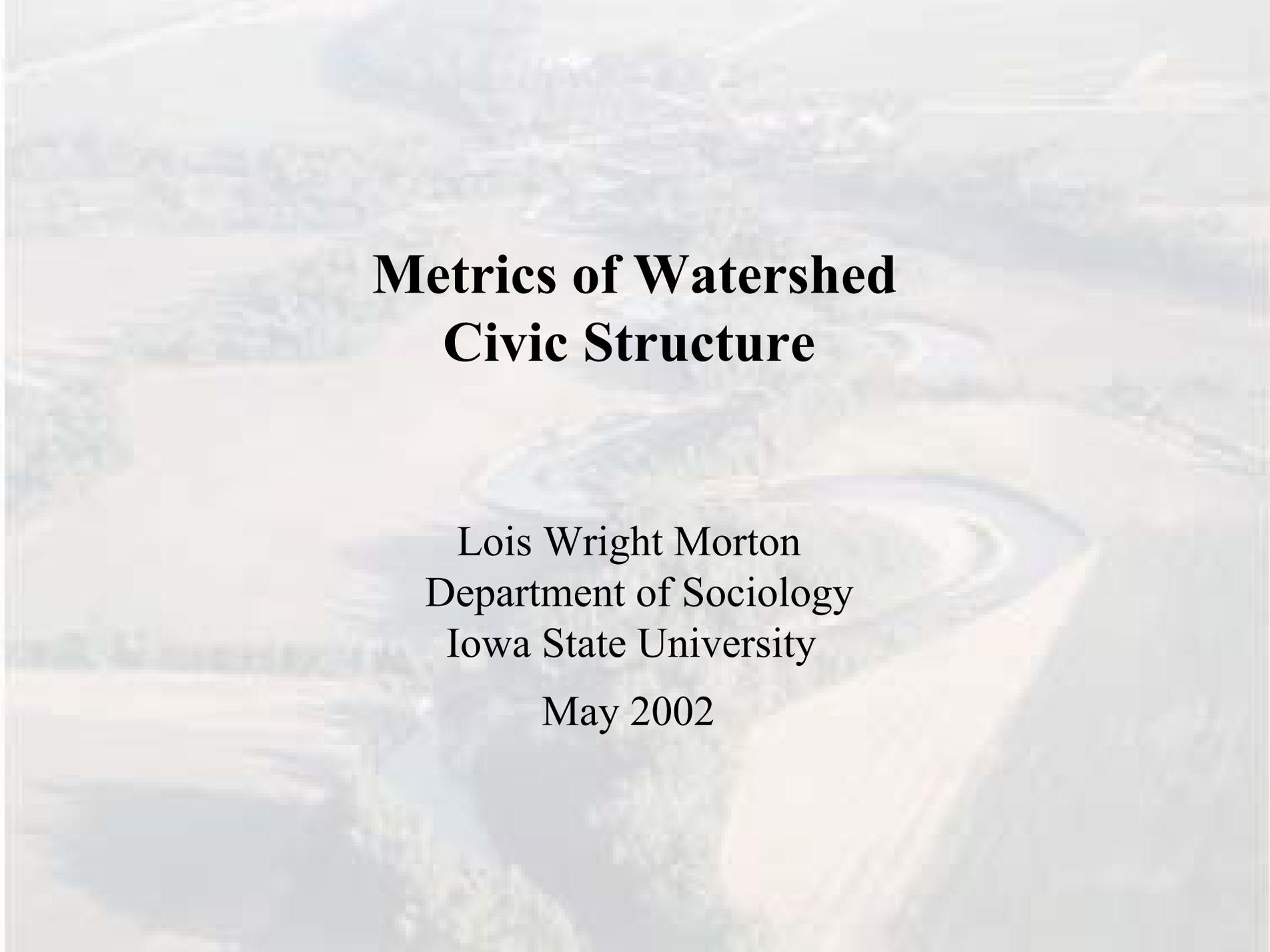


US EPA ARCHIVE DOCUMENT

An aerial photograph of a river winding through a landscape. The river is the central focus, curving from the upper right towards the lower left. The surrounding land is a mix of green fields and brownish areas, possibly agricultural or undeveloped. The overall tone is somewhat muted and soft.

Metrics of Watershed Civic Structure

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May 2002

What is the civic structure of a place?
Does it look different in different watersheds?
Why does it matter? Why should we pay attention to it?



Civic structure is the voluntary human actions and social organization of place(s) which are focused on solving problems of collectively held resources



In the United States this translates into how citizens participate/don't participate in public decisions

In watershed decision making, there are 4 ways citizens participate:

- 1. Representative-job of citizens is to vote for a person to represent them**
- 2. Direct democracy-citizens directly decide**
- 3. Direct action-citizens advocate, challenge, undertake direct actions**
- 4. Citizen democracy-citizens and government work together to reach shared outcomes/solutions**



To measure civic structure

Multi-level complexity

individual

group

place (political, community)

watershed

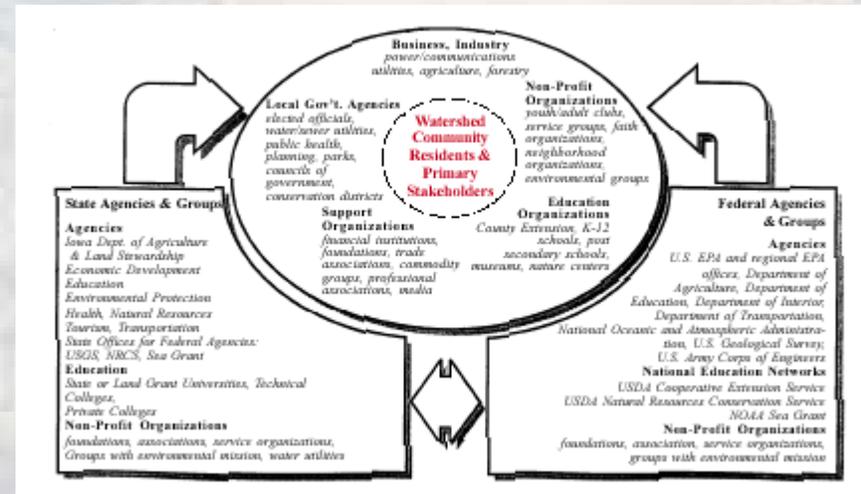
state

region (natural & political)

nation

regions of the world

the world



Business, Industry
*power/communications
utilities, agriculture, forestry*

Local Gov't. Agencies
*elected officials,
water/sewer utilities,
public health,
planning, parks,
councils of
government,
conservation districts*

**Non-Profit
Organizations**
*youth/adult clubs,
service groups, faith
organizations,
neighborhood
organizations,
environmental groups*

**Watershed
Community
Residents &
Primary
Stakeholders**

**Support
Organizations**
*financial institutions,
foundations, trade
associations, commodity
groups, professional
associations, media*

**Education
Organizations**
*County Extension, K-12
schools, post
secondary schools,
museums, nature centers*

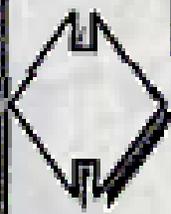
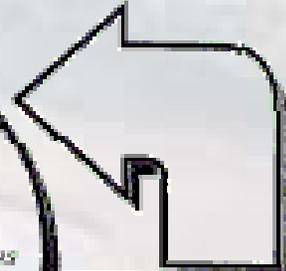
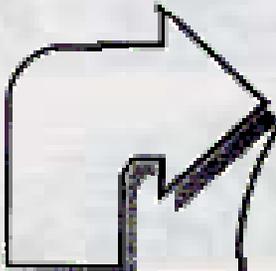
State Agencies & Groups

Agencies
*Iowa Dept. of Agriculture
& Land Stewardship
Economic Development
Education
Environmental Protection
Health, Natural Resources
Tourism, Transportation
State Offices for Federal Agencies:
USGS, NRCS, Sea Grant
Education
State or Land Grant Universities, Technical
Colleges,
Private Colleges*

Non-Profit Organizations
*foundations, associations, service organizations,
Groups with environmental mission, water utilities*

**Federal Agencies
& Groups**

Agencies
*U.S. EPA and regional EPA
offices, Department of
Agriculture, Department of
Education, Department of Interior,
Department of Transportation,
National Oceanic and Atmospheric Administration,
U.S. Geological Survey,
U.S. Army Corps of Engineers
National Education Networks
USDA Cooperative Extension Service
USDA Natural Resources Conservation Service
NOAA Sea Grant
Non-Profit Organizations
foundations, association, service organizations,
groups with environmental mission*



What to measure at each level?

Individual actions

1) leadership

Collective actions (social capital)

2) networks

3) norms of reciprocity/trust



Enabling mechanisms

There are a set of enabling mechanisms that affect how leadership and social networks of reciprocity and trust interact to obstruct and/or solve watershed issues

1. Legal and normative codes
2. Structural pluralism
3. Communication
4. State relations
5. Economic/market relations



Metrics of Watershed Civic Structure

LEVEL 1: INDIVIDUAL PERSONAL ACTIONS			LEVEL 2: COMMUNITY STRUCTURE		
Citizen Actions/ Leadership	SOCIAL CAPITAL		Leadership Structure	SOCIAL CAPITAL	
	Personal Networks	Norms of Reciprocity/ Trust		Networks Among Groups and Individuals	Norms of Civic Responsibility
<ul style="list-style-type: none"> • Did you vote in last local election? 1,4 • Have you ever: signed a petition? gone to public hearing? testified at public hearing? 1,3,4,5 • Have you ever: run for public office? 1,4 	<ul style="list-style-type: none"> • Percent of people you know in your watershed 3 • Percent of close personal friends who live in your watershed 3 • Voluntary organizations you belong to 1,3 • Kind of organization you belong to 1,3 	<ul style="list-style-type: none"> • You help neighbors 1 • You expect others to help you 1 • Do you trust government? 1,4 • Do you trust (a local business/institutions)? 1,5 	<ul style="list-style-type: none"> • Degrees and kind of: • Lack of community leadership on (water issues) 1,3,4 • Cooperation/conflict among community leaders 1,3,4,5 • Age and characteristics of community leaders 1,2,3 • Leadership style – paternalistic/self-organizing 2,3,4,5 	<ul style="list-style-type: none"> • Number of organizations in community 1,2,3 • Number of organizations with environment-related missions 1,2,3,4,5 • Group relations with organizations different from themselves 2 • Informal places (3rd places) for people to meet to talk about public issues 2,3 • Group connections outside community 1,2,3,4,5 	<ul style="list-style-type: none"> • Cooperation/conflict among organizations regarding community issues 1,2,3,4,5 • People work together/don't work together to solve community problems 1,3 • Community events/fundraisers 1,3 • Percent vote local issues 1,4 • Attendance at public meetings 1,3,4 • Public meetings have open dialogues 2,3

Enabling Mechanisms:

1. Legal/normative codes; 2. Structural pluralism; 3. Communication (information flows); 4. State relations; 5. Economic/market relations

Level: Individual

Citizen Actions/ Leadership	Personal Networks	Norms of Reciprocity/ Trust
<ul style="list-style-type: none"> • Did you vote in last local election? 1,4 • Have you ever: • signed a petition? • gone to public hearing? • testified at public hearing? 1,3,4,5 • Have you ever: • -run for public office? 1,4 	<ul style="list-style-type: none"> • Percent of people you know in your watershed 3 • Percent of close personal friends who live in your watershed 3 • Voluntary organizations you belong to 1,3 • Kinds of organizations you belong to 1,3 	<ul style="list-style-type: none"> • You help neighbors 1 • You expect others to help you 1 • Do you trust government? 1,4 • Do you trust (a local business/ institutions)? 1,5

Enabling Mechanisms:

1. Legal/normative codes; 2. Structural pluralism; 3. Communication (information flows); 4. State relations; 5. Economic/market relations

Individual Social Capital

Citizen Actions/Leadership

- Have you ever:
 - signed a petition?
 - gone to public hearing?
 - testified at public hearing? **1,3,4,5**
- Have you ever:
 - run for public office? **1,4**
- Did you vote in last local election? **1,4**

Enabling Mechanisms:

1. Legal/normative codes; 2. Structural pluralism; 3. Communication (information flows); 4. State relations; 5. Economic/market relations

Individual Social Capital

Personal Networks

- Voluntary organizations you belong to **1,3**
- Kind of organization you belong to **1,3**
- Percent of people you know in your watershed **3**
- Percent of close personal friends who live in your watershed **3**

Enabling Mechanisms:

1. Legal/normative codes; 2. Structural pluralism; 3. Communication (information flows); 4. State relations; 5. Economic/market relations

Individual Social Capital

Norms of Reciprocity/Trust

- You help neighbors **1**
- You expect others to help you **1**
- Do you trust government? **1,4**
- Do you trust (a local business/ institutions)? **1,5**

Enabling Mechanisms:

1. Legal/normative codes; 2. Structural pluralism; 3. Communication (information flows); 4. State relations; 5. Economic/market relations

Level: Community

Leadership Structure	Networks Among Groups and Individual	Norms of Civic Responsibility
<p>Degrees and kind of:</p> <ul style="list-style-type: none"> • Cooperation/conflict among community leaders 1,3,4,5 • Lack of community leadership on (water issues) 1,3,4 • Age and characteristics of community leaders 1,2,3 • Leadership style – paternalistic/self-organizing 2,3,4,5 	<ul style="list-style-type: none"> • Number of organizations in community 1,2,3 • Number of organizations with environment-related missions 1,2,3,4,5 • Group connections outside community 1,2,3,4,5 • Group relations with organizations different from themselves 2 • Informal places (3rd places) for people to meet to talk about public issues 2,3 	<ul style="list-style-type: none"> • Cooperation/conflict among organizations regarding community issues 1,2,3,4,5 • People work together/don't work together to solve community problems 1,3 • Community events/fundraisers 1,3 • Percent vote local issues 1,4 • Attendance at public meetings 1,3,4 • Public meetings have open dialogues 2,3

Enabling Mechanisms:

1. Legal/normative codes; 2. Structural pluralism; 3. Communication (information flows); 4. State relations; 5. Economic/market relations



Community Social Capital

Leadership Structure

Degrees and kind of:

- Cooperation/conflict among community leaders **1,3,4,5**
- Lack of community leadership on (water issues) **1,3,4**
- Age and characteristics of community leaders **1,2,3**
- Leadership style – paternalistic/self-organizing **2,3,4,5**

Enabling Mechanisms:

1. Legal/normative codes; 2. Structural pluralism; 3. Communication (information flows); 4. State relations; 5. Economic/market relations

Community Social Capital

Networks Among Groups and Individual

- Number of organizations in community **1,2,3**
- Number of organizations with environment-related missions **1,2,3,4,5**
- Group connections outside community **1,2,3,4,5**
- Group relations with organizations different from themselves **2**
- Informal places (3rd places) for people to meet to talk about public issues **2,3**

Enabling Mechanisms:

1. Legal/normative codes; 2. Structural pluralism; 3. Communication (information flows); 4. State relations; 5. Economic/market relations

Community Social Capital

Norms of Civic Responsibility

- Cooperation/conflict among organizations regarding community issues **1,2,3,4,5**
- People work together/don't work together to solve community problems **1,3**
- Community events/fundraisers **1,3**
- Percent vote local issues **1,4**
- Attendance at public meetings **1,3,4**
- Public meetings have open dialogues **2,3**

Enabling Mechanisms:

1. Legal/normative codes; 2. Structural pluralism; 3. Communication (information flows); 4. State relations; 5. Economic/market relations

