



Shifting Contexts:

How changes in governance frameworks,
stakeholder engagement, and
research application influence project outcomes

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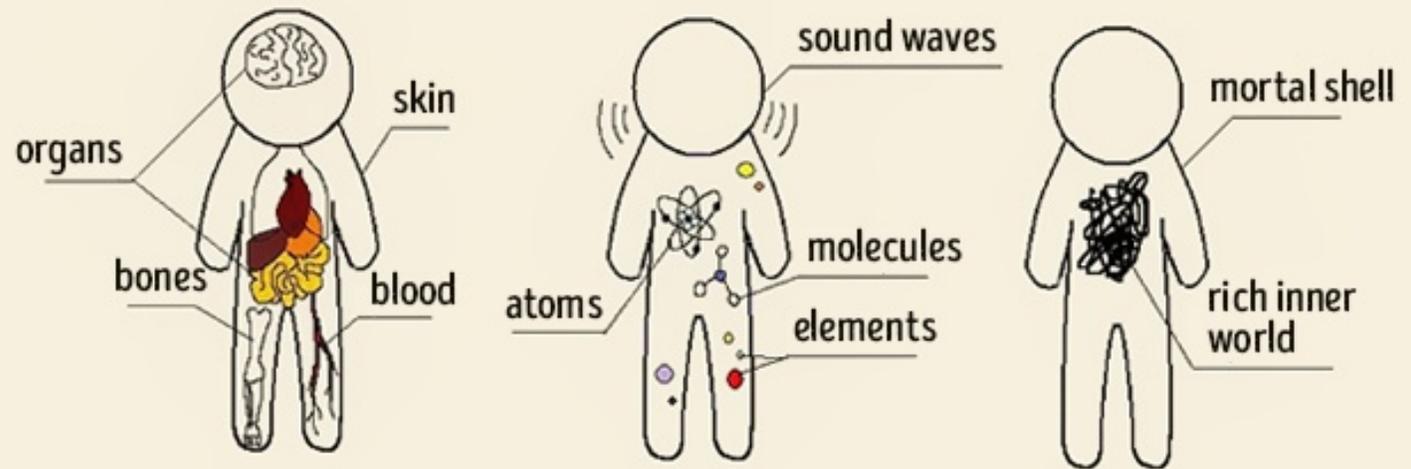
- **Introduction to the social science universe**
- **Our Study**
 - **Governance frameworks**
 - **Stakeholder engagement**
 - **Connection to outcomes**
- **Key Takeaways**
 - **Why should you consider governance?**
 - **How might you approach your governance assessment?**

What is social science?

The study of:

- How society works
- Relationships
- Individuals
- Organizations
 - Businesses
 - Governments
 - NGOs
- Things that determine human behavior

What are we made of?



Biologist:

Physicist:

Social
scientists:

BRIGHTSIDE.ME



Myths and Misconceptions

Common myths

- Jargon heavy
- Not objective
- Not hypothesis driven
- Anecdotal
- Doesn't include data
- Not science

Social science is not

- Outreach
- Extension
- Opinion or public input polling
- Easy?



Data and Methods

Quantitative data

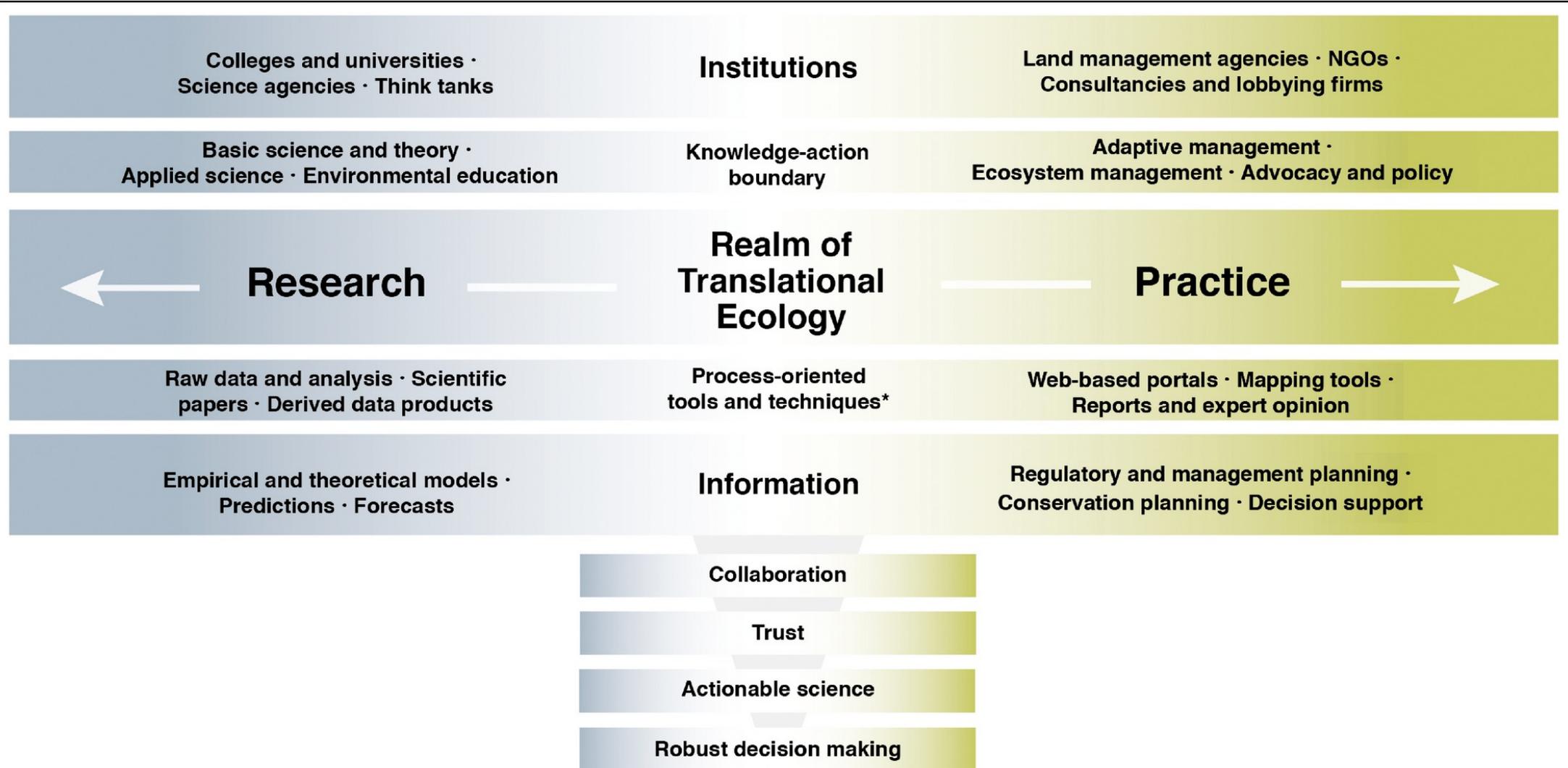
- Experiments
- Surveys
- Secondary data
- Content analysis
- Market data analysis
- Social network analysis

Qualitative methods

- Field
 - Participant observation
 - Ethnography
- Interviews
- Focus groups
- Photo elicitation
- Participatory mapping
- Scenario building



Translational Approaches



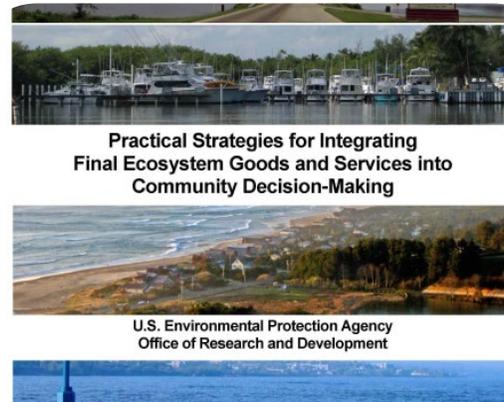
Enquist, C.A., Jackson, S.T., Garfin, G.M., Davis, F.W., Gerber, L.R., Littell, J.A., Tank, J.L., Terando, A.J., Wall, T.U., Halpern, B. and Hiers, J.K., 2017.

Foundations of translational ecology. *Frontiers in Ecology and the Environment*, 15(10), pp.541-550.

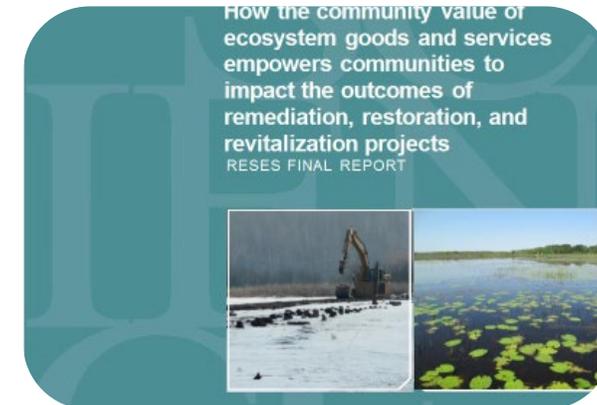
- Ongoing work focuses on introducing ecosystem goods and services thinking into community decision processes via a series of coordinated community case studies
- Recent reports looking at these case studies have examined:



The current status of ecosystem services in community-based decision support

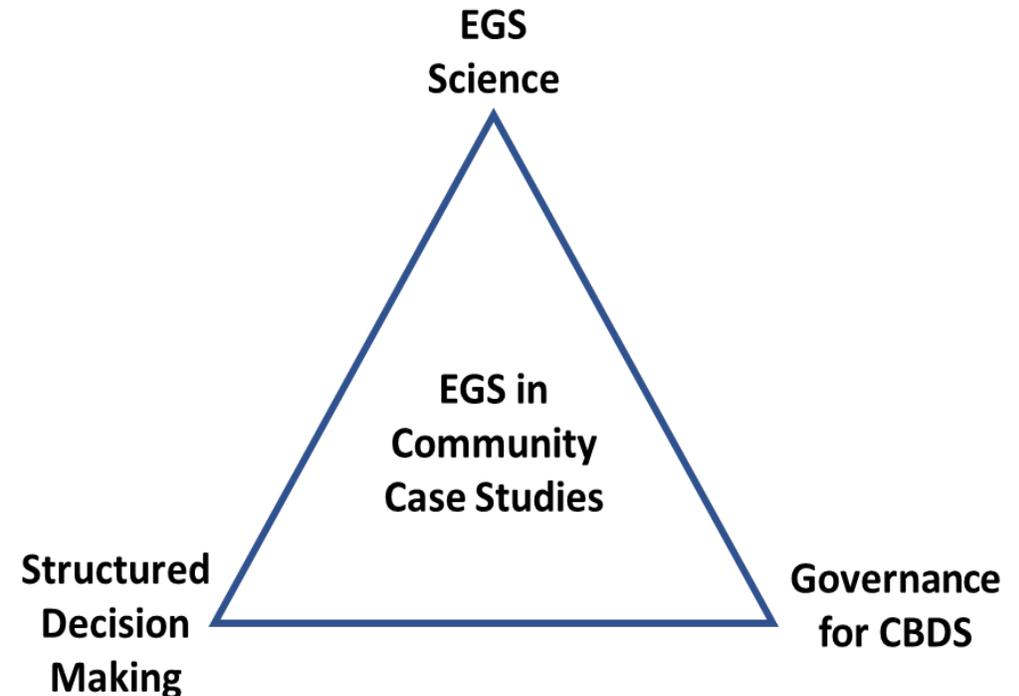


Practical strategies for incorporating ecosystem services thinking into existing decision-making processes



Exploration of how decision context influenced the who, what, where, and how of restoration decisions

- Study looks across full suite of coordinated case studies to explore how contextual factors influenced project options and outcomes
- Increasing understanding of influence of key contextual elements will help researchers incorporate ecosystem services thinking into community-level decision making



Six case studies

- Tampa Bay
- Mobile Bay
- Puerto Rico
- Pacific Northwest
- Great Lakes
- Southern Plains



Coastal Gulf
of Mexico



San Juan,
Puerto Rico



Pacific
Northwest



Great Lakes
AOC



Southern
Plains

Each tackling different issues, in varying states of progress, and with differing sets of partners engaged

Document analysis and qualitative interviews

- **Governance frameworks**
- **Stakeholder engagement**
- **Connection to outcomes**

Cross-cutting elements to be explored

- **Research questions**
- **Geographic context**
- **Program context**
- **Stakeholder invitations**
- **Stakeholder participation**
- **Decisions made**
- **Tools used**

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Research questions

What were they?

Where did they come from?

Geographic context

What is the geographic scope?

Program context

What programs and agencies are involved?

What is their relationship with each other?

Stakeholder invitations

How were stakeholders identified?

How were they invited to participate?

Stakeholder participation

How was stakeholder participation structured?

How did their input influence decisions made?

Decisions made

Who was making the decision?

How were decisions communicated?

Tools used

Were any structured decision making tools used?

How did tool outputs influence the decision?

Who

What

Where

How

Outcomes

City of
Duluth



EPA: R5

Citizen-stakeholder
input goes here
(during planning
process)

Urban Waters
Brownfields Assessments
Irving-Fairmount AWP
Chambers Grove Park improvements



Citizen-stakeholder
input goes here
(during planning and
implementation
processes)

Environmental R2R
are MEANS to end



Need to determine EGS
valuation here → priorities

Stormwater reduction
Improved aesthetics
Land reuse
Neighborhood enhancements
More equitable development

AOC



EPA: GLNPO

Citizen-stakeholder
input goes here
(during planning
process)

Minnesota Slip
21st Ave W
40th Ave W
Knowlton Creek
Kingsbury Bay-Grassy Point

EGS valuation
applied here if
known



Environmental R2R IS
the desired end

Remove BUI
Cleaner water
Safer fish
More habitat

EGS valuation has impact
here → helps tell story

Definition

The set of regulatory processes, mechanisms and organizations through which political actors influence environmental actions and outcomes.

(Lemos and Agrawal, 2006)

Representative case and details

- **Governance ≠ Government**
 - Government still part
- **Coordinated Case Studies**
 - Learn from experience
 - Comprehensive analysis
- **Shift conversation**
 - No longer “not using ES”
 - How using ES
- **Describe decision context, decisions, path to action, and outcomes**



Stakeholder Analysis

- What do we mean by stakeholder engagement?
- Stakeholder engagement is consistently valued, but varies widely in implementation
- Understand/Characterize:
 - How stakeholders are defined and identified
 - The roles stakeholders played in the decision process roles
 - How findings and decisions were communicated to stakeholders
- Expected outputs/results include:
 - Understanding of the roles that engaged stakeholders play in both the process and the community
 - The impacts of the governance structure on stakeholder engagement, participation, and influence



Outcome Analysis

- What do we mean by outcomes?
- Looking to map the effectiveness of the effort to the governance model in place
- Understand/Characterize:
 - Effectiveness of how tools were utilized in the process
 - How decision context shifts and is defined in practice
 - How desired outcomes may be defined by different participants
- Expected outputs/results include:
 - Concept maps of relationships between ORD and states, EPA, and tribes
 - Descriptions of context and how research can contribute to decisions
 - Best practices for collaborative problem-solving, working with stakeholders and applying research



Key Takeaways

- **Unpacking Decisions**

- Look beyond “help decision makers”
- Unpack which decisions, making what decision, with advice on how they can implement vision

- **Stakeholder Engagement**

- Stakeholder engagement is a key element of community decision-making, but implementation varies, impacting the process and how it is viewed
- Understanding these implications can help researchers looking to influence the process

- **Outcome Analysis**

- Looking at more than whether the project was completed or successful
- Using systems thinking to analyze project outcomes includes more than the science outcomes

- **Overall**

- For a given project, more pieces probably exist to conduct a governance assessment
- Case study examples have demonstrated the utility of governance assessments and key lessons learned can be transferable



Questions?

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References

- Enquist, C.A., Jackson, S.T., Garfin, G.M., Davis, F.W., Gerber, L.R., Littell, J.A., Tank, J.L., Terando, A.J., Wall, T.U., Halpern, B. and Hiers, J.K., (2017). Foundations of translational ecology. *Frontiers in Ecology and the Environment*, 15(10), pp.541-550.
- Fulford, R., Yoskowitz, D., Russell, M., Dantin, D., and Rogers, J. (2016). Habitat and recreational fishing opportunity in Tampa Bay: Linking ecological and ecosystem services to human beneficiaries. *Ecosystem Services*, 17, 64-74.
- Lemos, M.C. and Agrawal, A., (2006). Environmental governance. *Annual Review of Environment and Resources*. 31, pp.297-325.
- Williams, K.C., Bolgrien, D.W., Hoffman, J.C., Angradi, T.R., Carlson, J., Clarke, R., Fulton, A., MacGregor, M., Timm-Bijold, H., Trebitz, A., and Witherspoon, S. (2018). How the community value of ecosystem goods and services empowers communities to impact the outcomes of remediation, restoration, and revitalization projects. U.S. Environmental Protection Agency, Duluth, MN. EPA/600/R-17/292. 61 pages.
- Yee, S., Bousquin, J., Bruins, R., Canfield, T.J., DeWitt, T.H., de Jesús-Crespo, R., Dyson, B., Fulford, R., Harwell, M., Hoffman, J., Littles, C.J., Johnston, J.M., McKane, R.B., Green, L., Russell, M., Sharpe, L., Seeteram, N., Tashie, A., and Williams, K. (2017). Practical Strategies for Integrating Final Ecosystem Goods and Services into Community Decision-Making. U.S. Environmental Protection Agency, Gulf Breeze, FL, EPA/600/R-17/266. 191 pages.