

COMMUNITREE:

Stakeholder Relationships and Desired Outcomes for Collaborative Tree Planting



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MANUSCRIPT-IN PROGRESS:
For project updates, check out
the CommuniTree page on
the LUFA website: www.lufa-depaul.org/CommuniTree

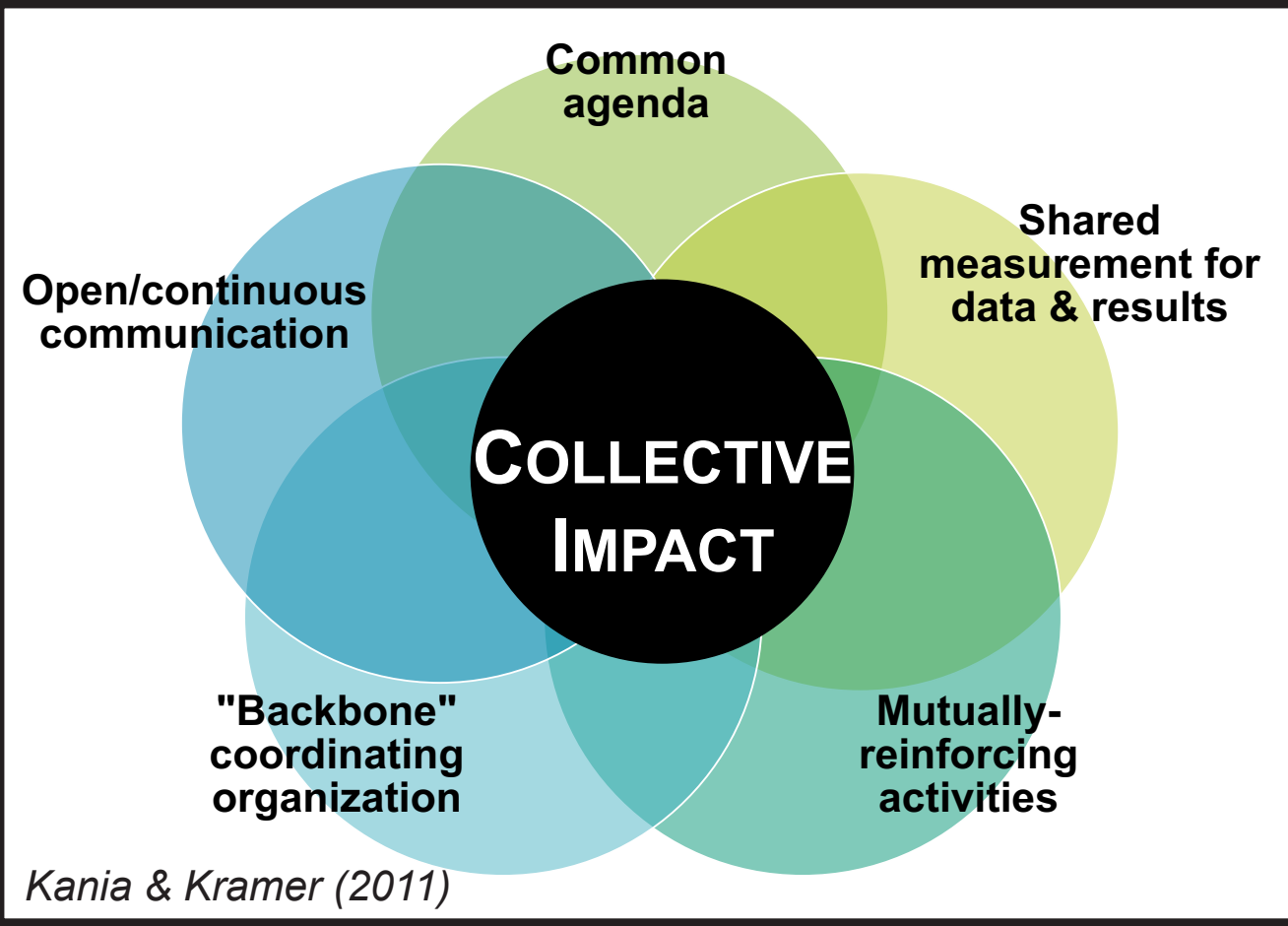
ABSTRACT

CommuniTree is a new, multi-organization, community urban forestry partnership that engages in tree planting in under served, post-industrial Northwest Indiana communities. In addition to providing free trees and maintenance to communities, the grant-funded partnership provides training in urban forestry practices to a crew of young adults from the Student Conservation Association. Individuals at 11 stakeholder organizations were interviewed to document their role with, motivations for involvement in, and desired outcomes for CommuniTree, as well as how they envision the program evolving in the future. We found that stakeholder contacts were already involved in other forestry projects with CommuniTree's point contact at the US Forest Service or another stakeholder organization before becoming involved in this project. In many cases, it was the stakeholder contact's personal interest in urban forestry that led their organization to partner with CommuniTree. The level of formality of stakeholder relationships to the CommuniTree Program varied. The stakeholders directly involved in the application for grants or listed as technical assistants had a more formally documented relationship, and many of the interviewees had work orders they submitted to superiors approving the work they dedicated to CommuniTree. Municipalities also had a formally documented relationship because of their approved applications to receive trees to be planted on public property. Stakeholders stated desired outcomes both ecological and social. Non-municipal public stakeholders wished to increase ecosystem services, particularly those that apply to the specific mission of the agency. Municipalities wished to restore losses due to invasive species, improve relations with their community, provide job training opportunities for citizens, and lower future costs that arise due to improper planting practices. The utility company (private entity) also wished to improve community relations and decrease future costs due to conflicts with utilities. The desired outcomes of nonprofit stakeholders were very specific to the mission of their nonprofit, and their representatives prioritized ecological and social outcomes differently based on this mission. The regional and federal partnership groups interviewed were most interested in regional ecological improvements and increasing the urban forestry capacity of local communities. All stakeholders stated a high level of satisfaction with the CommuniTree program, but were interested in planning related to the sustainability of the project, particularly financially, and management of the existing urban forest (e.g., dead tree removal).

WHAT IS COMMUNITREE?

CommuniTree is a *collaborative, multi-organizational tree planting partnership* based on the Collective Impact model (at right).

- *Instigated by* USFS's Drew Hart *in 2016*
- *“Backbone” organization:* Student Conservation Association (SCA), which manages a trained crew
- *Nearly 2,000 trees planted to date* by SCA crew, through volunteer tree planting events, or disbursed to municipalities and school or community groups



RESEARCH QUESTIONS

1. Who are the formal *stakeholders* involved and what *role(s)* do they play?
2. Is stakeholder participation *motivated* by organizational interest in urban and community forestry or the personal interests and connections of the interviewee?
3. What are the *desired outcomes* of stakeholders and how do the desired outcomes of each stakeholders align (or not) with each other?
4. What are stakeholders' *visions for the evolution and possible improvements* of CommuniTree?

METHODS

Interview Script Development and Stakeholder Identification

- Initial script designed by DePaul ENV *Mixed Methods Research class* and refined with the help of Drew Hart (USFS)
- Drew Hart provided contact information for the person or persons at each stakeholder organization most involved in CommuniTree activities
 - *“Stakeholder”* = group that provides/receives resources to/ from CommuniTree program
- Interviewees were recruited through *email* and provided an information sheet on the research project; we then contacted unresponsive parties by *phone* one week after our initial email

Interviewing Stakeholders

- *30- to 60-minute interviews* conducted at the interviewee's office or a location of their choice
- Interviews with all stakeholders *conducted* during fall 2017; *recorded* + *transcribed* for qualitative analysis

Qualitative Analysis

- Interview transcripts were uploaded to the *NVivo* software (QSR International, 11.4.3) for qualitative content analysis
- *Emergent coding* on themes of motivations, desired outcomes, and vision for evolution of CommuniTree

External funding

Stakeholders & Participants

Resources (Funding, Time, Personnel)

CommuniTree Capacity

Desired, Possible & Observed Outcomes

- U.S. Forest Service State & Private Forestry Northeastern Area
- Student Conservation Association (SCA)
- Northwestern Indiana Regional Planning Committee (NIRPC)
- Wildlife Habitat Council
- Indiana Department of Natural Resources (IDNR) Coastal Program
- Northwest Indiana Urban Waters Partnership
- Northern Indiana Public Service Company (NIPSCO)/Arbormetrics
- Dunes Learning Center
- The Nature Conservancy
- Municipalities (East Chicago, Gary, Hammond, Whiting)

- Tree activities
 - Pre-planting planning, etc.
 - Tree planting (trees in ground & characteristics of these trees?)
 - Post-planting tree care & maintenance
- Education & outreach activities
- Volunteer/community participation

CommuniTree program happening in an existing **SOCIO-ENVIRONMENTAL CONTEXT**
...prior and surrounding land use, biodiversity, ecological characteristics
...existing relationships & networks between community groups & CommuniTree partners & stakeholders
...environmental constraints (soil & water contamination)
...historical socio-economic & cultural dynamics
...values, norms, knowledge of trees/stewardship of different community groups
...etc.

- Environmental outcomes
 - Tree survival → provision of benefits (stormwater management most crucial)
 - Character of conservation and restoration areas
 - Other biophysical, ecological, or environmental outcomes defined by stakeholders
- Community outcomes
 - Stewardship capacity
 - Level of participation & buy-in of different stakeholders, including industry partners
 - Education, awareness & attitudes about conservation, tree planting and related goals
 - Employment/training opportunities for tree crews
 - Human health outcomes
 - Improved relations between municipality and citizens
 - Mitigation of future costs for municipalities and private stakeholders by proper planting practices

RESULTS

Who are CommuniTree's Stakeholders?

- Drew Hart (USFS) identified 5 primary stakeholders who are actively involved in the CommuniTree steering committee, which meets quarterly (*Table 1*)
- Stakeholders divided into *4 sectors*:
 - Public
 - Private
 - Nonprofit
 - Partnership (combo. of above)
- 9 of 11 stakeholders *had previously been involved* in other tree planting projects with Drew Hart
- 6 of 11 stakeholders became involved due to the stakeholder contact's *personal interest* in urban or community forestry, though CommuniTree also aligns with their organization's mission
- 5 of 11 stakeholders became involved because CommuniTree *fulfilled their organization's mission or interests*
- Stakeholders involved in *grant applications* or listed as providing technical assistance have *more formal relationships* with CommuniTree program than non-grantees.

Desired Outcomes - see also Table 2

- Desired outcomes of...
 - *Public:* wish to restore trees lost to EAB, engage disenfranchised citizens in improvement and beautification of community, increase ecosystem services with different levels of priority depending on mission of agency or municipal department, with common emphasis on storm water management and air quality
 - *Private:* wish to improve community relations, avoid future utility conflicts
 - *Nonprofit:* specific to mission of organization - prioritize social v. ecological outcomes based on mission; all wish to engage and educate communities in stewardship and conservation activities
 - *Partnership:* wish to increase communities' urban forestry capacity, regional ecological improvements such as increased canopy and better water quality.

Table 1: Primary CommuniTree Stakeholder Organizations

Stakeholder Organization Name and Abbreviation	Sector	Level of Operation	Role with CommuniTree	Motivation for CommuniTree Participation (Personal or Organizational)
Student Conservation Association (SCA)	Nonprofit	Chicago/ Northwest Indiana office of national organization	Main program administrators with Drew Hart (of US Forest Service), one of five primary stakeholders. NFWF grant administration, provision of planting equipment, hiring and training of crew members, reviewing community applications, planting site evaluation, administrative duties such as accounting and record keeping.	Organizational interest in conservation projects and community engagement in Chicagoland area. Designed program with the help of Drew Hart, who is personally focused on Northwest Indiana.
Northwestern Indiana Regional Planning Commission (NIRPC)	Partnership	Regional	One of primary stakeholders. GLRI grant administration, tree procurement, collection of community applications, planting site evaluation.	CommuniTree helps meet organizational goals identified in their 2040 comprehensive regional plan for community reinvestment and their green infrastructure vision.
Northern Indiana Public Service Company (NIPSCO)	Private	Regional	One of primary stakeholders. Reviewing community applications, evaluating planting locations for utility conflict and energy conservation potential, record keeping, workshops for tree applicants and community members, provision of some planting equipment.	Interviewee has strong personal interest in CommuniTree program, which they call their "pet project". Their participation is well-supported by employer to maintain NIPSCO's Tree Line USA designation. Close personal and professional contact of Drew Hart.
Indiana Department of Natural Resources Lake Michigan Coastal Program (IDNRC)	Public	State	One of primary stakeholders. Reviewing community applications, help organize and host workshops for communities on the CommuniTree application process. interviewee listed as a technical assistant on GLRI grant managed by NIRPC.	Interviewee has personal interest in and knowledge of urban forestry. Close professional contact of Drew Hart.
Northwest Indiana Urban Waters Partnership (UW)	Public/ Partnership	Federal partnership operating at regional level	One of primary stakeholders. Interviewee acts as program ambassador by facilitating communication between federal and local CommuniTree stakeholders, engaging volunteers, and regional outreach. Grant writing assistance.	CommuniTree meets organizational priority for 2017-2018 to support Urban Forestry efforts in Northwest Indiana. Connected to program through NIRPC.

Table 2: Desired Outcomes by Stakeholder Sector

Nodes	Public	Private	Nonprofit	Partnership
ECOLOGICAL/BIOPHYSICAL OUTCOMES				
Urban Forest Structure	EC, GEA	NIPSCO	TNC, SCA	NIRPC
Increase canopy	EC		TNC	NIRPC
Increase habitat and biodiversity			TNC, SCA	
Tree species composition	EC		TNC, SCA	
Tree survival			SCA	
Pest or disease recovery (EAB)	EC, GEA	NIPSCO	TNC	NIRPC
Water	GEA, IDNRC, UW		SCA	NIRPC, UW
Storm water management	GEA, UW		SCA	NIRPC
Water quality	IDNRC, UW			UW
Watershed management				NIRPC
Waterway restoration				UW
Air quality	EC, GEA, HPR		TNC, SCA	
Soil or brownfield remediation	HPR		DLC	
Stated prioritization of ecological/biophysical outcomes				
Carbon sequestration			TNC	
Improve overall urban environmental quality			TNC	
Temperature/Urban heat island regulation			TNC	

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Nodes	Public	Private	Nonprofit	Partnership
SOCIAL OUTCOMES				
Aesthetics/Beautification	EC, GEA, IDNRC, UW		TNC, SCA	UW
Improve public spaces	EC, GEA, HPR	NIPSCO	TNC	
Model for other forestry efforts	EC, UW	NIPSCO	SCA	NIRPC, UW
Increase municipality prioritization of tree planting	EC		SCA	NIRPC
Increase municipality urban forestry capacity	EC, UW			NIRPC, UW
Organization image	EC, GEA	NIPSCO	WHC	
Improve stakeholder relationship with community	EC, GEA	NIPSCO		
Organization exposure and marketing			WHC	
Community engagement	GEA, UW		TNC, SCA	UW
Forestry job training	GEA, HPR, UW		SCA	UW
Stewardship education	GEA		DLC, TNC, SCA	
Tree planting or maintenance at little to no cost	EC, GEA, HPR		NIRPC	
Conservation partnerships	IDNRC		SCA, WHC	
Social justice	EC, GEA		DLC	
Arbor Day Foundation designation	EC	NIPSCO		
Improve quality of life	EC		TNC	
Prevent utility conflict	HPR	NIPSCO		
Stated prioritization of social outcomes		NIPSCO		
Community/economic development	IDNRC			
Create community	HPR			
Energy conservation	NIPSCO			
Impact on crew/crew's increased environmental consciousness			SCA	
Shade	EC			
Connect communities to waterways	UW			UW

Vision for CommuniTree Evolution/Possible Improvements

- Most commonly mentioned potential changes/improvements:
 - Clearer big-picture goals, such as a regional urban forestry plan and an official mission statement
 - Improved data collection
 - Greater long-term financial sustainability
 - Geographic expansion
 - Management of existing urban forest