

Oregon Department of Forestry
Board of Forestry

**Natural Resource Values in Science and
Policy: The Wicked Problem World**

The What, Why and How of Coming to Agreement

November 2019

Center for Public Service (CPS)
Mark O. Hatfield School of Government
Portland State University

Dr. Craig W. Shinn, Professor Emeritus
shinnc@pdx.edu
503 805 8322

Dr. Craig W. Shinn; Emeritus Professor -----

- ▶ *Over 30 years working with mid-career public service professionals (MPA, MPP, Executive MPA, PhD degrees. Over 25 training and professional development programs.*
- ▶ *Trained as a forester, worked as a forester, biological forestry research*
- ▶ *Many interactions with ODF over the years including Chairing CFF*
- ▶ *“healing the relationship between humankind and the land”*

*Dr. Craig W. Shinn;
Emeritus Professor ----*

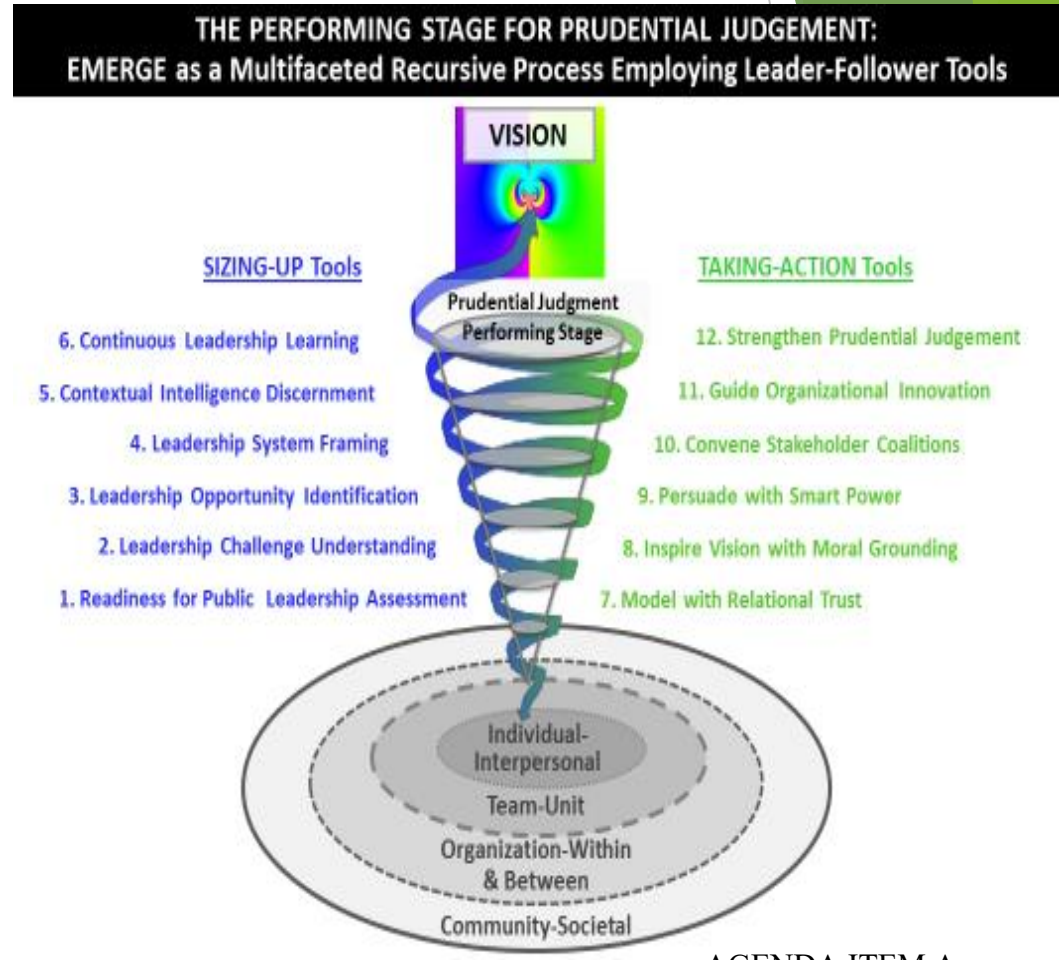
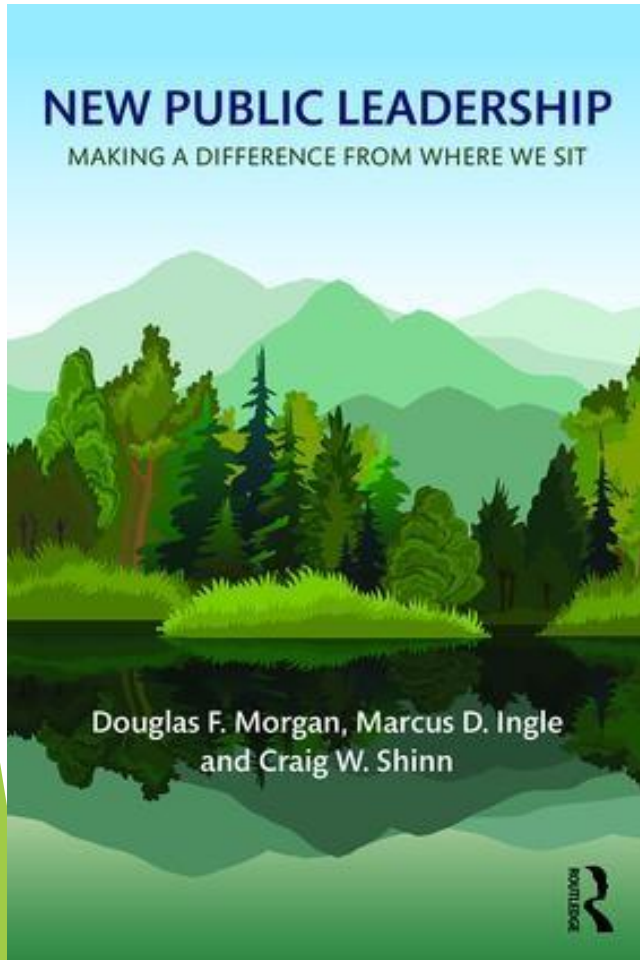
- ▶ *A resource sociologist*
- ▶ *How we produce and arbitrate meanings about the things of nature.....*
- ▶ *A note on Science, Policy and Law*

What resource sociologists can say ... for sure

- ▶ What we hear depends on who we hear from ---
- ▶ We arbitrate value differences (that's what small "p" politics is) in both the market place and political arena
- ▶ Multiple arena which are not mutually exclusive
- ▶ Agreement at one scale in society does not ordain agreement at other scales (ecological fallacy, etc.)

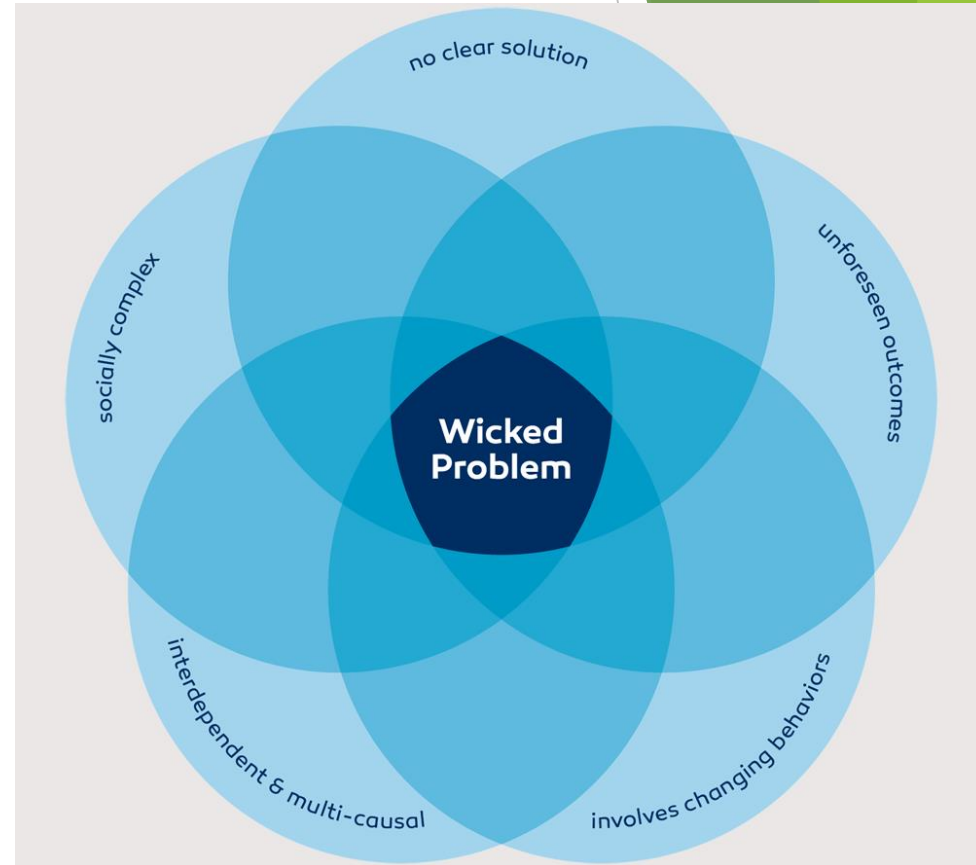
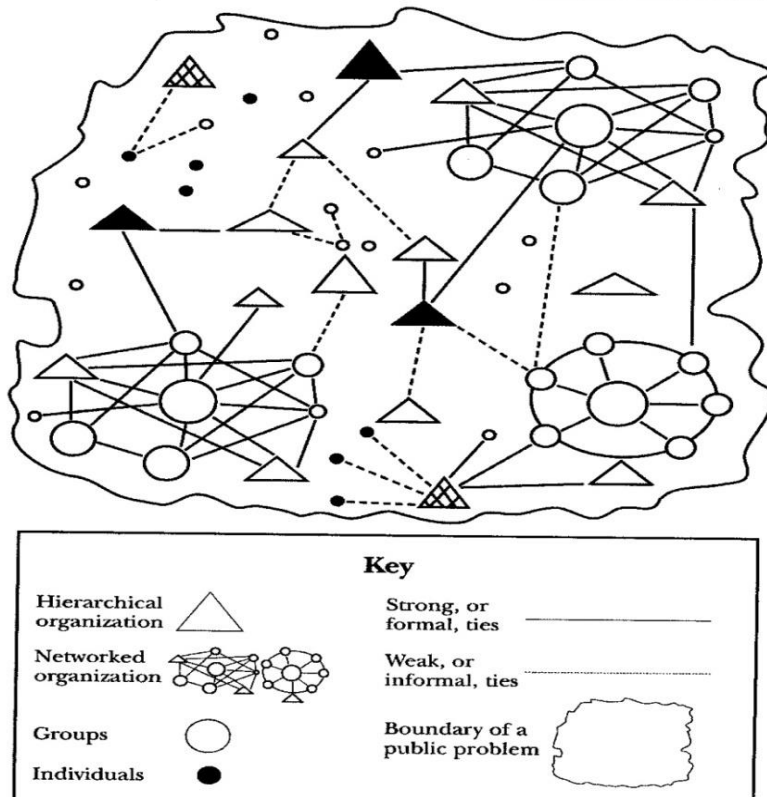
An enhanced model of public service leadership –

- > Publicness and politics*
- > Leadership and followership*
- > Conciliatory practices and “prudential judgement”*



Some Perspectives on Wicked Challenges...

Figure 1.2. Public Problems in a No-One-in-Charge, Shared-Power World.



Illustrative Wicked Challenges...

- 2. How can we mobilize sufficient resources for the work we need to do on the landscape in midst of dynamic change in funding, understanding of the problems, and policy priorities and?*
- 3. How to address urgent economic, social and environmental challenges such as climate adaptation and infrastructure maintenance in a shared-power governance system?*
- 4. How to reestablish trust between governments, among actors in other parts of the political economy, with groups of interest, and with citizens and the communities of which they are part ...*

Historical Perspectives on Wicked Problems...

Planning problems are inherently **wicked**: ill-defined and reliant on political judgment. They are never solved. At best they are re-solved, over and over again.

Horst Rittel and Marvin Webber, 1973



What decision-makers deal with are **messes**, not problems. A mess is a set of external conditions that produces dissatisfaction.

Russ Ackoff, 1974



The policy process is 'a **swampy lowland**' where solutions are confusing messes incapable of technical solutions



Don Schön, 1979

11/08/2019

8

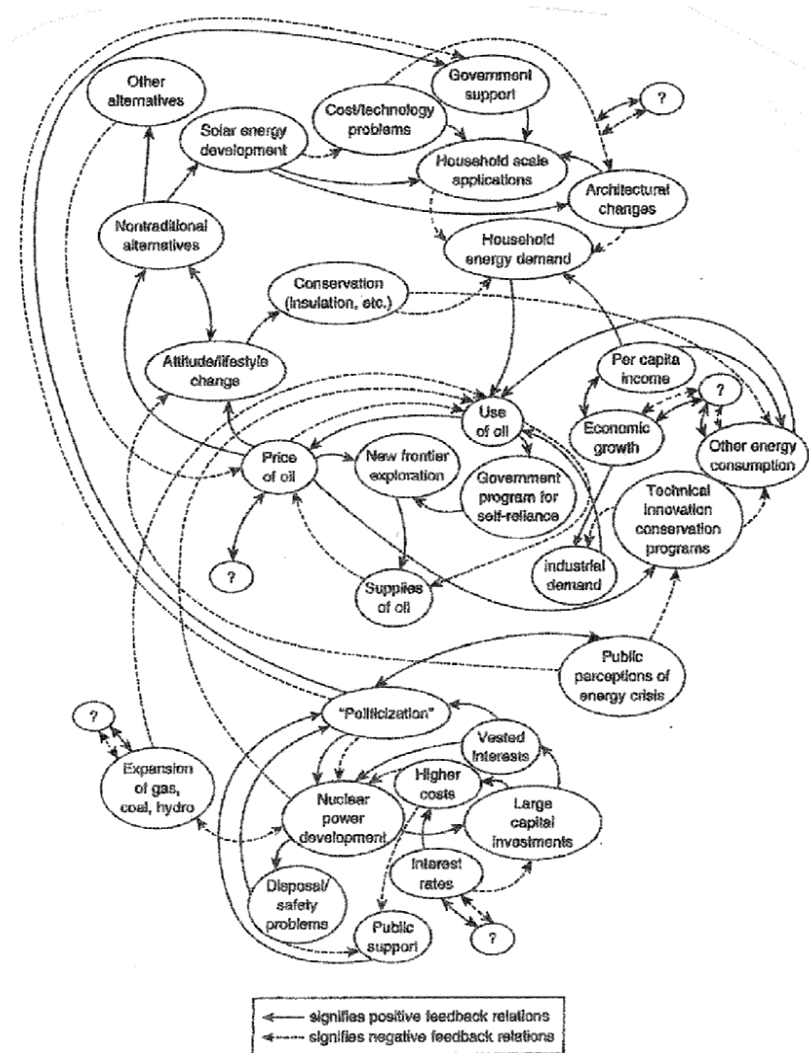
JB

The Rise of Wicked Problems: An Illustration

Polycentric - Is there one clear center from which one can define the problem or obtain traction to address it?

Interrelated - If one part of the problem is acted on, will it have positive and negative effects on other parts?

Borderless - How many different stakeholders are interested in this problem? What authorities & powers do they have for influencing the outcome of actions?



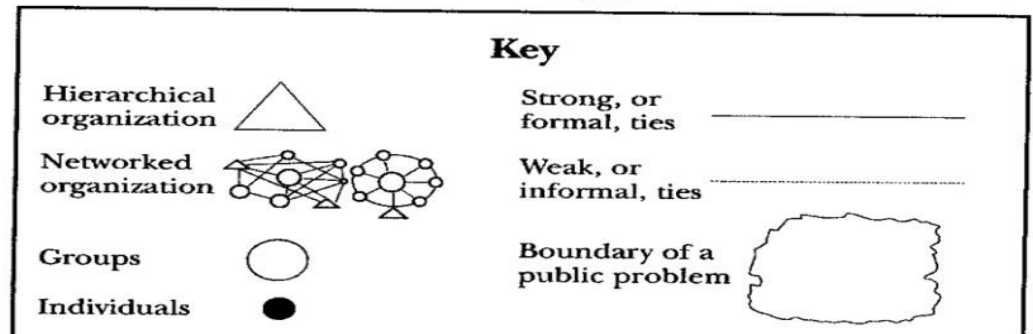
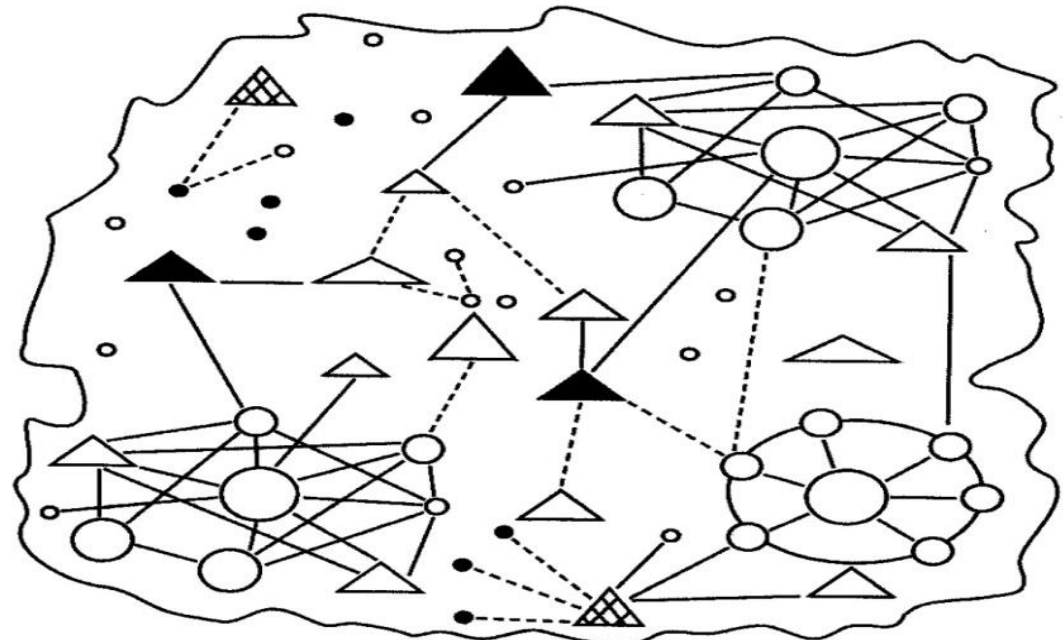
*Source: Morgan, G., 2006, Electrical Power, p. 269

Social Complexity Network Map...

Figure 1.2. Public Problems in a No-One-in-Charge, Shared-Power World.

Illustration: Portland School Board Issues (education, health, and social welfare)

- Networked
- Interdependent
- Polycentric
- Complexity
- Indeterminacy
- Ambiguity



In Natural Resources

Wicked Problems are *NORMAL*

Characteristics of Environmental Problems:

- ▶ Long times to solutions
- ▶ Complexity
- ▶ Weak or scattered science base
- ▶ Integration across disciplines
- ▶ Emotionally charged atmosphere
- ▶ Uncertainty and unintended consequences

Gordon and Berry. Environmental Leadership Equals Essential Leadership. Yale University Press: New Haven. 2006.

A Resource Sociologists Perspective

- ▶ **Complexity:**
 - ▶ Social, Political and Economic as well as ecological
- ▶ **Interdependent:**
 - ▶ Individuals, Organizations and Communities are connected as are ecological scales, and ecological processes.
- ▶ **Indeterminacy:**
 - ▶ Science seldom solves the problem alone
- ▶ **Ambiguity:**
 - ▶ People, in various collectivities from family to agency make and hold the contested meanings about nature

Wickedness & Problem Solving *or better yet finding solutions*

Object and Subject

While most of us are technically trained, and depend on science to build our stock of knowledge, problem solving at it's core is subjective in nature.

All of the green, as well as the final choice itself are *subjective*

- Choose the best alternative to _____

Alternatives Criteria	A.	B.	N
1.			
2.			
3.			
n			

Miller, Shinn and Bentley Rural Resource Management: Problem Solving for the Long Term. Iowa State University Press: Ames. 1994.

Wicked Problems Require Different Approaches

Wicked Problems can not be addressed in the same way as we have been approaching problems.

Traditional approaches:

- don't let people in to the process
- design solutions bereft of strategies to address complexity
- solve parts of problems but not wholes
- create undesirable outcomes and consequences
- fail to lead to understand the reasons for undesirable outcomes

Wicked Problems
Complex
Integrated
Interdependent
Indeterminate
Unbounded
Polycentric
Unpredictable
Intractable
Discontinuous
Nonlinear

Wickedness is the new normal for public leaders!

**Marcus Ingle, on many occasions.*

*In a Wicked Problem World, leaders identify problem types for followers, and make **ordinary** as many problems as possible.*

**Craig Shinn rejoinder, on many occasions.*

Science; Knowledge; Understanding and Agreement

- ▶ What does science based decision making look like in natural resources?
- ▶ Why do “field days” work for decisional groups?
- ▶ Some tricks of the trade*

* Foundations of Collaborative Governance (PA 575)

Tricks of the Trade

- ▶ Keeping track of what people care about -
 - ▶ Alternative A is better than C because -> *values!*
- ▶ “Bending the line” - Move the “tug of war” or polar opposites to *orthogonal lines*
- ▶ *Move northeast* - creating space for agreement
- ▶ Pathways toward *better solutions* rather than “best”
- ▶ The power of *AND* in solution finding

Oregon Department of Forestry
Board of Forestry Meeting November 2019

*Thank you for your public service
to Oregon and her forests*

Center for Public Service (CPS)
Mark O. Hatfield School of Government
Portland State University

Dr. Craig W. Shinn, Professor Emeritus
shinnc@pdx.edu
503 805 8322