Building and living in Common Ground, a net zero energy community land trust project on Lopez Island

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Outline

• Common Ground
• The organization (LCLT)
• The people, the buildings, the process
• What we’ve learned (and what we’d do different)
LOPEZ COMMUNITY LAND TRUST

Unleashing the Power of Community
It all started when in 1989, the cost of housing rose 190% in one year!

Highest per capita income—highest cost of living….

Lowest wages—51% of children living in poverty….

How to keep our working residential islanders?
Community Land Trust - Defined

• Nonprofit, USA tax-exempt corporation
• Holds land to benefit community
• Provides affordable access to land for such purposes as affordable housing, sustainable forestry and agriculture, cottage industries and cooperatives.
CLT’s came out of Civil Rights Movement and Ghandian Land Reform
First CLT—”New Communities,” Georgia 1969
4800 acres $1,080,000
Community Land Trust Tool is Diverse

• Locations in the United States:
  – 38% small cities/towns
  – 26% rural
  – 36% urban/metropolitan

259 in U.S 2012
21 in Washington State
The people...
The buildings...
The process...
In the empty field of imagination, vision emerges.
Design Charrette
Budget affordability
... is beautiful
Rainwater catchment

- Rainfall: 4.6m gal/yr
- Evaporation
- Raingarden
- Potable Well Water
- Irrigation
- Runoff
- 38k gal Non-Potable Storage
- Non-Potable Supply for Toilets and Laundry
- Sewer / Waste: 60k gal/yr
- Ground Filtration
Rainwater catchment
Passive solar
Straw-bale and earthen plaster
Strawbale
Solar hot water
Solar hot water
Grid-tied solar
Grid-tied solar
High-efficiency windows
Insulated shades
Soy-based stain
Who does the work?
Prospective homeowners
Interns
Construction supervisor
Subcontractor
Volunteers
We know how to have fun!
10 years later...

What we’ve learned (and what we’d do different)
Stability of Housing
Home for Children
Sense of community
Sense of community
Sense of community
Skill sets (homeowners) education
Reduced energy cost
Project—Zero-net energy

weekly electrical consumption by household (kWh)
Common Ground: Annual Consumption & Production
(kWh/household)
Production vs consumption of low, avg & high users (kWh, 2017)
Average Residential Electricity Consumption
(kWh/month/household)

- WA State Average: 1041
- U.S. Average: 909
- E.U. Average: 300
- World Average: 279
- Common Ground - K: 700
- Common Ground - J: 674
- Common Ground - A: 585
- Common Ground - G: 582
- Common Ground - E: 416
- Common Ground - F: 256
- Common Ground - I: 228
- Avg PV output - Common Ground: 311
What would we do different?

- Strawbale
- Heatpumps
- Small architectural changes
  - Move bathrooms to north side
  - Larger clerestory ceiling
  - More space between homes
There is no power for change greater than the community discovering what it cares about.

– Meg Wheatley
Vision manifest and still growing
Thank you