

Building Resilience with Pennsylvania Communities

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My focus on community resilience stems from practical experience
How do you “fix” this kind of flooding?
Chehalis River, Washington, Dec. 2007



Bruce Ely, The Oregonian

#1 natural hazard in PA = flooding

Penn State Initiative for Resilient Communities example partnership between community and university



Penn State Initiative for Resilient Communities A Pilot to Develop Community-Based Solutions to Riverine Flooding

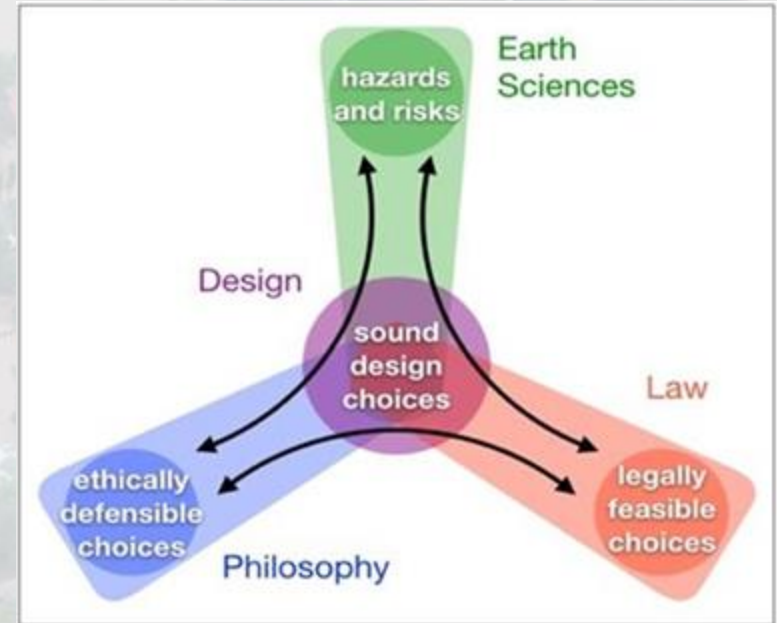
Lisa Iulo, College of Arts and Architecture - **Klaus Keller**; **Robert Nicholas**, College of EMS -
Lara Fowler, IEE & Penn State Law - **Nancy Tuana**, College of Liberal Arts

Major objectives for this project

- Work with Selinsgrove Borough to develop a plan for community flood resilience and revitalization; and
- Engage with stakeholders and decision-makers about flood resilience in Pennsylvania's riverine communities in the Susquehanna River Basin.

Deliverables

- Establish foundation to (i) harness synergies from projects, institutes and centers; and (ii) develop tools, design strategies, data resources, risk assessments, and values- informed decision support approaches.
- Educate in disciplinary and transdisciplinary methods.



Example scoping activities



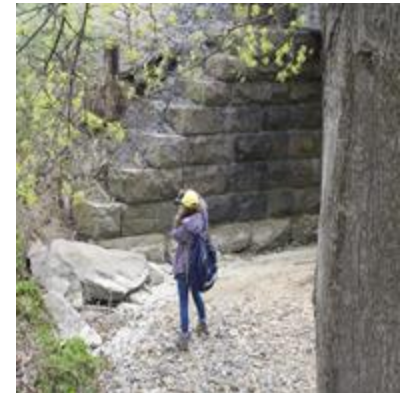
Scoping meetings w/ key partners



Data gathering, mapping, and contextualizing for flood risk analysis and Master Plan development



Student Vision Plans, Landscape Architecture 414, Spring 2019



Team visits to Selinsgrove to examine infrastructure and assess responses to prior floods and perceived flood risk.

What we heard from engagement with Selinsgrove leaders

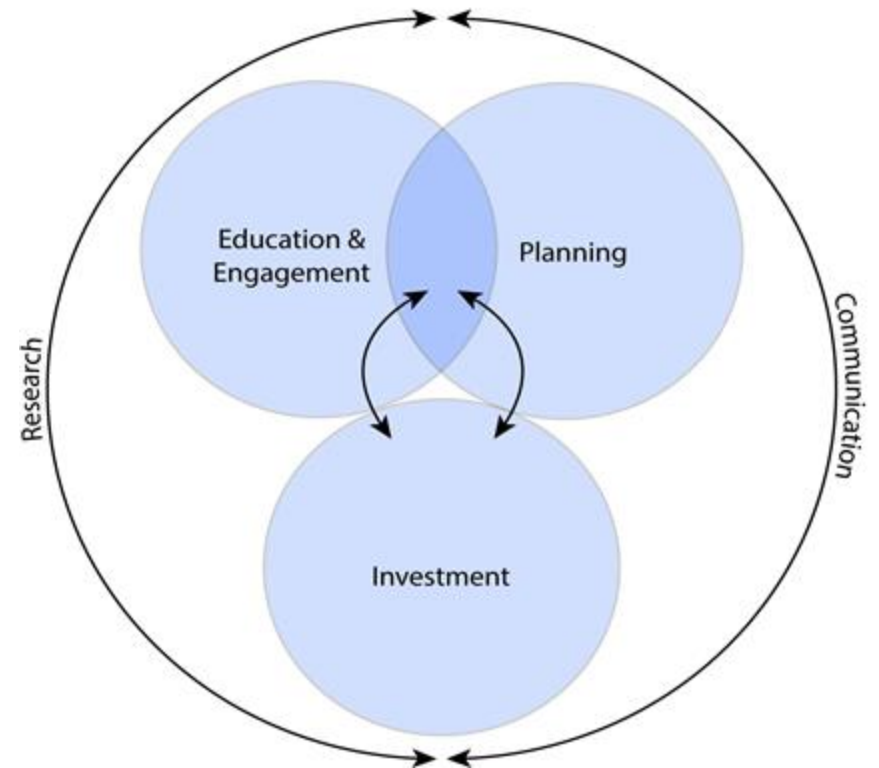
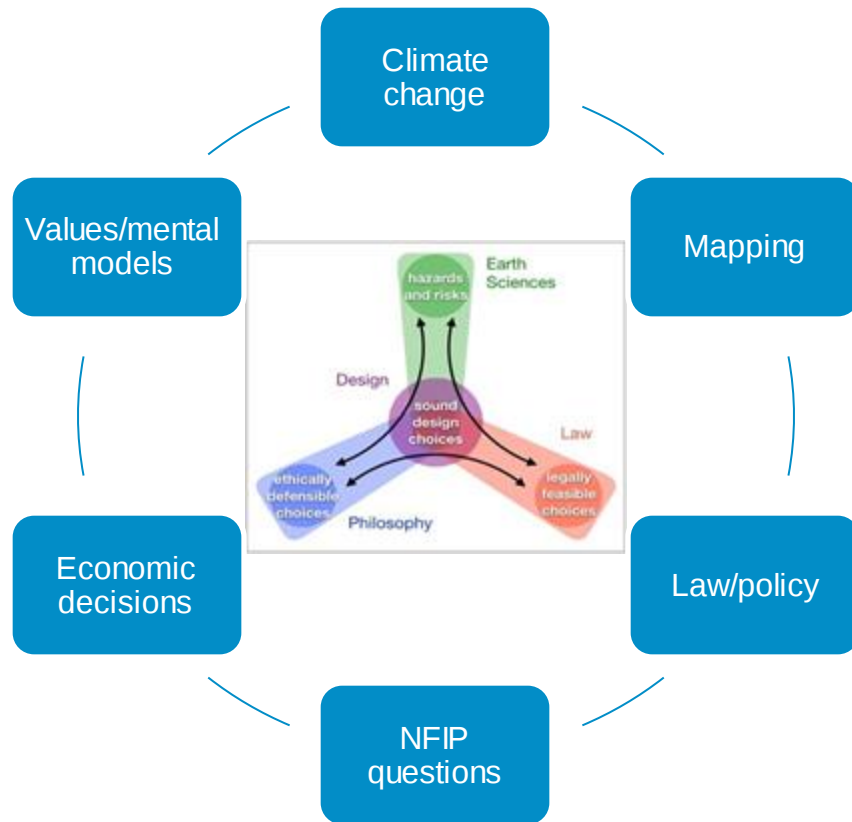


Isle of Que, Selinsgrove, 2011:

Fourth Grade Student's Impression
"How do you see Selinsgrove?"
Selinsgrove Area Intermediate School

- Focus on community quality of life
- Need to find ways to decrease flood/stormwater impacts
- Historic, cultural, and recreational resources important, including connection to the Susquehanna River
- Economic revitalization, preservation of tax base critical
- Human health & wellbeing important
- Engagement with public to address critical flood and stormwater challenges needed

Lessons Learned



Questions of riverine flooding (and other impacts) extend far beyond Selinsgrove



The Broader Challenge

- Flooding = big impact to riverine communities
- Limited funding, big financial impacts
- Increase variability: floods (and drought)
- Challenging trade offs to ensure community resilience, well-being

Flood Prevention

**Improve
quality of life**

**Stormwater management
practices**

Increase economic vitality

Reduce water pollution

Ensure resilient communities

Tremendous opportunities for community/university engagement- 2 examples from Penn State



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Thank you!

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