans, snap beans and sweet corn. This diversity makes agriculture a mainstay in the county's economy.

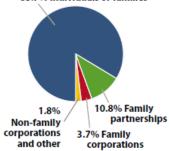
Green Lake County's rolling hills and rural charm, surrounding the state's deepest lake, also make it a popular tourist spot. Home to a large Amish community, the Tri-County Produce Auction Co-op and many value-added farms, Green Lake County is also an agri-tourism destination.

#### How important is agriculture?

- Agriculture provides 1,463 jobs in Green Lake County.
- Agriculture accounts for \$320 million in business sales.
- Agriculture contributes \$88 million to county income.
- Agriculture pays \$7 million in taxes.

#### Who owns the farms?

83.7% Individuals or families





http://www.uwex.edu/ces/ag/wisag/

## References:

- Meter, Ken, 2012. Crossroads Resource Center. http://www.crcworks.org/?submit=pubs
- Peters, C.J., Wilkins, J.L. & Fick, G.W., 2007. Testing a complete-diet model for estimating the land resource requirements of food consumption and agricultural carrying capacity: The New York State example. Renewable Agriculture and Food Systems 22: 145–153.
- 2000 U.S. Census data (Sq Miles converted to acreage)
   http://censtats.census.gov/usa/usa.shtml
- 2007 Ag Census County Data http://www.agcensus.usda.gov/Publications/2007/Full\_Report/Volume\_1,\_Chapter\_2
   \_County\_Level/Wisconsin/index.asp
- 2010 US Census Population Estimates http://www.census.gov/popest/eval-estimates/eval-est2010.html
- 2010 Bureau of Labor Statistics Per Capita Food Expenditures (National) - http://www.bls.gov/news.release/cesan.nr0.htm\
- NRCS 2010 Soil Data Mart data, analyzed by UWRF GIS Department
  - http://soildatamart.nrcs.usda.gov/SDM%20Web%20Application/default.aspx



# Economic News Release

For release: 10:00 a.m. (EDT), Tue	CONSUMER EXPENDITURES2010
sday,	S
Tuesday, September	2010
27,	
27, 2011	
L USDI-11-1395	

Percent change

Item				2008-2009 2009-2010	
Number of consumer					
units (000's)	120,770	120,847	121,107		
Income before taxes	\$63,563	\$62,857	\$62,481	-1.1	-0.6
Average age of					
reference person	49.1	49.4	49.4		
Average number in					
consumer unit:					
Persons		2.5			
Earners		1.3			
Vehicles		2.0			
Percent homeowner	66	66	66		
Average annual					
expenditures	\$50,486	\$49,067	\$48,109	-2.8	-2.0
Food	6,443	6,372	6,129	-1.1	-3.8
At home	3,744	3,753	3,624	0.2	-3.4
Away from home	2,698	2,619	2,505	-2.9	-4.4
Housing	17,109	16,895	16,557	-1.3	-2.0
Apparel and services	1,801	1,725	1,700	-4.2	-1.4
Transportation	8,604	7,658	7,677	-11.0	0.2
Healthcare	2,976	3,126	3,157	5.0	1.0
Entertainment	2,835	2,693	2,504	-5.0	-7.0
Cash contributions	1,737	1,723	1,633	-0.8	-5.2
Personal insurance					
and pensions	5,605	5,471	5,373	-2.4	-1.8
All other expenditures	3,376	3,404	3,379	0.8	-0.7

http://www.bls.gov/news.release/cesan.nr0.htm

# rural new york minute

#### Land and Diet: What's the most land efficient diet for New York State?

By Christian J. Peters, Jennifer L. Wilkins, and Gary W. Fick, Cornell University\*

I ncreasing numbers of consumers are considering the environmental, social and economic impacts of their food purchasing and consumption habits. To reduce environmental costs associated with transportation and support local economies, some consumers favor buying and consuming locally or regionally produced food. While this approach may seem logical, to support the nutritional requirements of a population an area's land base must be able to produce an appropriate variety and quantity of foods. Research suggests that while New York State doesn't have the land base to provide for its population's total food needs, more people could be fed by making some important adjustments to both diet and land use.2

We set out to understand how diet influences the amount of land needed to produce the food we eat and, consequently, how many people can be fed by the NYS land base. We compared 42 complete diets (2300 calorie/day) - all including the same NYS grown grains, fruits, vegetables, and dairy products, but varying in the amounts of meat and in the amounts of energy supplied by fats. We found a five-fold difference in acreage requirements between the diets incorporating the least amount of fat and meat and those with the least amount of fat and greatest amount of meat. A person following a low-fat vegetarian diet requires less than half an acre per year to produce the food required for their meals while a person consuming a low-fat diet with a lot of meat

Importantly, even though all the vegetarian diets require less land than the meat diets, they do not necessarily feed the most people (see illustration). Because different soil types are suited to different crops (some of which are not consumed directly by humans), more people can be fed when their diets are not strictly vegetarian. The components of a vegetarian diet - fruits, grains, and vegetables require high quality land, whereas meat producing animals can be raised on lower quality lands which produce crops we don't eat. In NYS, more land is suited to perennial forage production (pasture, dry hay, haylage, and greenchop) than for growing annual crops (corn, soy, wheat, and vegetables). In other words, land suited to the production of dairy and meat but not fruits, grains, and vegetables is more readily available, making it theoretically possible to feed more people who eat a modest amount of meat than those whose diets are completely vegetarian.

'Wilkins, J. How many people can the land feed? Depends on the amount of meat and milk in the diet. Hunger and Environmental Nutrition Newsletter, American Dietetic Association Hunger and Environmental Practice Group. Winter 2008.

Peters, CJ, Fick GW, Wilkins JL. Testing a complete-diet model for estimating the land resource requirements of food consumption and agricultural carrying capacity: The New York State example. Renewable Agriculture and Food Systems. 2007; 22(2):145-153.



Source: Illustration by Steve Rokitka/University Communications. This graphic originally appeared in the Cornell Chronicle, 10/5/07.

"Modest amount" of meat is the key, however. If all of the land suited to producing meat but not plant foods is used, additional meat production would require the use of land required for the production of plant foods. In order to achieve the most efficient balance between land use and consumption, our research suggests that New Yorkers would need to limit their egg and meat consumption to 2 cooked ounces per day. This adjustment would require a significant reduction in meat consumption, as the average American consumed almost 6 ounces of such products per day in 2005.3 It would also require NYS producers to significantly change their land use practices. The influence of diet on land use has important implications for individuals and communities. Understanding these relationships can help policy makers ensure the well-being of both.

"U.S.Department of Agriculture, Economic Research Service. 2007. Food consumption (per capita) data system: Loss-adjusted food availability. Available at Web site: http://www. ers.usda.gov/Data/FoodConsumption/FoodGuideIndex.htm (verified 19 June 2008)

\* Heidi Mouillesseaux-Kunzman serves as guest editor for this issue



The Rural New York Minute is a publication of Cornell University's Community & Rural Development Institute (CaRDI), edited by Robin M. Blakely. These publications are free for public reproduction With proper accreditation. For more information on CaRDI, our program areas, and past publications, please visit: WWW.cardi.cornell.edu.

#### Testing a complete-diet model for estimating the land resource requirements of food consumption and agricultural carrying capacity: The New York State example

Christian J. Peters1\*, Jennifer L. Wilkins2, and Garv W. Fick3

<sup>1</sup>515 Bradfield Hall, Department of Crop and Soil Sciences, Cornell University, Ithaca, NY 14853, USA <sup>2</sup>305 Martha Van Rensselaer Hall, Division of Nutritional Sciences, Cornell University, Ithaca, NY 14853, USA. <sup>3</sup>507 Bradfield Hall, Department of Crop and Soil Sciences, Cornell University, Ithaca, NY 14853, USA. \*Corresponding author: cjp20@cornell.edu

Accepted 22 December 2006

Research Paper

Agriculture faces a multitude of challenges in the 21st century, and new tools are needed to help determine how it should respond. Among these challenges is a need to reconcile how human food consumption patterns should change to both improve human nutrition and reduce agriculture's environmental footprint. A complete-diet framework is needed for better understanding how diet influences demand for a fundamental agricultural resource, land. We tested such a model, measuring the impact of fat and meat consumption on the land requirements of food production in New York State (NYS). Analysis was confined to this geographic area to simplify the modeling procedure and to examine the state's ability to reduce environmental impact by supplying food locally. Per capita land resource requirements were calculated with a spreadsheet model for 42 diets ranging from 0 to 381 gd<sup>-1</sup> (0 to 12 ozd<sup>-1</sup>) of meat and eggs and 20 to 45% total calories from fat. Many of these diets meet national dietary recommendations. The potential human carrying capacity of the NYS land base was then derived, based on recent estimates of available agricultural land. A nearly fivefold difference (0.18-0.86ha) in per capita land requirements was observed across the diets. Increasing meat in the diet increased per capita land requirements, while increasing total dietary fat increased the land requirements of low meat diets but reduced the land needed for high meat diets. Higher meat diets used a larger share of the available cropland suited only to pasture and perennial crops. Thus, only a threefold difference was observed for the potential number of people fed from the NYS land base (2.0-6.2 million). In addition, some high-fat vegetarian diets supported fewer people than lower fat diets containing 63-127 gd -1 of meat (approximately one- to two-thirds of the national average per capita consumption in the US). These results support the assertion that diet should be considered in its entirety when assessing environmental impact. To more completely understand how diet influences land requirements and potential carrying capacity, this model should be applied across a larger geographic area that encompasses a wider variety of climates and soil resources. To better understand the ability of a local region to supply more of its own food, the model should be moved into a geospatial framework.

Key words: carrying capacity, diet, fat, food consumption, human nutrition, land requirements, local agriculture, meat, model

#### Introduction

Agriculture faces a collection of potentially irreconcilable challenges in the 21st century; feeding a growing world population that demands a more affluent diet, providing better nutrition for the poor and more balanced nutrition for the rich, adapting to a changing climate, and reducing its impact on the environment. Food consumption and agricultural production are interdependent, and new tools are needed to understand how one influences the other. Peters et al.1 contended that complete-diet approaches should be used to assess the adequacy of food supplies and

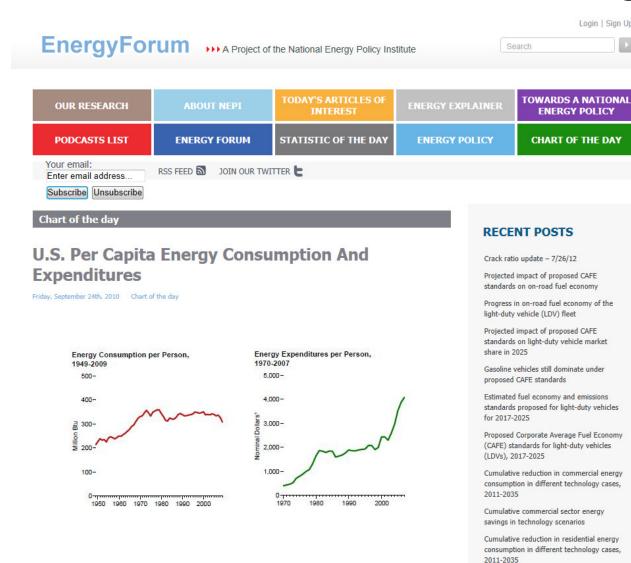
© 2007 Cambridge University Press

http://journals.cambridge.org/download.php?file=%2FRAF%2FRAF22 02%2FS1 742170507001767a.pdf&code=ad0aa1e0b076304fead73b8e039e5e6c

http://cce.cornell.edu/Ag/Documents/PDFs/Land%20 Efficient%20Diet.pdf

## What Would These Per Capita Numbers Look Like for Energy?!

Login | Sign Up



C------ FTA

**At** ~\$4,000 / Person / Year?

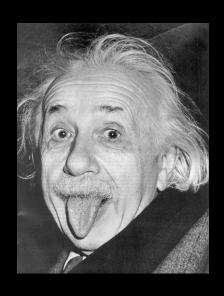
1,100 X \$4K = \$4.4M

90% Leakage?

\$3,960,000

What We Truly Believe About the Planet Determines What We Will Actually Do

## STRATEGY IS EVERYTHING



**VERSUS** 



"The significant problems we face cannot be solved at the same level of thinking we were at when we created them."

**Albert Einstein** 

"Stupidity Got Us Into This Mess, and Stupidity Will Get Us Out."

Homer Simpson



## Critical to any strategy is ....

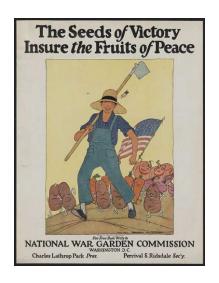
**Relevance & Leadership** to an American public who increasingly feel their backs to the wall & government unable to solve their problems. They increasingly retreat to that which they can depend and defend .... that is traditional American values of self, family, neighborhood, and community.



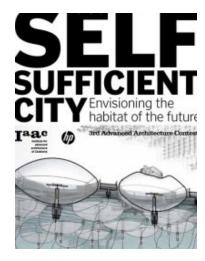
## Core American Values ...

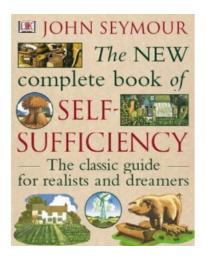
Life, Liberty, & the Pursuit of Happiness

- Self-Sufficiency
- Self-Reliance
- Self-Determination
- Creativity & Ingenuity
- Innovation
- Entrepreneurship
- Responsibility for Self, Family, Neighbors, & Community











## Sustainable Community Defined:

 "Fundamentally, a community is sustainable only to the degree to which it is 'locally' self-sufficient in energy, food, water, shelter, clothing, transportation, health care, education, safety/security, employment, and commerce scaled to the equitable needs of all its citizens and within the carrying capacity of native ecosystems over multiple (7) generations."

Cain / SCISCD, 2008





## RF School District Food Self-Sufficiency

(10 January 2012)

- RFSD Population (2010 Census) = 22,944
- Per Capita Expenditures (Eat In & Dine Out) = Midwest \$2513 (BLS, 2009) X 22,944 = \$57,658,272 ... w/90% Leakage of ~\$52M
- Acres to Support That Population = 43,431 Acres:
  - % Vegan (.5%), Vegetarian (2.7%), Vege Inclined (10%) = 2,983
  - Omnivore (86.8%) = 19,961 (Harris Interactive Service, 2008)
  - Per Capita Acres to Support (Peters, Cornell University, 2006)
    - VVVI 0.44 acres X 2,983 = 1,313 acres
    - Omni 2.11 acres X 19,961 = 42,118 acres
    - Total = 43,431 of 91,918 Total Acres (UWRF Geog & Mapping Sciences Dept, 2011)



RFSD & Community Food Print, Self-Sufficiency, Security, & Economic Opportunity ??

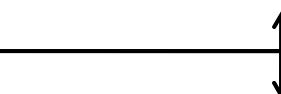
Priceless!

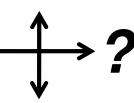
## " Is Sustainability Enough?"

<u>Un</u>-Sustainability

The Tipping Point of Sustainability <u>Beyond</u> Sustainability







- 1XBL Approach
- Capitalism w/o a
   Conscience
- Carbon Positive
- Soft vs. Hard Landing "Collapse Scenarios"

Status Quo - Maintenance Break Even - Zero Sum Game Minimize Further Degradation Carbon Neutrality 3XBL Approach

- 4XBL Approach
- Re-Localization
- Restorative
- Regenerative
- Resilient
- Carbon Negative
- Post Carbon Communities



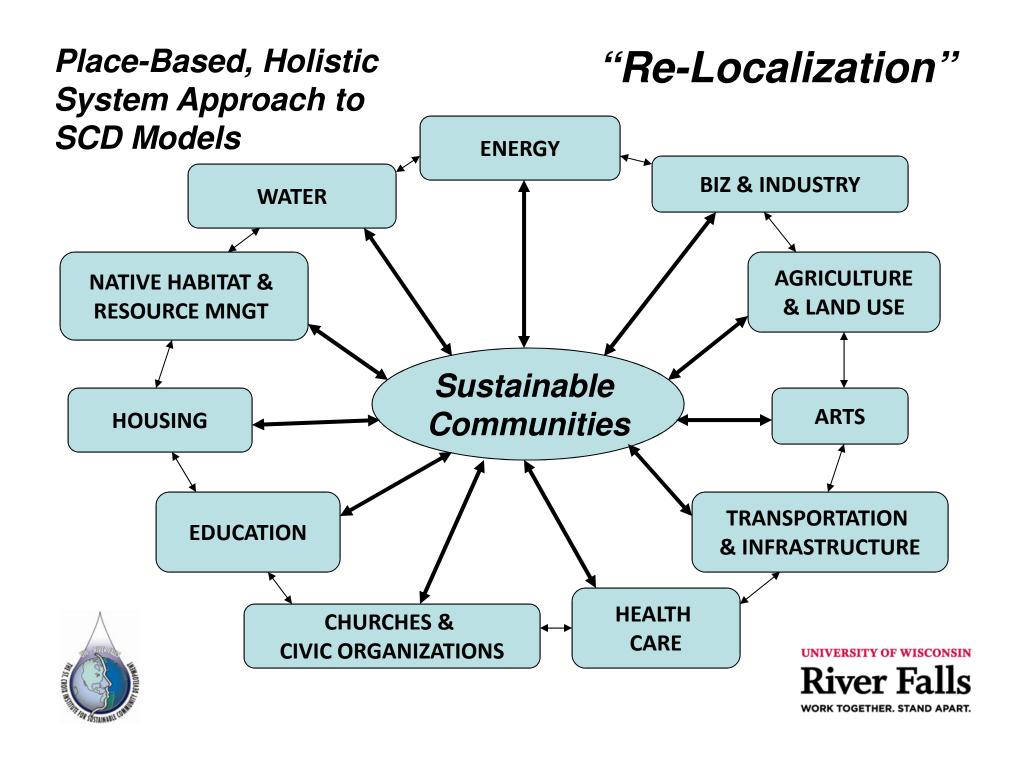


## "Cash Positive – Carbon Negative, Sustainable Community Design"

Energy, Food, & Water Self-Sufficiency w/in the Carrying Capacity of Native Ecosystems Equals Social & Economic Security Whose Value Is Incalculable ....

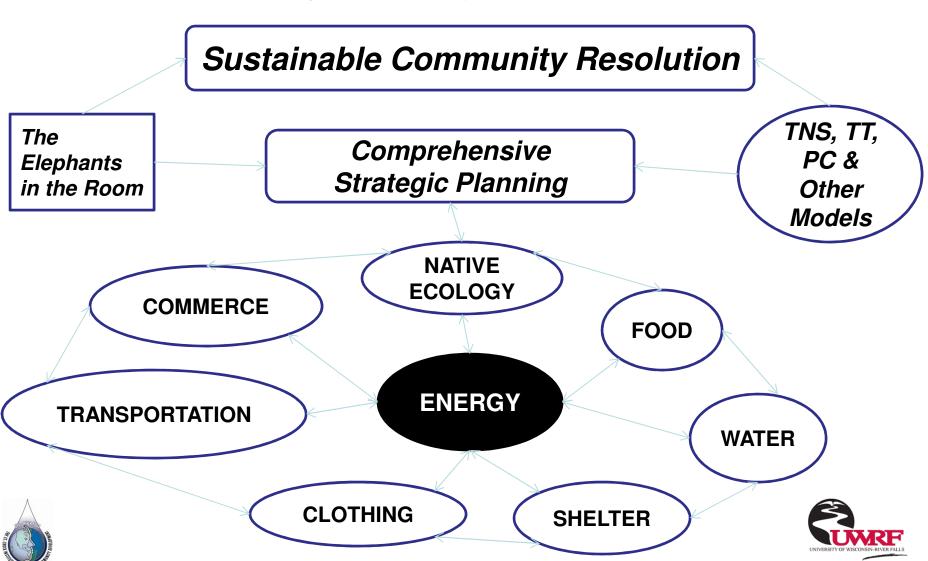






## Sustainable Community Development

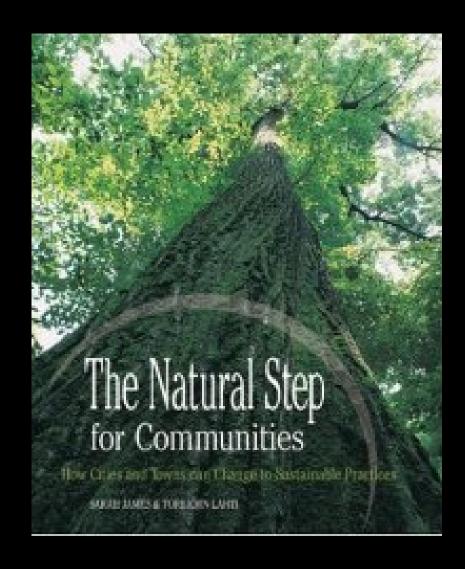
A Holistic, Systems Thinking Approach to Self-Sufficiency in Energy, Food, Water, Shelter, Clothing, Habitat, Transportation, & Commerce



## TNS for Community & Biz Models

• "The perfect scale for the creation of socially and ecologically sustainable role models ... is at the municipality level - close to people as it is... Municipalities hold the key to a sustainable world in their hands."

Dr. Karl-Henrik Robèrt



## 30 WI Communities have passed SCD / Eco-Municipality Resolutions as of June, 2012





UW Extension
Sustainable Community
Capacity Center
Website

http://www2.uwsuper.edu/sustainability/index.htm



### Sustainable Community Resolutions

#### **RESOLUTION #05-021**

- City of Washburn, Wisconsin ~ Adoption of Sustainable Community Development Policy
- WHEREAS, in the sustainable society, nature is not subject to systematically increasing concentrations of substances extracted from the Earth's crust, because human society mines and brings into use substances from below the Earth's surface, that along with their emissions are steadily accumulating at levels far greater than their natural occurrence and cannot break down further; and,
- WHEREAS, in the sustainable society, nature is not subject to systematically increasing concentrations of substances produced by society, because human society has been manufacturing synthetic substances faster than these materials can be broken down, and,
- WHEREAS, in the sustainable society, nature is not subject to systematically increasing degradation by physical! means, because human activity is breaking down natural systems—land, water, forests, soil, ecosystems—by depletion and destruction faster than these natural systems can renew themselves; and,
- WHEREAS, in the sustainable society, human needs are met worldwide, because if people around the world cannot meet basic human needs—air, water, food, shelter, means of livelihood, mobility, equal treatment, equal access, safety, participation in decisions that affect our lives, the right to peaceful enjoyment of life, a connection with nature, and psychological and spiritual connection and meaning—then this inequality will continually undermine the goals identified above; and,
- WHEREAS, by endorsing sustainable community development, The City of Washburn is joining an international network of eco-municipalities, and taking the initiative to become one of the first four eco-municipalities in the United States; and,
- WHEREAS, the City of Washburn has a pledge of support through mentorship and consulting from The National Association of Swedish Eco-Municipalities;
- NOW THEREFORE BE IT RESOLVED that The City of Washburn hereby endorses the principles of sustainable community development, as proposed in The Natural Step Program, and agrees to apply these principles in its planning, policy making, and municipal practices.
- Adopted by the Common Council for the City of Washburn, Wisconsin this 11th Day of July, 2005. Irene Blakely, Mayor

#### Quick Links

- Home
- About Us
- Transition 101
- Why Transition
- Initiatives
- Take Action
- Calendar
- Training
- Speakers Bureau
- Blogs
- Stories
- Cheerful Disclaimer

#### Archives

- Online Training Archive
- Newsletter Archive
- Listserv Archive

#### **Toolkits**

Providing inspiration, encouragement, support, networking, and training for Transition Initiatives across the United States

lt's the mama bear of the transition initiatives sprouting up all over, and as such is a great place to leverage support for creating ... networked economies that are healthy, interesting and full of opportunity. ? ?

Thanks to a generous \$100,000 Challenge Grant, every contribution you make to Transition US is matched dollar for dollar.

**Give Today** 



### Shovels and Ballots... Getting to Work on 10/10/10

A message by Asher Miller from our partner think tank Post Carbon Institute with an invitation to organize!

After major disappointments in Copenhagen and Washington D.C., millions of us concerned about the climate crisis have been left wondering "what now?".



### Transition OKC momentum building!

Transition OKC, a project of Sustainable OKC A, became the nation's 27th official Transition initiative in May of 2009. The TOKC coordinating team took several months to lay the foundations of this project by discussing the "Transition Handbook," hosting a Training for Transition, and setting principles,



#### A Look at Transition Cities

While the Transition model is being used in communities of all shapes and sizes, rural and urban, it takes a slightly different tune each time, adapted to the settings of that particular local. In larger urban areas, and given the dense and resource intensive aspects of cities, organizers are thinking hard about how best to develop resilient local communities

## Self-Sufficiency = Re-Localization + Regenerative + Restorative + Resiliency

We Do Not Suffer From a Lack of Solutions, Only From a Lack of Shared Vision, Language, Urgency & Political Will





## Conclusion ....?

## We have a choice between simply trying to "avoid Un-Sustainability"

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or being a major catalyst for .... "resilient communities" .... based on self-sufficiency & a return to Core American Values at the community level?





# 4XBL - Community Performance Metrics

- % Locally Sourced & "Recycled" Energy
- % Locally Sourced & "Recycled" Food
- % Locally Sourced & "Recycled" Water
- \$\$\$ Carbon Off-Sets Invested Locally
- Employee Volunteer Service Hours
- Philanthropy in Community





### Time to chat .....



"Achieving Sustainability should not be our children's responsibility, .....

anymore than failure at such should be our generation's legacy."

Cain/SCISCD, 2007

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Leadership ~or~ The Risk of Irrelevance

