

What Does a Sustainable Future Look Like?



Hiking Northerly Island, 2011 (photo by L. Bryson)

Environmental resources are conserved for both future human generations as well as non-human biota.

Economic development occurs not at the expense of the natural environment, but in a way to mitigate ecological costs and impacts.

Equity – social, economic, and environmental justice – governs the process of sustainable development.

Backyards



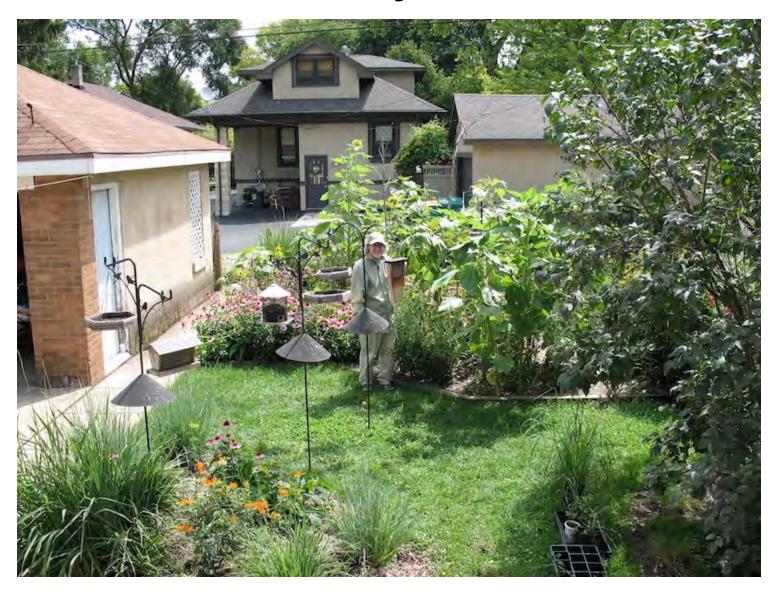
Our backyard prairie in Joliet, seen from the alley (Aug. 2020)

Backyards



What used to be our back yard, seen from the driveway (Oct. 2007)

Backyards



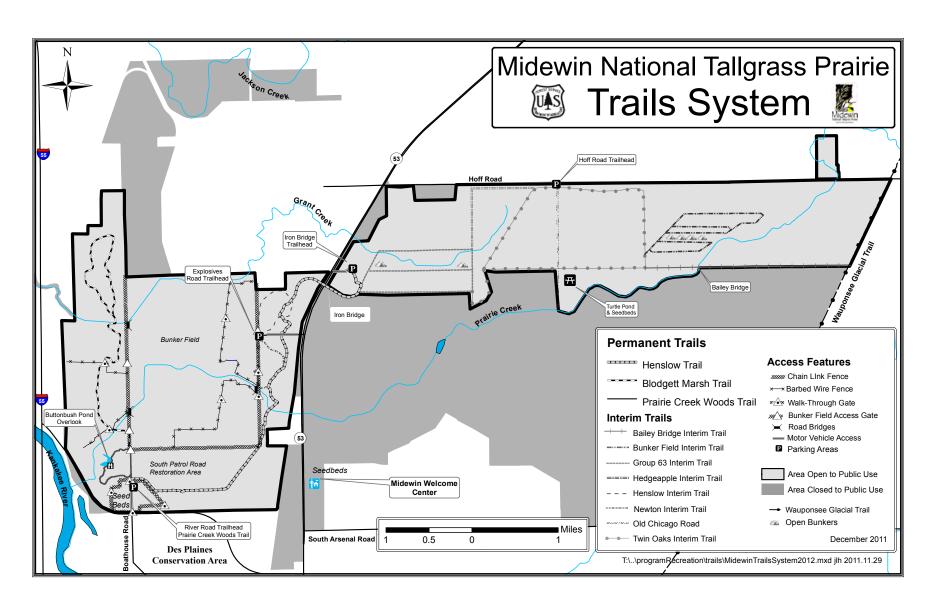
Our backyard prairie in Joliet, seen from the kitchen window (Aug. 2020)

Will County's Backyard



Iron Bridge Prairie at Midewin National Tallgrass Prairie (2012)

Will County's Backyard



Frozen Lakes



On the coastline of Antarctica, near McMurdo Station (Dec. 1991)

Frozen Lakes



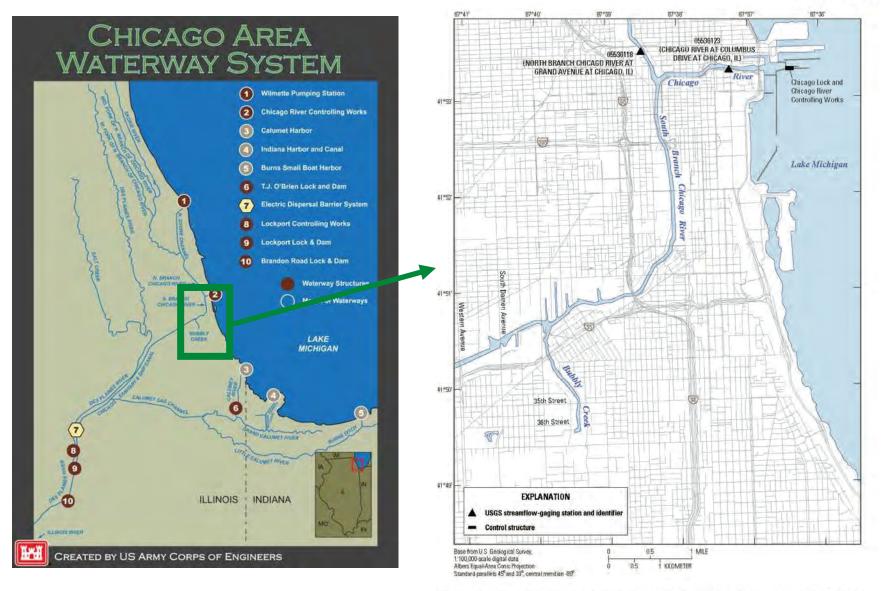
Lake Fryxell, Taylor Valley, Antarctica (Oct. 1991)

Frozen Lakes



Lake Fryxell, Taylor Valley, Antarctica (Oct. 1991)

Polluted Rivers



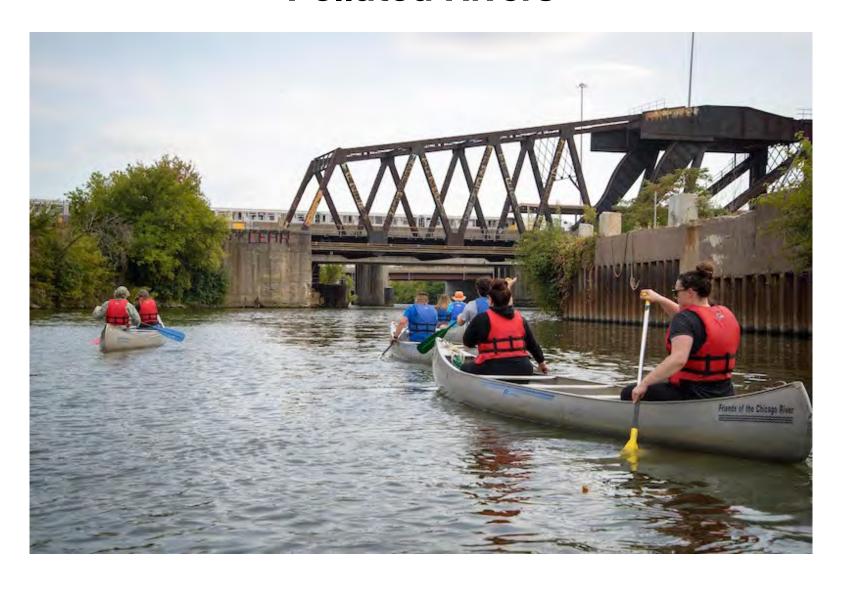
Maps: US Army Corps of Engineers; US Geological Survey

Polluted Rivers



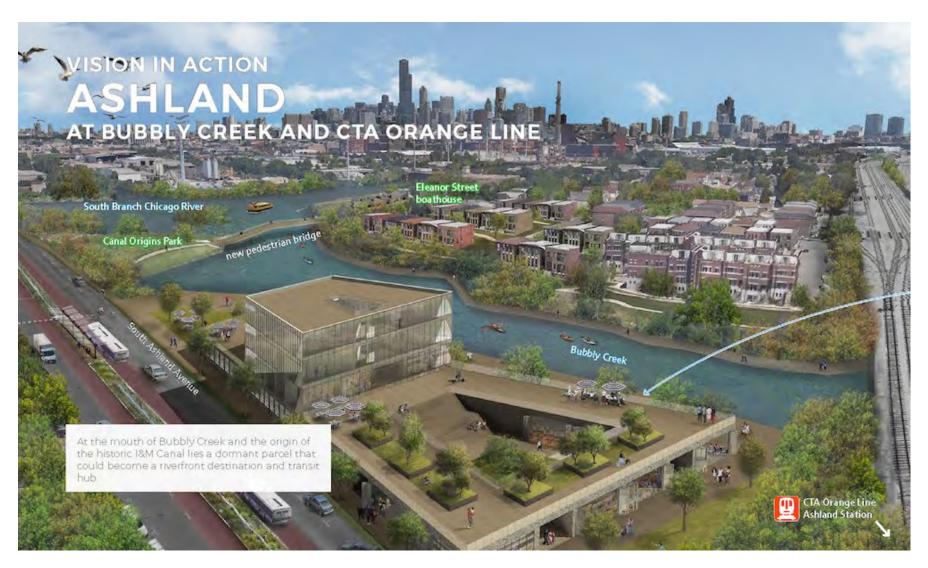
A chicken stands upon Bubbly Creek, c.1911 (photo: Chicago Historical Society)

Polluted Rivers



SUST 220 Water students take one of many canoe trips with Friends of the Chicago River on Bubbly Creek, South Side of Chicago, Oct. 2017 (R. Winterpacht)

Bubbly Creek, What Future Awaits Thee?



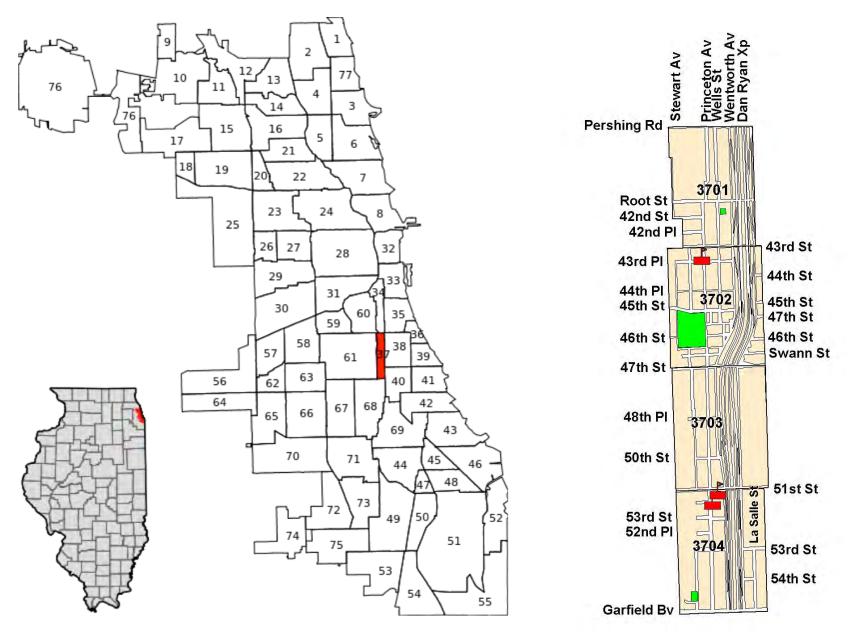
Land Use and Planning: Vision concept for the mouth of Bubbly Creek at Canal Origins
Park by Metropolitan Planning Council, Friends of the Chgo River, and Chgo
Metropolitan Agency for Planning (Our Great Rivers, 2016)

Urban Farms



RU students at Eden Place Farms, Chicago IL, Dec. 2018 (M. Bryson)

Geography: Fuller Park in Chicago



Community: Fuller Park in Chicago



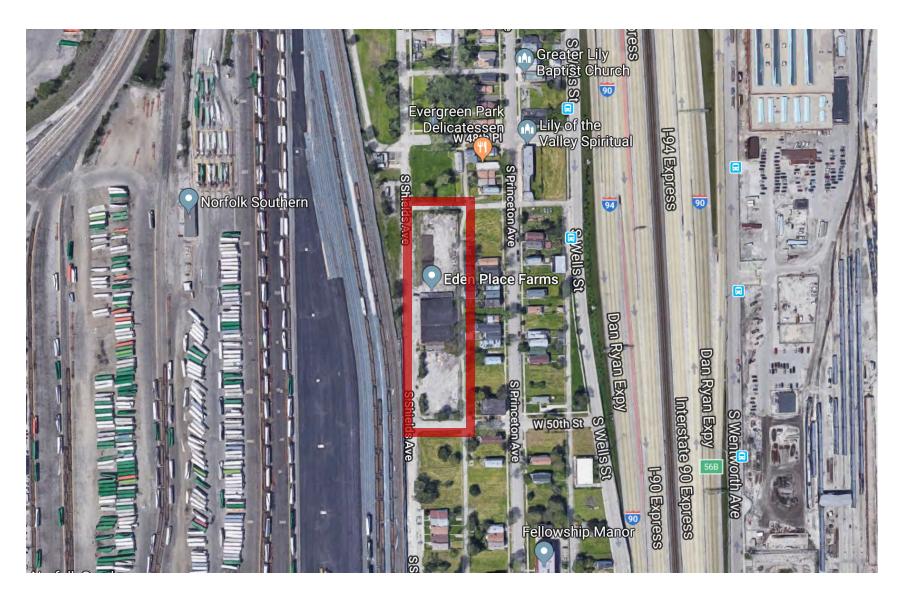
Community Notes:

- One of the smallest CAs in terms of population (2,876 in 2010, down 34% from 1990)
- 92% African-American
- >75% of children live in poverty
- Legacy of environmental contamination, loss of jobs
- Bounded, bisected, and polluted by RRs and highways

Key organizations:

- Eden Place Nature Center & Farm
- Fuller Park Community
 Development Organization
- Hendricks Elementary School
- Chicago Park District
- Local churches

Eden Place Farm



South Side of Fuller Park neighborhood, Chicago IL (photo: Google Maps)

Contamination



Eden Place Farm, January 2015 (photo: M. Bryson)

Restoration



Eden Place Farm, September 2018 (photo: M. Bryson)

Stewardship of Land



Removing phragmites at Eden Place Nature Center, October 2018 (photo: M. Bryson)

Sustainability Studies at Roosevelt

Three Things To Know about Us

Hands-on Learning + Online Access

Core SUST classes F2F, remote, & online 4+1 SUST BA to MPA Experiential Learning (EXL) @ museums, urban

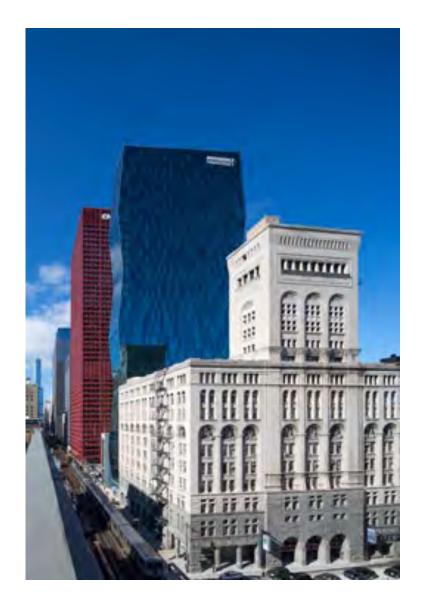
farms, local waterways/parklands
RU's sustainable campus is learning &
research laboratory (e.g., Rooftop Garden)
Environmental justice focus throughout

Internship & Research Opportunities

Internship sites in Chicago & suburbs
Collections research @ Field Museum
Urban Ecology summer field-based course
Campus sustainability planning & operations
Resilience Studies Consortium

Student Activism & Alumni Success

RU Green student organization Campus improvements (e.g., composting) Graduate school & post-grad internships Alumni working in many aspects of the field



JJC / RU Alumni Spotlight



Tiffany Mucci-Heitman (BPS '16)

- Studied biology, ecology, & sustainability at JJC, graduated in 2013
- Transferred to RU's SUST program in 2013
- Assistant editor of the SUST blog and co-editor of the <u>Writing Urban</u> <u>Nature</u> project
- Summer environmental sustainability associate in RU's Operations & Planning department
- <u>Ecological restoration intern at</u>
 Midewin National Tallgrass Prairie
- SUST Outstanding Student of the Year for 2016
- Holistic health practitioner, an outdoors and wildlife enthusiast, and freelance writer with recent publications in the highly-regarded blog <u>City Creatures</u>

Highlighted SUST Classes @RU in 2021-22



Summer/Fall 2021

SUST 361 <u>Urban Ecology</u>: 5-week EXL online course (summer)

SUST 330 <u>Biodiversity</u>: Field Museum-based research seminar pairs each student w/ a FM scientist in a lab (fall)

SUST 350 Service & Sustainability:

Community-based learning at Eden Place Farm on Chicago's South Side + online individual service projects (fall)

SUST 101 Humans & Nature (fall)

Spring 2022

SUST 101 Humans & Nature (CORE Ideas of Social Justice seminar for first year students)

SUST 370 Mapping for Sustainability: new core requirement that provides hands-on experience with GIS software (job readiness)

Internships for Credit

SUST 395 Sustainability Internship: may be taken for 1-6 credits

Doing Research at the Field Museum





SUST alumni Kristina Lugo (BPS '16) and Colleen Dennis (BA '15) interned & the worked at the Field Museum of Natural History, Chicago IL; SUST 330 Biodiversity taught onsite at museum by Prof. Julian Kerbis Peterhans

Pursuing Internships, Fellowships, and Travel Experiences



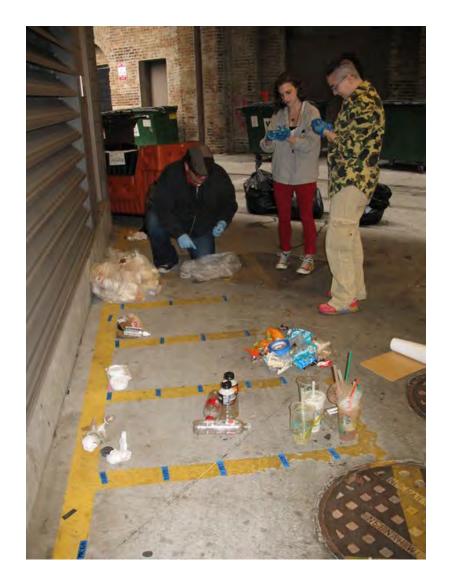
SUST students have blogged about <u>internships</u>, fellowships, and study abroad experiences at (clockwise from upper left) Southern IL Univ, the Field Museum, Uncommon Ground (Chicago), Iceland, Appalachia, the Center for Neighborhood Technology, 7 Generations Ahead, & more.

Creating a Sustainable Campus



SUST alum Maria Cancilla (BPS '18), SUST prof Vicki Gerberich, and RU Green prez Michelle Giles (BA '18) work on the WB Rooftop Garden during RU Service Day, Sept 2018 (M. Bryson)

Creating a Sustainable Campus





SUST 240 Waste students conduct a <u>waste audit</u> of WB and AUD, Fall 2014 (M. Bryson)

Creating a Sustainable Campus





Students ran compost collection volunteer projects in 2017-18, and in 2019 RU established campus-wide composting. Now even faculty can do it!

Student Research/Activism --> Campus Planning

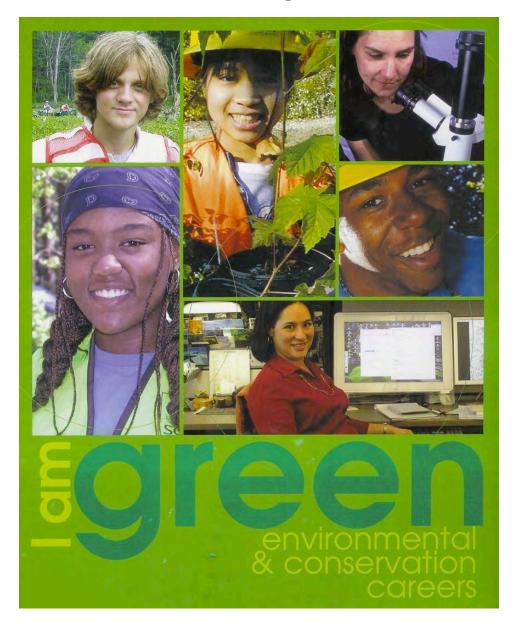




Students contributed to these massive undertakings!

Strategic Sustainability Plan, adopted Spring 2015; STARS Assessment Report, submitted Fall 2015

Sustainability Careers



Science/Engineering:

- Energy manager/technician
- Hydrologist
- Restoration ecologist
- Toxicologist
- Water/wastewater engineer

Business/Professional:

- Brownfields real estate developer
- Corporate recycling manager
- Environmental quality certification specialist
- GIS specialist
- Risk manager
- Sustainability officer

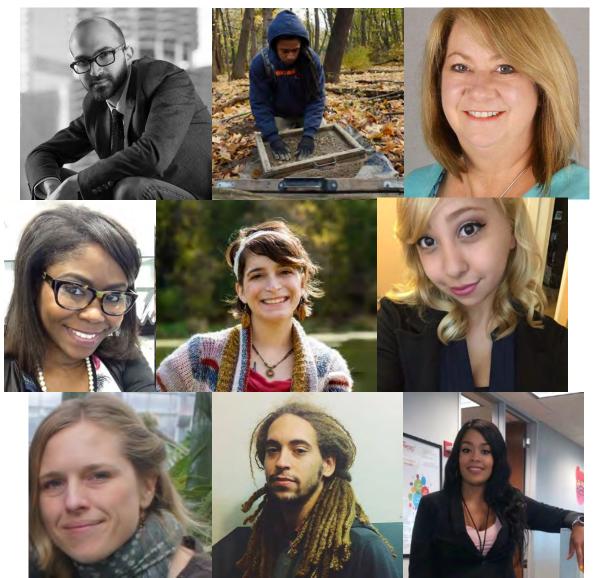
Social Science:

- Geographer
- Museum curator
- Parks and recreation specialist
- Planner
- Policy analyst

Arts and Humanities:

- Environmental communications
- Landscape architect
- Technical environmental writer

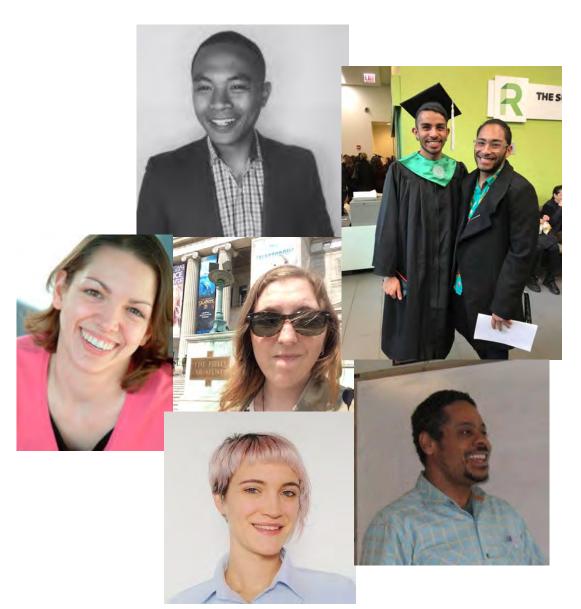
SUST Alumni Success



Employment & Internships

- Ben Shulman (BPS '12), Director of Publishing @IIT Architecture, blogger, editor
- Christian Cameron (BA'14), urban forester & youth educator
- MaryBeth Radeck, entrepreneur & sustainability consultant
- Cheryl Roberts (BPS '14), energy management at GE
- Rebecca Quesnell (BA '15), sustainability coordinator @ RU, operations director @ Independent Recycling Services
- Yessenia Balcazar (BA '18), Southeast Environmental Task Force, Chgo Dept of Aviation
- Jessie Crow Mermel (BPS '12), farm educator @ Angelic Organics Farm & master naturalist
- Jesse Williams (BA '15), director of sustainability @ Rust Belt Riders
- MeLissa Tate (BA '19), corporate sustainability specialist @ Ferrara Candy Co.

SUST Alumni Success



Graduate School

- Mike Magdongon (BPS '13), MBA @ Erasmus Univ (Netherlands)
- Yessenia Balcazar (BA '18), Josh
 Campbell (BA '13), Tom Lewallen (BA '15), & Akilah Mitchell (BA '16), UIC
 Urban Planning MA
- Moses Viveros (BA '17), Eden Hall Fellow in Food Studies MA + MBA joint program @ Chatham Univ ('20)
- Ben Shulman (BPS '12), UIC Communications MA
- Lindsey Sharp (BPS '16), Wayne State U Anthropology MA

Employment & Internships

- Margaret Allen (BA '19, environmental technician @ Env Design International
- Maria Cancilla (BPS '18), horticulture intern @ Shedd Aquarium; garden educator @ Gardeneers / Americorps
- Emily Rhea (BA '16), project manager
 & energy analyst @ Eco-Achievers
- Ron Taylor (BPS '12), director of parks & energy, City of Harrisburg

Questions for Discussion

- What environmental and/or sustainability-related issues are most important to you personally?
- What particular places or ecosystems do you know and care about?
- What are some of the ways students at JJC are working on behalf of sustainability and/or social justice?
- What people inspire you? Who should we know about and learn from?
- What are your school and/or career aspirations and how might they relate to sustainability?



Vital and Incredibly Interesting Online Resources

Sustainability Studies @ RU
Blog (includes <u>alumni</u> updates)

RU Sustainability

Comprehensive info about all things sustainable at Roosevelt

SUST on <u>Twitter</u> & <u>Facebook</u> (news, events, people, stories)

Prof. Bryson's <u>Faculty Website/Blog</u> (lots of key resources on internships and green jobs)

Schaumburg's Sustainable Future Website/blog (e-subscribe!)



It's all about the journey . . .

Canoeing the North Branch of the Chicago River, Fall 2014 (M. Hoffman)