

Using an Ecojustice Education Framework to Address Conservation in the Upstate

by

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Masters of Arts: Natural Science and Environmental Education

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PROJECT SUMMARY

Purpose

The purpose of my capstone project was to engage diverse stakeholders in the Upstate on issues and solutions pertaining to ecojustice, social justice and conservation by posing the question, of *how can an ecojustice education framework help address environmental equity in the Upstate of South Carolina?* Additionally, aside from the educational importance, it was the interest of my project to understand how concepts translate to knowledge, attitude, and behavioral changes. These changes resulting from ecojustice education involve three distinct groups: undergraduate students, conservation professionals, and social justice advocates. These stakeholder groups were chosen in order to develop organizational and educational links between different advocacy groups. The most significant objective of this project was to ground advocacy conversation amongst groups who pursue justice for the environment and minority groups and to introduce the next generation of advocates, undergraduate college students, to the arena of diverse stakeholder engagement.

The project consisted of two in-person sessions, each two hours long with varying and diverse stakeholder groups. The groups that participated in these sessions are referred to as the “Ecojustice Co-Learning Groups”. I had the privilege of working with Dr. Quinn at Furman University who helped me design and facilitate intentional information and techniques designed to unite and foster conversation and action.

Project Description and Format

This project was a workshop style presentation for adults in the Upstate of South Carolina. The project itself comes in the form of three important components: the powerpoint

presentation, the small group discussion packets, and the online participation survey. All three of these components are attached in the following section of this document.

My project was formatted in this way to best present the information and research collected during the literature review phase of this project, and to gauge the importance and effectiveness of this educational framework within the context of people doing this work in the Upstate. The presentation highlights the key points of my argument in an educational context. Then the discussion questions, which are also referenced in the small group discussion handouts, are strategically placed in between key sections of the presentation. There were a total of four small group discussions throughout the two hour long workshop presentation. Additionally, lunch and unstructured conversations were had during the second hour of this workshop.

Intended Audience

Each session hosted different stakeholder groups of the Upstate. Previously, it was my intention to separate the different stakeholder groups into their own workshop days. However, after some contemplation, I decided on mixed groups to foster interdisciplinary conversation and help the participants make connections across institutional boundaries. All together the 27 workshop participants included students from Furman University and Clemson University, five different social justice organizations, professors from three different universities, professionals from six different environmental organizations, and several professionals from other related utilities that understand the importance of interdisciplinary convergence of environmental and justice fields. Therefore, I can confidently say that the audience was representative of the values and understanding of the nuanced components of research pertaining to the environment and justice fields.

PROJECT

Powerpoint Presentation

Ecojustice and the Upstate

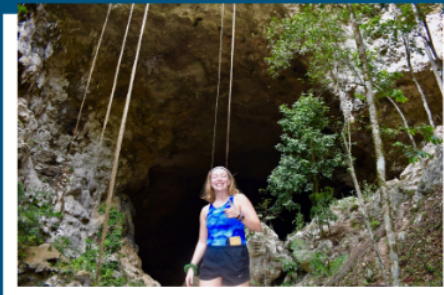
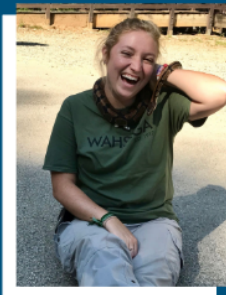
Masters of Education: Natural Science
& Environmental Education

Hamline University

Rebecca Bolich-Wade

About me

- Bachelor's Degree in Biology and Philosophy - Furman University, 2019
- Interest in biology, conservation, research, and environmental education
- Began Master's in May, 2020
- Personal and educational interest in the intersectionality of conservation and justice
- Serve as the Clean Water Associate at Upstate Forever



Research Question: How does an ecojustice framework inform conservation in the Upstate?

Outline:

1. Why a workshop?
2. Ecojustice Theory
3. Environmental Justice
4. Conservation
5. The Upstate
6. Case Studies & Group Discussions



Purpose and Desired Outcome

- Limited research on the application of ecojustice.
- I do not work in a traditional educational setting.
- Need to gauge the interest that stakeholder organizations and personnel have regarding the application of this topic.
- Share values and make connections with others interested in conservation and justice.

Importance of small group discussion notes, form small groups, make introductions, and review definitions sheet.



Why the Feed and Seed Co?

Their mission is, "... to improve the health and well-being of all citizens by increasing access to nourishing local foods and establishing a truly sustainable food system built on profitable farms and independent markets."



Defining Ecojustice

"The understanding that **local and global ecosystems** are essential to all life; challenging the **deep cultural assumptions** underlying modern thinking that undermine those systems; and the recognition of the **need to restore the cultural and environmental commons**" (Martusewicz et al., 2015, p.23).

In order to combat the environmental and social injustices of today environmental and social justice issues cannot be entirely separated. By linking these two crises, it helps people to **understand that it is human thinking and behaviors that must change.**

Ecojustice Terminology

- **Ecological Crisis:** articulate anthropogenic climate change or to encapsulate **environmental issues as a collective.**
- **The Commons:** The non-monetized relationships, practices, and traditions that people across the world use to survive and take care of one another on a day-to-day basis. This includes both the “environmental commons,” such as land, air, water, seeds, and forests, and the “cultural commons,” which include practices, skills, and knowledge used to **support mutual well-being.**
- **Value-hierarchized thinking:** A way of thinking that depends on a ranking system where we value some and devalue others. Seeing some groups or cultures as having more value than others; or seeing humans as having more worth than any other species. **Hierarchized thinking makes racism, sexism, and anthropocentrism, for example, possible**

Small group conversation

What aspects of ecojustice do you recognize in your work, community, relationships, or personal life?



Defining Environmental Justice

"Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."
(U.S. EPA, 2021)

Founding principle: People speaking for themselves.

The overarching goal of environmental justice is for the fair allocation of environmental burdens regardless of race, color, ethnicity, or socioeconomic status

(U.S. EPA, 2021).

Environmental Justice History

- **White decision-makers** utilized political, governmental, and economic infrastructure to **localize polluting industries in communities of color.**
- Methods: Exclusionary zoning, dismantling public transportation, disincentivization of developing minority communities, concentrating poverty.



Modern Environmental Justice

Instead of putting the focus on degraded environments negatively impacting people, modern environmental justice looks to study and increase awareness of **holistic solutions that create better environments that in turn, better serve communities.**

Methods: understanding concentrated poverty and generational equity, urban green space, public transportation, etc.

Ecojustice vs. Environmental Justice

Justice for whom?

Greater value assumption:
where in any conflict between
nature and humans, humans
are always paramount.



Considerations when looking at social injustice and environmental degradation together

- Understanding the complexity and why these fields are often kept separate
- Ecojustice is concerned with how cultural issues are a byproduct of the same value hierarchy that creates environmental issues.



Small group conversation:



1. What comes to mind when you consider environmental justice?
2. How does ecojustice compare to environmental justice?
3. Why is it important to distinguish the difference?
4. What aspects of these fields are components of your own lives, study, and work?

Conservation

Conservation Science: the field of study that seeks to understand the impacts humans have on species, habitats, and ecosystems and to provide tools for **protecting or restoring those parts of nature that humanity values**; the interdisciplinary application of principles and tools from biology economics, political science, psychology, and **many other disciplines** for the protection of biodiversity and ecosystem services.

Explore the intersectionality of environmental science, human well-being, and different mechanisms that **balance the needs of people with nature**.

Key Components of Conservation Science

- Urban Sprawl
- Smart Growth
- Ecosystem Services
- Land Use Zoning
- Urban Green Space
- Relational Values



Urban Sprawl

- The rapid **expansion of the geographic extent of cities and towns**, often characterized by low-density residential housing, single-use zoning, and increased reliance on the private automobile for transportation.
- Is the result of a need to **accommodate rising human populations** who desire increased living space and residential amenities, but is correlated with increased energy consumption, pollution, and traffic congestion.
- Impacts all people and is linked to poverty and **heightening the separation between income classes**.

Urban sprawl and metropolitan areas represent the ideal setting to witness ecojustice theory in action through conservation science.

Smart Growth

- Centered around the concern of how our nation's metropolitan areas can **provide opportunities and quality environments for all residents**.
- Closely connected with environmental justice.
- Seeks to mitigate oppression of people and the environment by addressing:
 - Land use zoning
 - Public transportation
 - Inclusion of all stakeholders, **especially those most at risk**, in the development of urban communities.

Ecosystem Services

- Refers to the benefits that society receives from nature; it is nature's contribution to people.
- Represent the possible negative outcomes for future generations of people who benefit from ecosystem services that are now declining as a result of unsustainable development and anthropogenic climate change.
- It is proposed that ecosystem services **represent the human dimensions in the context of conservation science**
- Should be included into governance and planning in order to **maximize the positive impacts of urbanization** all while conserving the benefits gained from natural capital.

Land Use Zoning

- Is the most broadly applied mechanism to regulate urban land use in the U.S.
- Is historically linked to environmental justice because of **exclusionary zoning**:
 - Use of governmental power to perpetuate discriminatory practices by allowing polluting industries to disproportionately invade marginalized communities.
- Can be a tool to advance sustainable development today:
 - can reflect the interests of **diverse stakeholders**
 - can be used to separate incompatible uses and prevent negative impacts of development
 - can integrate compatible uses
 - can **insert land that provides ecosystem services** such as green space and ecological buffers around waterways into urban spaces

Urban Green Space

Urban green spaces represent an opportunity to maximize environmental sustainability, human health, and health equity.



Urban Green Space

- As a result of city densification and urban sprawl, urban green spaces are being degraded and developed.
- Positives: aesthetic, environmental, leisure, social, and health benefits.
 - Environmental benefits: trees, parks, riparian buffers, and stormwater adaptations all can help achieve reductions in air pollution, temperature, impacts of flooding events, water pollution, noise pollution, and reductions of atmospheric carbon dioxide.
- Negative: Increase inequality by driving up home values of surrounding neighborhoods.

Increasing home values leads to displacement of vulnerable communities that generally obtain the most health and social value from the presence of urban green spaces.

Relational Values

- Preferences, principles, and virtues associated with relationships, both interpersonal and as articulated by policies and social norms; Relational values can represent cultural identity, social cohesion, social responsibility, moral responsibility for non-humans, individual identity, and stewardship
- They represent a way to bridge the gap between the philosophical and educational premises of ecojustice, conservation science, human values, intervention, and policy.



Intersectionality of ecojustice and conservation



1. Can we adequately conserve the Upstate without considering human dimensions? Especially the most vulnerable groups of people?
2. Do you see a distinction between ecojustice and environmental justice in terms of conservation application?

Lunch/Feed & Seed Talk



The Upstate

- Geographical Overview
- Traditional textile history and industrial and tourism present
- Revitalization of urban spaces
- Massive population increase throughout the state

With this massive increase in population throughout South Carolina, urban and rural thresholds are becoming blurred and the **consequences of urban sprawl are expanding and exacerbating unresolved issues** of conservation and environmental justice.

History of Environmental (In)Justice in the Upstate

Segregationist policy has persisted in the wake of urban sprawl and greening of cities such as Greenville and Spartanburg through gentrification, and their present issues are indicative of the struggle and possible solutions that could be applied generally in other developing metropolitan areas in the South.

- Arkwright Community in Spartanburg
- Mill Village communities
- Bramlett vs. Broad Street Clean Up

Current Concerns in the Upstate

- Strategic revitalization starting in the 90's has repurposed abandoned textile mill facilities and abandoned mill village housing.
- Revitalization has brought a thick wave of gentrification.
- **Gentrification:** a form of neighborhood change driven by a complex interaction between historic practices that created and **reinforced disinvestment in low-income communities and communities of color** and modern investment patterns that are now radically reshaping the economic conditions in those same communities.
- **Displacement:** when **residents are pushed out of their neighborhoods and communities** due to cultural, climate, or economic drivers.

Green Gentrification

- The convergence of urban redevelopment, ecologically-minded initiatives, and environmental justice activism in an era of advanced capitalism

For whom do green amenities make a community more sustainable?



Ecojustice Examples in the Upstate

**Bramlett, Unity Park & City of
Greenville Tree Ordinance**

1. How could an ecojustice framework enhance/progress these projects?
2. Could an ecojustice lens impact the projects you work with?
3. If not to help your own projects, could ecojustice be useful in terms of demystifying the intersections between environmental and social issues and solutions?

Evaluation Survey

Thank you!



Discussion Questions & Data

The following questions are referenced in order according to the time they were posed throughout the workshop presentation. Data collected for this capstone project came in the form of hand-written answers and testimonials in response to the small group questions posed throughout my workshop presentation. In total, there were four small group discussion opportunities with one to four questions for participants to answer and discuss with their Ecojustice Co-Learning Groups. The second form of data collection was through virtual surveys completed by participants after the completion of the workshop. This survey was anonymous and aimed at assessing knowledge, attitude, and behavior changes of participants following their involvement in the workshop.

Handout Data

This data was collected from the 27 total participants who filled out all or parts of the handout packet for the Ecojustice Co-Learning discussions. To share both specific and

overarching ideas, I compiled key words and phrases and direct quotes from all of the packets, and condensed them by question. The results of that process are summarized below.

Discussion 1: Ecojustice

What aspects of ecojustice do you recognize in your work, community, relationships, or personal life?

Keywords/Phrases:

- Importance of educating elected officials
- Culture meets conservation
- Public transportation
- Common mobility
- Local Food Access
- Energy Ethics
- Affordable housing
- Access to green space
- Challenging traditional power structures

Direct Quotes:

- “Root of the problem and value hierarchised thinking need to be understood to dismantle an unsustainable system.”
- “Greenville County is struggling to stay green.”
- “Striking a balance between two demands. My field, conservation biology tends to have a bias for biodiversity but more recently has moved to an ecojustice framework. Not always! But it is more of a part of conservation.”

- “I am trying to break down value-hierarchized thinking in my own life, and getting the people I care about to recognize that we have been conditioned to think this way.”
- “Cultural commons → we have westernized the world, perpetuating colonialistic ideals and capitalistic systems. There are other (and better) ways to live.”

Discussion Two: Ecojustice and Environmental Justice

1. What comes to mind when you consider environmental justice?

Keywords/Phrases:

- Concentrated poverty
- Infrastructure on the natural environment
- Unfavorable locations for affordable housing
- Denmark, South Carolina
- Kinder-Morgan oil spill
- Tree canopy
- Superfund sites
- Air and water quality
- Poorer neighborhoods have more pollution
- Gentrification

Direct Quotes:

- “Disproportionate concentration of ecosystem costs on disenfranchised people.”
- “Environment only has value in the lens of people, not inherent value.”
- “Minority communities are disproportionately affected by climate change. This is because they don’t have the power, resources, etc., to fight back.”

- “The intersectionality between justice for under valued communities and justice for the environment and the effects.”
- “Unity Park’s history in segregation of green spaces.”
- “The disparity between who faces the brunt of ecological damage caused by corporations and affluent populations.”

2. How does ecojustice compare to environmental justice?

Keywords/Phrases:

- Holistic ecojustice encompasses environmental justice
- Ecojustice is broad and environmental justice is specific
- Environmental justice is application of ecojustice
- Theory versus action
- Ecojustice is holistic and de-siloing
- Ecojustice restores the commons versus environmental justice which restore the balance of environmental burdens

Direct Quotes:

- “Ecojustice seems to focus more on the values of natural resources and the theoretical ideas of environmentalism, whereas environmental justice is more realistic in that it discusses specific interactions between ecology and communities.”
- “Ecojustice is the whole system while environmental justice is human-centered; environmental justice is a subfield or concept of the overarching ecojustice movement.”

- “The difference between environmental justice and ecojustice derives from power dynamics and intent.”

3. Why is it important to distinguish the difference?

Keywords/Phrases:

- Ecojustice, the environment is the main character versus environmental justice’s main character is human
- Bridges the gap between human need and environmental need
- Power and intent
- Actionability
- Different goals
- Need to develop more balanced societies
- Underlying motives and goals

Direct Quotes:

- “Without valuing people first it is not going to be equitable.”
- “We need to break down that hierarchical thinking; the environment itself is just as valuable, if not more, than us.”
- With environmental justice it’s more about tackling one issue at a time, but ecojustice works on connecting the social justice groups and environmental groups.”
- “To allow us to give equal consideration to both human/social and environmental impacts as far as who the justice is for; and understanding that the two work hand-in-hand.”

- “Knowing the goal because both concepts ultimately have different goals or achievements so to acknowledge their difference you can attribute more effective application.”

4. What aspects of these fields are components of your own lives, study, and work?

Keywords/Phrases:

- Anthropocentric versus ecocentric research
- Environmental protection for the environment’s sake
- Poor development/growth
- Striking a balance
- Value of water
- Passion for equality, environment, and people

Direct Quotes:

- “Candidly, environmental justice probably doesn’t have a significant direct impact on anyone in this room, but is central to many of our studies and initiatives which hopefully can be addressed, making efforts accessible to the people who are actually being affected.”
- “Both can be used in the public transit sector. Is installing infrastructure better for whom? Humans or wildlife? Also, how will a bus stop in a neighborhood affect the surrounding area? Is pollution worth the mobility it grants?”

Discussion Three: Ecojustice, Environmental Justice, and Conservation

1. Can we adequately conserve the Upstate without considering human dimensions?

Especially the most vulnerable groups of people?

Keywords/Phrases:

- Human dimensions are necessary and unavoidable
- Connecting conservation, city and county planning, and economic development
- Should it? No, not without an ecojustice approach.

Direct Quotes:

- “Yes and no. Yes, if we ignore NIMBYS. No, we can’t ignore the most vulnerable.”
- “No, if conservation is more broad than biodiversity.”
- “Academically, yes. Practically, very difficult because without human involvement and care no change will take place.”
- “No, conservation efforts still tend to benefit those who can afford access to those areas and can often even negatively impact those most vulnerable communities that would benefit the most. Needs to be a mutual planning effort that takes all into account.”

2. Do you see a distinction between ecojustice and environmental justice in terms of conservation application?

Keywords/Phrases:

- Ecojustice encompasses environmental and human dimensions of conservation more than environmental justice
- Ecojustice elevates people and the environment equally
- Justice for whom?
- More clear connection between ecojustice and conservation as opposed to environmental justice
- Cultural versus environmental conservation

- Ecojustice is the theory and conservation is the tool

Direct Quotes:

- “I see ecojustice as being more a conservation focus than environmental justice because environmental justice focuses more on social issues caused by environmental problems and ecojustice more as how can we conserve without having significant social trade offs.”
- “Conservation science application inadvertently negates environmental justice; even removing conservation from communities, it increases the likelihood of eventual urban sprawl and decreased environmental justice. But, in terms of conservation science, I think the concepts of ecojustice and environmental justice blend together more in terms of their goals than in comparison to when they stand alone.”

Discussion 4: The Upstate

1. How could an ecojustice framework enhance/progress these projects? (Unity Park, Greenville Tree Ordinance, and Bramlett Cleanup)

Keywords/Phrases:

- Introduce a different value system
- Meeting environmental and community needs
- Balancing investment and infrastructure
- Bringing different groups to the table
- Who is/should be responsible for a cleanup?

Direct Quotes:

- “All aspects and all stakeholders will be considered and solutions could be more comprehensive and inclusive.”
- “Cost-benefit analysis of both ecosystem services and cultural benefits.”
- “This could add equality and voice to all sides.”
- “An ecojustice framework brings a value system different from those contributing to the initial injustice. Dignity would be brought to the exploited site.”

2. Could an ecojustice lens impact the projects you work with?

Keywords/Phrases:

- Community tax
- Sustainable agriculture research
- Scenario planning
- Unintentional application of ecojustice values
- Bring other stakeholders to the table
- Preserving and improving land for residents

Direct Quotes:

- “Yes, but I feel like in terms of the public transportation sector, environmental justice is more prevalent.”
- “Stakeholders like Upstate Forever, River Keeper Alliance, Nature Conservancy, etc., bring this lens to the discussion. Still a tough sell for economic water use sectors.”

3. If not to help your own projects, could ecojustice be useful in terms of demystifying the intersections between environmental and social issues and solutions?

Keywords/Phrases:

- Educational tool
- Interdependence of systems

Direct Quotes:

- “Ecojustice is definitely useful/essential to create solutions that consider environmental, social, and cultural implications.”
- Yes, but it will be difficult to get the general population to regram their way of thinking without disrupting their lives. People like to be comfortable.”
- Coupling them together highlights who is affected, why they are affected, and the need to fix it.”

Survey Data

Out of the 27 total participants, I received 15 participant evaluations of the workshop. The feedback I received communicated what I had hoped participants would get out of this experience: that it informed their knowledge of these topics, it molded some attitudes concerning the importance and application of these topics, and that they intend to utilize this knowledge to enhance their work and studies.

Participant Evaluation Survey Data

1. Was the time invested listening and participating in this workshop valuable to you? If so, please explain what aspects intrigued you.

Answers:

- Bringing various stakeholders to the table that I would not have precisely thought about.

- It was valuable. Ecojustice and environmental justice are things we should be more engaged with in our organization. Green gentrification was new and interesting as well as some of the EJ issues in the upstate.
- Yes! I wasn't familiar with the difference between eco-justice and environmental justice before this workshop. I appreciated the discussion and really thinking more critically about these topics, and also learning about some local issues.
- Yes, it was very helpful to hear different voices
- Yes, absolutely! I really enjoyed learning about ecojustice and I think that one of the most valuable lessons was that we should be focusing on making sure things are better from the start. Intentionally planning is better than trying to catch up.
- It was extremely valuable. I had no idea the difference between ecojustice and environmental justice!
- Absolutely! Very interesting topic and important distinctions made. I think many industries would benefit from learning more from a workshop or even a paper/pdf learning tool of some sort.
- Very valuable. Distinguishing the difference between ecojustice and environmental justice is critical in applying these concepts to sustainable solutions in a way that makes them effective, equitable, and comprehensive. We need to consider all aspects of an issue, which means considering the cultural, social, and environmental implications a solution may have.
- Yes- helps me reframe some of the conversations we've been having as an organization lately (Bramlett, Unity Park restoration, UDO Tree Ordinance) to better advocate for an ecojustice perspective.
- Yes! It was helpful to learn the terms and mental framework for evaluating environmental decisionmaking within the framework of ecojustice.
- Yes, i definitely came away with new knowledge
- great to meet and discuss this topic with like-minded group
- Yes. Defining terms like ecojustice and answering the discussion questions in small groups were what was valuable to me.

- As someone who has spent 20+ years in the environmental field I was really interested in the difference between eco justice and environmental justice.
2. Does learning about ecojustice change the way you perceive conservation in the Upstate?

Please explain why.

Answers:

- Yes, it's a lot more complicated! And will take many people working together to make a dent.
- I'm unsure at this point if it changed my perception. I enjoy getting to work with conservation and environmental groups. It made me think about the topic and issues certainly.
- Yes. It provides a new lens through which to view conservation actions, especially in terms of considering who or what is being given higher priority in some decisions. It'll make me think a little more carefully about how conservation efforts can impact communities, and how those communities' needs can be balanced with environmental needs.
- Perhaps, if we can build better coalitions
- Definitely! We need to pool resources together from environmental realms and social justice realms to improve conservation and preservation projects.
- Yes! We need more people to advocate for conservation that actually works with the people rather than against them.
- I do! I've learned a little in my major at Furman, but it's interesting to learn a little more about the past of conservation, especially relating to the Upstate.
- Yes, thinking about how the environment and people can synonymously be considered is an important paradigm shift from people first or environmental first thinking.
- I don't know that it changes it, but it did reinforce my knowledge that vulnerable populations and many cultural implications are often not considered in these projects and need to be integrated more into these solutions.
- Yes— introduces some questions of what motivates conservation in the upstate and if this should continue to be the motivation or if it needs to be reframed (probably, yes).

- Absolutely. My understanding of ecojustice will inform how I view infrastructure development in particular
 - Yes, I think we conserve as a tool for environmental justice but not necessarily eco justice.
 - Yes - loved learning about some of the terms and concepts as well as how to apply them to conservation in our communities
 - Not necessarily but it does change the terms I will use in the future to be more encompassing.
 - I didn't fully understand the difference and this workshop helped to inform how I have approached these two concepts during my personal and professional life.
3. What would you like to see as the next step to applying ecojustice in the Upstate?

Answers:

- Government level interest
- Public awareness maybe. Bridging the public divide is difficult as you discussed with our group and the Bramlett - Broad issue. Our engagement and outreach efforts with stakeholders is a similar challenge.
- I think just more thoughtful and intentional efforts to bring diverse stakeholders to the discussion when considering conservation actions.
- A formal workgroup with members of nonprofits in the region
- Requirements that ecojustice perspectives be included in the continued development of the Upstate
- I would love to see more development projects have groups involved in ecojustice that are consulted.
- Steps to how to reach out to others and help them learn more about ecojustice!
- How could industries apply this type of workshop into organizational strategic planning? I think this information would be paramount to consider for future directions of organizations and how both people and environmental factors are considered together.
- Educate city planners and other development/real estate stakeholders on the importance of eco justice and how it can and should be applied to solutions
- More organizations assert themselves to provide a voice for eco Justice, even when not invited.

- More open and public discussions around decisionmaking and ecojustice
 - Conservation organizations implementing eco justice within their strategic plans and developing or utilizing tools to ensure they're carrying this out.
 - Continued dialogue --> moving into action, inform and adjust focus of current organizations
 - A greater understanding of the term ecojustice and use in Upstate conservation discussions.
 - Use this concept to inform our land use policies in the region.
4. How do you plan to utilize the information you used at this workshop?

Answers:

- Find ways for our Water Center to be more involved in these areas perhaps. This is becoming more important to our national group of water resource institutes/centers. Funding is usually the main obstacle to working on these or similar issues.
- In my own work, I'll be more aware and considerate of the value hierarchy in program objectives and practices, and perhaps how those values may be better balanced in some aspects!
- Continues learning and co versátiles, followed by action!
- I will keep everything in mind as I go forward with my research. Nuanced approaches are key (Thanks, Ben). This will help with cultural considerations as well as addressing the issues affecting Bucksport.
- I plan to utilize the information I learned in my upcoming research and overall it just helps to be more educated on environmental topics when pursuing a sustainability science degree!
- Keep Rebecca on the team :) explore how ecojustice and water issues can be integrated to solve problems throughout the Upstate under UF's umbrella.
- This workshop showed me that it is necessary to be critical of solutions and think critically about who these solutions are being created for
- I'm interested in taking this to the FoRR Board as we proceed with development oppositions and a developer checklist (you'll be involved in this as part of the TC!).

- This will deeply inform my work as a hydrologist. Every step of the process, including problem definition, methods, communication of results, and all need to be evaluated within the context of ecojustice
- Discuss with local partners when conservation discussions are being had
- Not sure yet - most likely next step is to interview Rebecca on my podcast and continue to learn and share what I learn
- I plan to use the information from the workshop in problem solving in future jobs.
- Incorporate it into how we shape our goals at Upstate Forever.

REFERENCES

- Allen K.E., C.E. Quinn, C. English, J.E. Quinn. (2018). Relational values in agroecosystem governance. *Current Opinion in Environmental Sustainability*,
<https://doi.org/10.1016/j.cosust.2018.10.026>
- Bowers, C. A. (2017). An Ecojustice approach to educational reform in adult education. *New Directions for Adult and Continuing Education*, 2017(153), 53–64.
<https://doi.org/10.1002/ace.20221>
- Fleming, C. (2004). When environmental justice hits the local agenda: a profile of Spartanburg and Spartanburg County, South Carolina. *Public Management*, 86(5), 6–.
- Groves, C. & Game, E. (2015). Conservation planning: Informed decisions for a healthier planet.
- Gutkowski, A. (2020). The Evolution of environmental (in)justice in Spartanburg, South Carolina, 1900–2000. *The Journal of American History (Bloomington, Ind.)*, 106(4), 923–948. <https://doi.org/10.1093/jahist/jaz675>
- Kareiva, P. & Marvier, M. (2012). What is conservation science? *BioScience*, 62(11), 962–969.
<https://doi.org/10.1525/bio.2012.62.11.5>
- Kareiva, P. & Marvier, M. (2017) *Conservation science: Balancing the needs of people and nature*. (2nd Edition) New York, NY: W.H. Freeman Macmillan Learning.
- Martusewicz, R. A. (2018). EcoJustice for teacher education policy and practice: The way of love. *Issues in Teacher Education*, 27(2), 17–35.
- Morrison, S. A. (2018). Reframing Westernized culture: insights from a critical friends group on ecojustice education. *Environmental Education Research*, 24(1), 111–128.
<https://doi.org/10.1080/13504622.2016.1223838>

Paige, K., Lloyd, D., & Smith, R. (2016). Pathway to knowing places— and ecojustice — three teacher educators’ experiences. *Australian Journal of Environmental Education*, 32(3), 260–287. <https://doi.org/10.1017/aee.2016.18>

Sperling, E. & Bencze, J. L. (2015). Reimagining non-formal science education: A case of ecojustice-oriented citizenship education. *Canadian Journal of Science, Mathematics and Technology Education*, 15(3), 261–275. <https://doi.org/10.1080/14926156.2015.1062937>