

Reducing Community Vulnerability Through Ecological Design



Exercise





Introductions

Workshop Overview



Re•sil•ience
/ri'zilyəns/

noun: resilience; plural noun:
resiliences

1. the ability of a substance or object to
spring back into shape; elasticity.

2. the capacity to recover quickly from
difficulties; toughness.



Resilient communities are capable of bouncing back from adverse situations.

They can do this by actively influencing and preparing for economic, social and environmental change.

A high level of social capital means that they have access to good information and communication networks in times of difficulty.



- Resilience is seen as something bigger than disaster preparedness.
- Resilience-building is seen as an important municipal responsibility, although respondents ascribed different specific activities to it when describing their efforts.
- Citizens want resilience-building actions.

- Post Carbon Institute



Can we do better?





Resilient
-- --> <-- --
Community





We need to see our communities as the ecosystems they are and consider how the components of these places could be better integrated.



Permaculture is
Solution Oriented.

We ARE Change
Agents.

Framework for
Ecological Design.

Humans Guide the
Creation of New
Ecosystems.

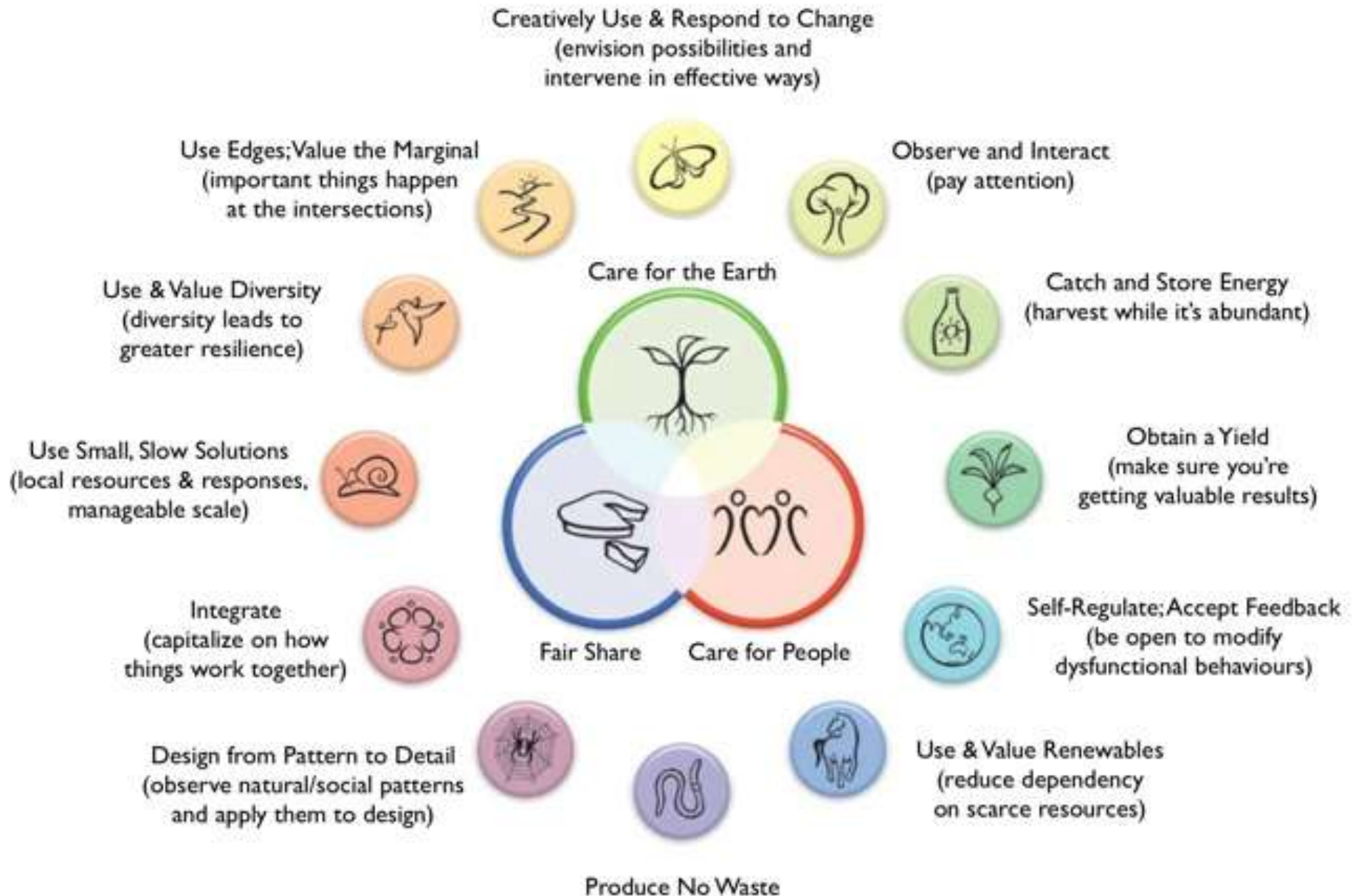


Permaculture is an approach to designing human settlements and agricultural systems that are modeled on the relationships found in natural ecologies.

We design ecosystems!



The Permaculture Ethics and Principles





Permaculture Ethics

Earth Care – Rebuilding Natural Capital

Caring for the living soil, forests, rivers and all other life forms – they all have their own intrinsic value, and need to be respected for the functions that they perform even if we don't see them as useful to our needs.

People Care – Look After Self, Family & Community

Grow through self-reliance and personal responsibility focusing on non-material well-being, taking care of ourselves and others without producing or consuming unnecessary material resources. Empower ourselves to make better decisions and recognize that greater wisdom lies within a group of people who can work together.

Fair Share – Set Limits and Redistribute Surplus

The growth in human consumption and the accelerating extinction of species make clear the impossibility of continuous growth. Sometimes we need to make hard decisions and consider what enough is. By finding the right balance in our own lives we provide positive examples for others, so that they can find their own balance.

Permaculture Principles



Principle 1: Observe & Interact

“Beauty is in the Eye of the Beholder”





Downtown
1 mile

Nubanusit Neighborhood and Farm

Permaculture Principles



Principle 2: Catch and Store Energy
“Make Hay When the Sun Shines”



Photo courtesy, Richard Telford



OCSL The Omega Center
for Sustainable Living



Permaculture Principles



Principle 3: Obtain a Yield

“You Can’t Work on an Empty Stomach”







TOGETHER WE ARE



GROWING POWER



Permaculture Principles



Principle 4: Apply Self Regulation & Accept Feedback
“The Sins of the Fathers are Visited on the Children
unto the Seventh Generation ”





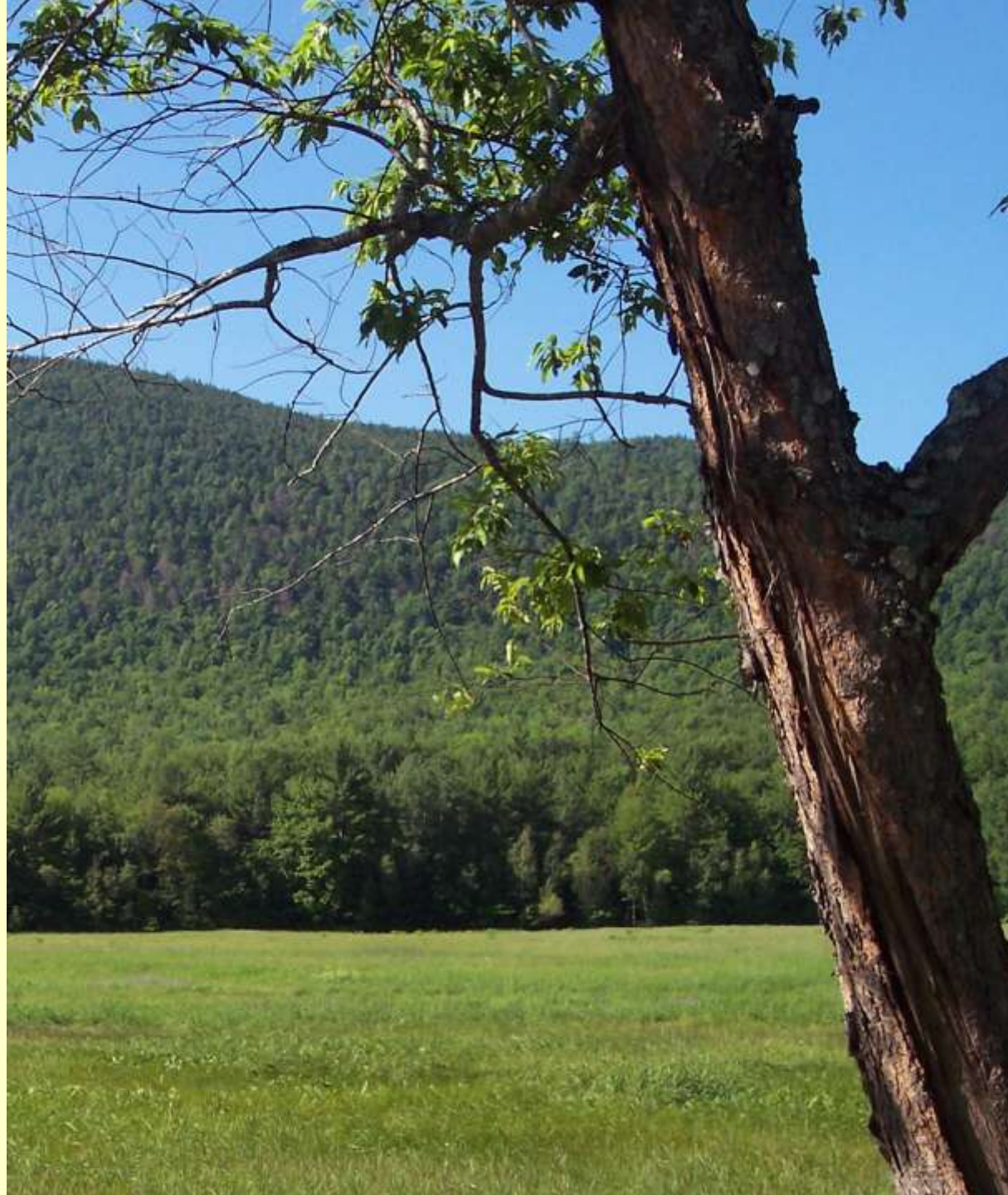
Permaculture Principles



Principle 5: Use & Value Renewable Resources & Services

“Let Nature Take Its Course”





Permaculture Principles



Principle 6: Produce No Waste
“Waste Not, Want Not”





COMPOST CINC
COMPOSTING FOOD & ORGANIC WASTE

* We Only Accept Organic Materials *
* Smoking is Prohibited *

ACCEPTED MATERIALS	UNACCEPTED MATERIALS
Organic Materials ONLY	Trash
Food Scraps	Plastic (includes Bags & Boxes)
Yard Wastes	Diseased Plants, Weeds & Grass
Animal Manure & Bedding (fed vegetarian diet)	Dog & Cat Manure
Agricultural Waste	Glass
Compostable Containers	Metal
Clean Untreated Wood	Treated Lumber
Shredded Cardboard (includes wax covered)	Construction & Demolition
Shredded Newspaper	Dirt





Permaculture Principles

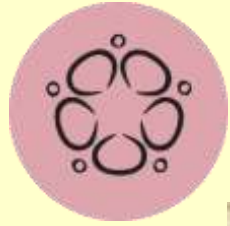


Principle 7: Design from Patterns to Details
“Can’t See the Forest for the ‘Trees”





Permaculture Principles



Principle 8: Integrate Rather Than Segregate
“Many Hands Make Light Work”





Permaculture Principles



Principle 9: Use Small and Slow Solutions
“Slow and Steady Wins the Race”





Permaculture Principles



Principle 10: Use & Value Diversity

“Don’t Put All Your Eggs in One Basket”





GATES



Permaculture Principles



Principle 11: Use Edges & Value the Marginal

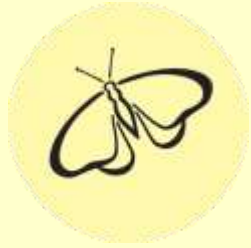
“Don’t Think You are on the Right Track just because it’s a Well-Beaten Path”



Photo courtesy: Joel Catchlove



Permaculture Principles



Principle 12: Creatively Use & Respond to Change
“Vision is not Seeing Things as They Are but as They Will Be”







Exercise..



EXISTING
NUNN RD
PROPOSED
NUNN RD
RELOCATION

PROPOSED S.
REYNOLDS EXTENSION

HWY 99

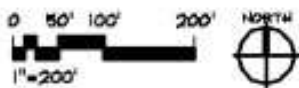
- — — BUFFER/SETBACK
- - - RIGHT OF WAY
- . - PROPERTY LINE

LEGEND

- A: GRADED DETENTION FACILITY AREA
- B: RETAIL 11,550 SF
FFE = +/- 886.0'
- C: PHARMACY 13,912 SF
FFE = +/- 886.0'
- D: 3-STORY M.O.B. 46,000 SF
FFE = +/- 900.0'
- E: 1-STORY HOSPICE 8,416 SF
FFE = +/- 882.0'

PARKING

- MOB TRACT = +/- 480
(5.00 PER 1000 SF OF FLOOR AREA)
- HOSPICE TRACT = +/- 42
(5.00 PER 1000 SF OF FLOOR AREA)
- PHARMACY AREA = +/- 70
(5.04 PER 1000 SF OF FLOOR AREA)
- RETAIL AREA = +/- 71
(6.13 PER 1000 SF OF FLOOR AREA)



COMMERCE MEDICAL VILLAGE

FRANKLIN FALLS AT ODELL PARK

BALANCING PRESERVATION AND PROGRESS THROUGH PERMACULTURE



A practical, living example of a water and energy-efficient development. The plan shows a large green area with various buildings and features. Key buildings include the Stanley Hill, Memorial, Proulx Community Center, and River Bend Mill. The plan also shows a large parking lot, a street, and a river. The site is surrounded by greenery and trees. The plan includes labels for various features such as 'Winnipeg River', 'Memorial', 'Stanley Hill', 'Proulx Community Center', 'River Bend Mill', 'Winnipeg River', 'City Hall', and 'City Council'.

Franklin Falls at Odell Park

- Week-long Design Charette for an Advanced Permaculture Diploma
- Generate a resilient ecological design for underutilized mills in the downtown district
- Low energy solutions, repurposed materials, and the multifunctional use of interior and exterior spaces within a historic portion of downtown Franklin
- Presented plan to the town and several champions are leading implementation



Other Examples...



City Repair



Miracle on Elmer Avenue

TreePeople is an environmental nonprofit that unites the power of trees, people and nature-based solutions to grow a sustainable future for Los Angeles.

Elmer Avenue - a neighborhood in Los Angeles' NE San Fernando Valley that was transformed from a flood hazard zone into a green street that is a model of sustainability.



Tucson...1994



Tucson...2006





Balance Bethlehem
Aug 2013 1 in = 10 feet
Rooted by Stacey, LLC

Tactical Urbanism – Pavement to Parks and Pop Up Cafes



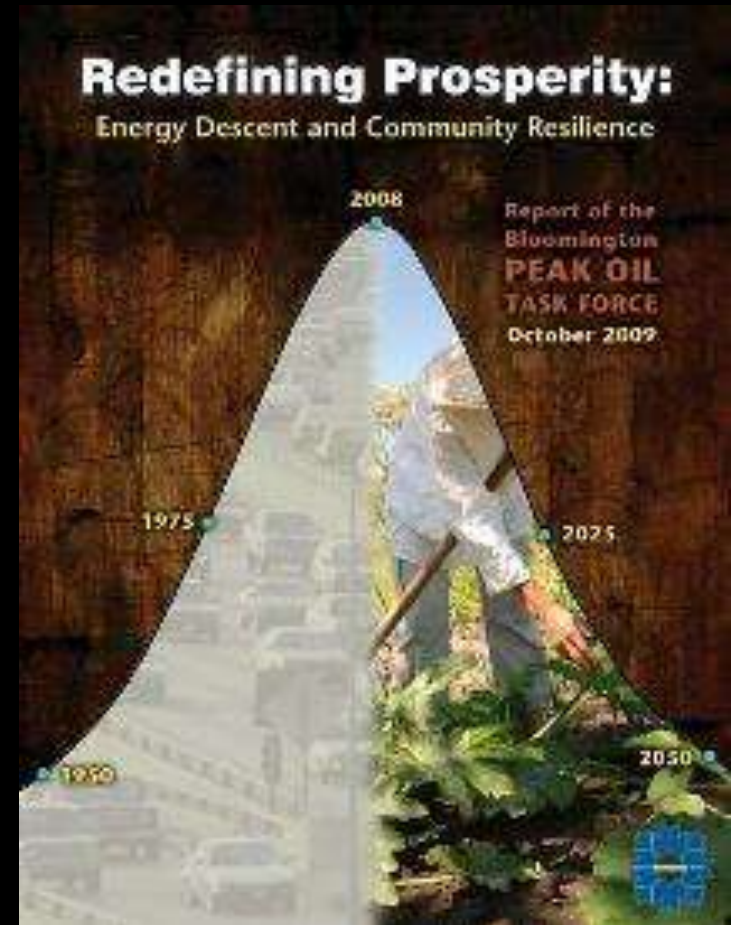
Tactical Urbanism –



- Chair Bombs
- Open Streets
- Pop Up Town Hall
- Reclaim Setbacks
- Pop Up Libraries
- Mobile Parks
- Guerilla Gardening...

Redefining Prosperity

- Bloomington, Indiana “Redefining Prosperity: Energy Descent and Community Resilience” Adopted in 2009
- Recommendations include:
 - new transportation efforts
 - creating a centralized composting system
 - removing and reducing the legal, institutional, and cultural barriers to farming in an ecologically friendly way within and around the city.





Are we vulnerable or resilient?

Diversity...

Social Capital...

Innovation...

Overlap...

Feedback Loops...

Ecosystem Services...

Discussion and Next Steps





RESILIENCE
Planning & Design LLC

Thank you!

<https://www.kickstarter.com/projects/1122699426/inhabit-a-permaculture-perspective>