



Trust Ecology



Managing by Network April 23 & 24, 2025

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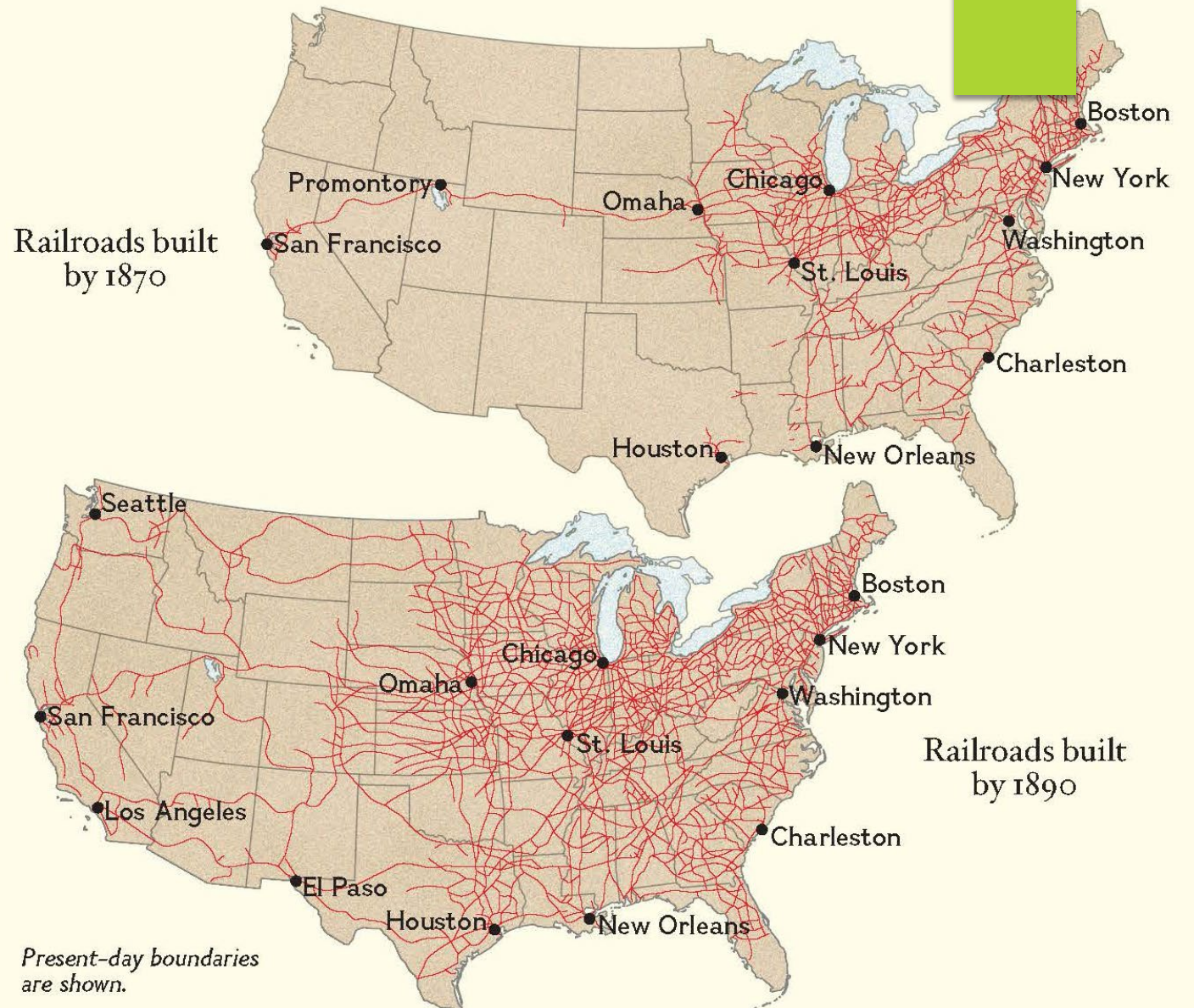
U.S. Fish and Wildlife Service





Why is it important to center
trust in conservation?

The mid-late
1800's were a
time of rapid
westward
expansion.



American settlers
believed that
natural resources
were limitless.



THE WOMAN BEHIND THE GUN.

Puck magazine illustration, 1911. "The woman behind the gun."

But natural resources
are not limitless.



Warden Paul Kroegel, first Refuge Manager
[NCTC Image Library](#)

One can argue that
some early federal
conservation actions
were rooted in
distrust of people.



Warden Paul Kroegel, first Refuge Manager
[NCTC Image Library](#)

Historical perceptions of distrust are reflected in modern-day policy

- ▶ When refuges are established, they are closed to people by default.
- ▶ National Wildlife Refuge System Improvement Act (1997)
 - ▶ Directs the involvement of private citizens in land management decisions
 - ▶ Codifies the Big 6 Public Uses as "legitimate and appropriate"



N A T I O N A L
WILDLIFE
R E F U G E S Y S T E M



Where are places in your life that you see trust or distrust reflected in policy or ground rules?

This could be your agency, softball team, homeowners association, knitting circle, scout troop, etc.

Take 2 minutes and drop your reflections in the chat.

Case Study – Portland Vancouver Urban Refuge Program

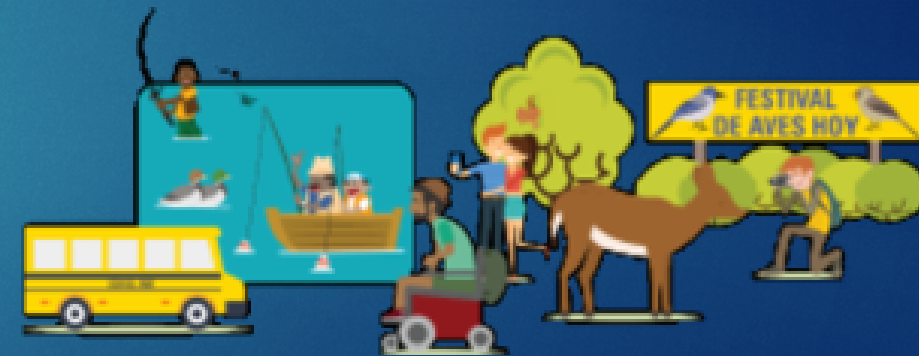
**Welcoming all
to Refuges**



**Serving people in
neighborhoods**



**Collaborating
with coalitions**





Why learn a social science theory
about trust?

Chaos



Order

(or at least less chaos)



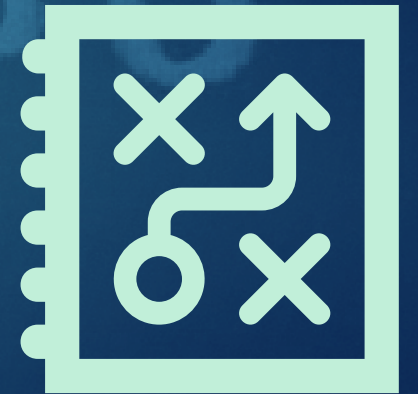
Understand & Predict



Guide action

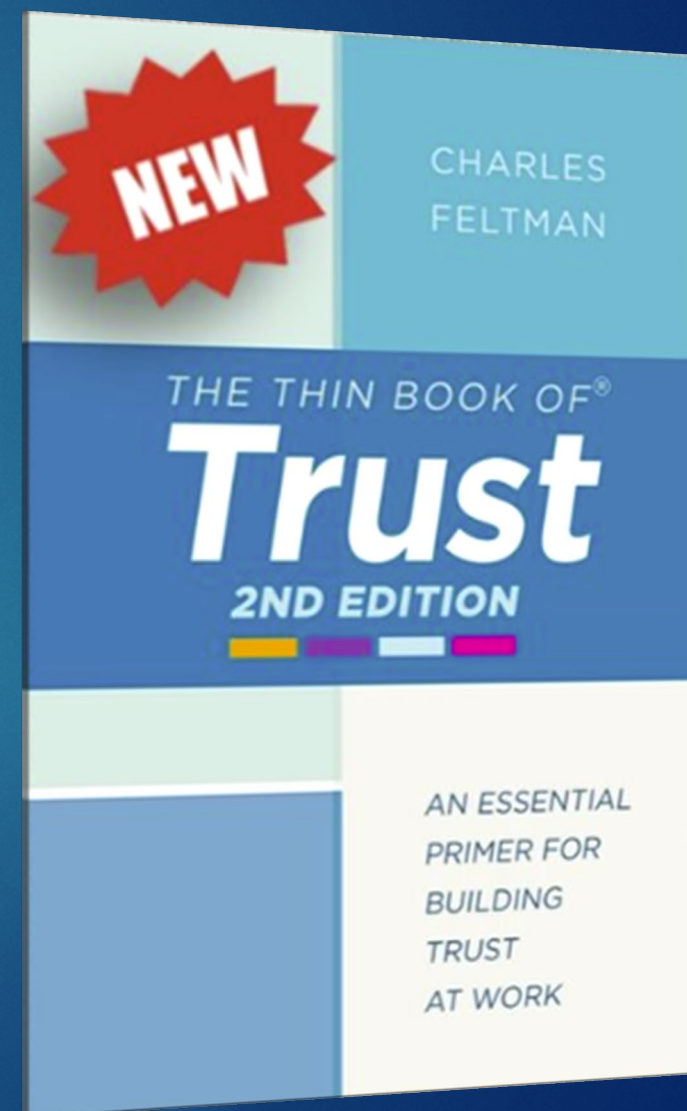
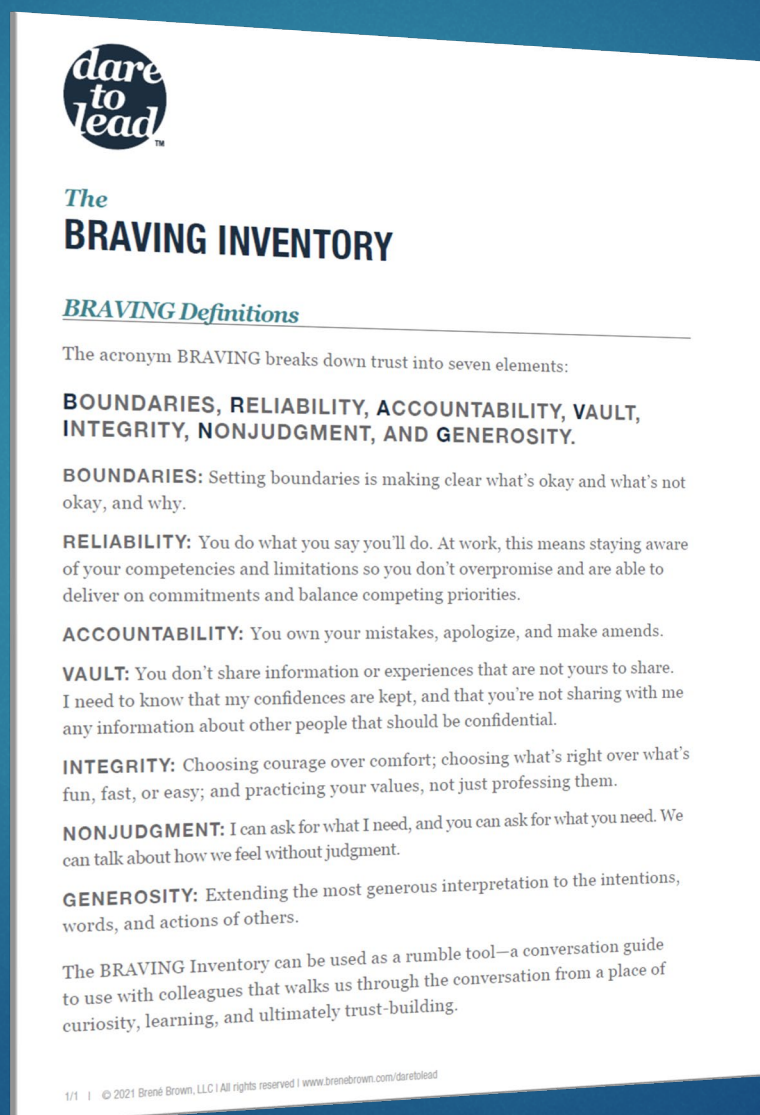
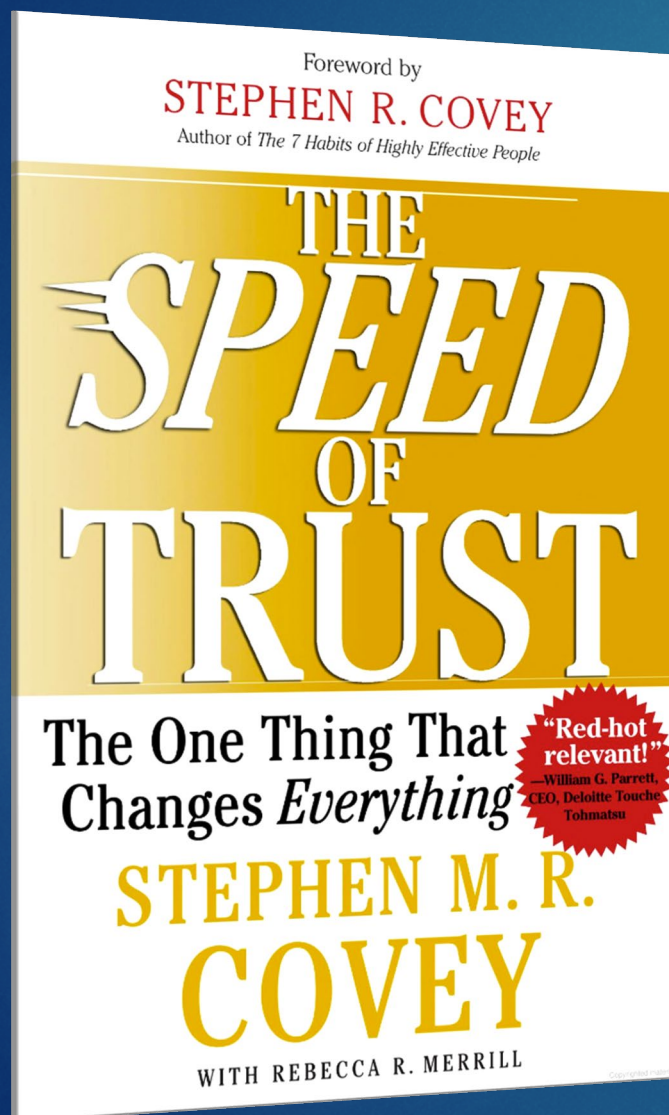


Communicate

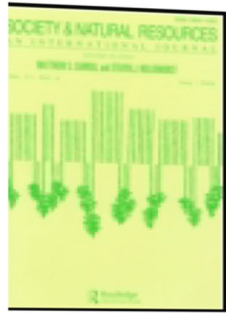


Monitor & Evaluate

Variety of approaches to Trust



Trust Ecology Origins and Resources



Society and Natural Resources

Routledge
Taylor & Francis Group

ISSN: 0894-1920 (Print) 1521-0723 (Online) Journal homepage: <https://www.tandfonline.com/loi/usnr20>

The Power of Trust: Toward a Theory of Local Opposition to Neighboring Protected Areas

Marc J. Stern

To cite this article: Marc J. Stern (2008) The Power of Trust: Toward a Theory of Local Opposition to Neighboring Protected Areas, *Society and Natural Resources*, 21:10, 859-875, DOI: [10.1080/08941920801973763](https://doi.org/10.1080/08941920801973763)

To link to this article: <https://doi.org/10.1080/08941920801973763>

- [Stern, M. J., & Coleman, K. J. \(2015\).](#) The multidimensionality of trust: Applications in collaborative natural resource management. *Society & Natural Resources*, 28(2), 117-132.
- [Stern, M. J., & Baird, T. D. \(2015\).](#) Trust ecology and the resilience of natural resource management institutions. *Ecology and Society*, 20(2).
- [Coleman, K., & Stern, M. J. \(2018\).](#) Exploring the functions of different forms of trust in collaborative natural resource management. *Society & Natural Resources*, 31(1), 21-38.
- Stern, M. J. (2018). Trust, negotiation, and public involvement. In *Social science theory for environmental sustainability: A practical guide* (p. 100 – 110). Oxford University Press.
- [Dietsch, A. M., Wald, D. M., Stern, M. J., & Tully, B. \(2021\).](#) An understanding of trust, identity, and power can enhance equitable and resilient conservation partnerships and processes. *Conservation Science and Practice*, e421.

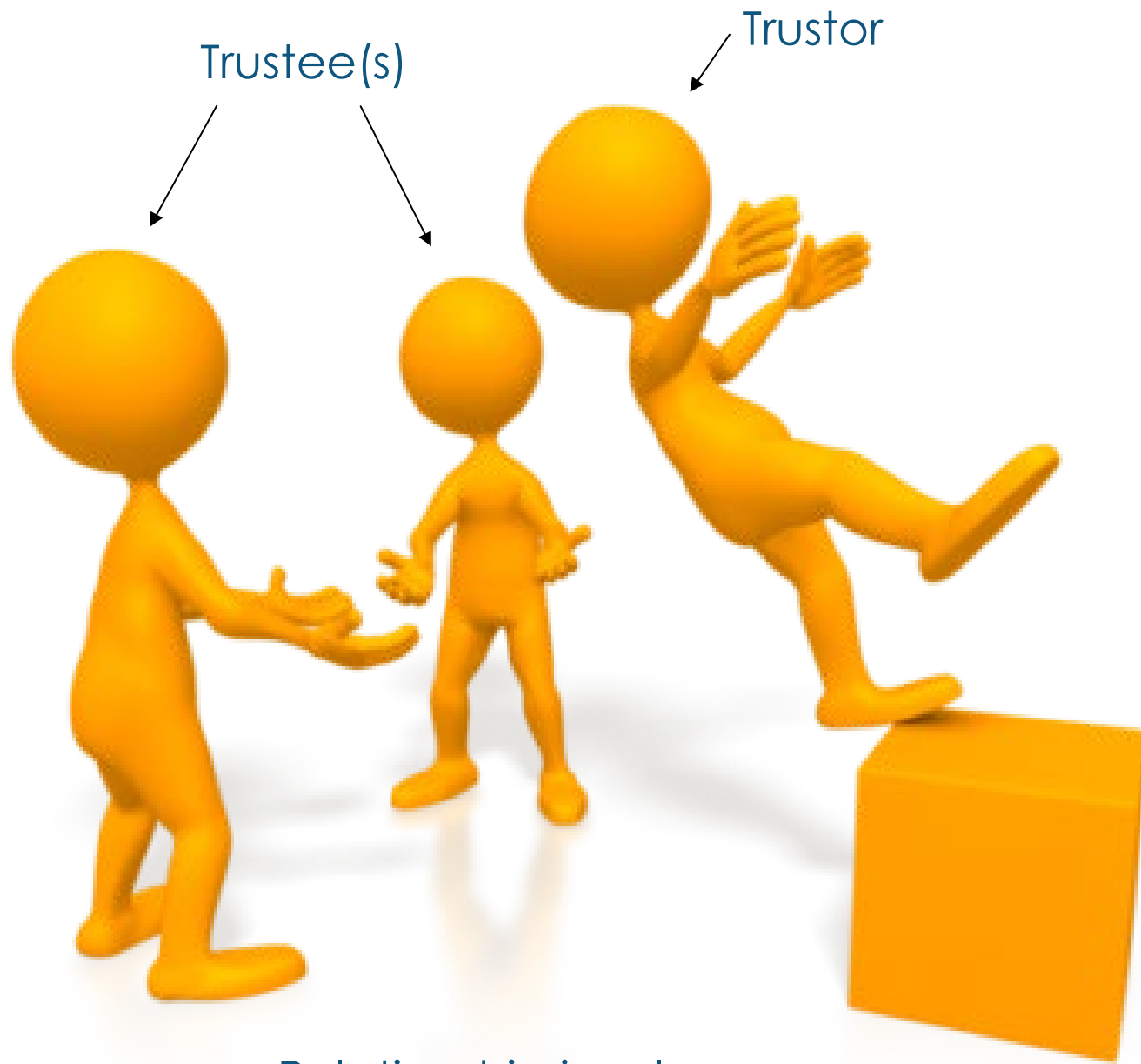


Trust:

Willingness to accept vulnerability to another in the face of uncertainty

A psychological state

- Build → create conducive environment



Relationship involves
interdependence, uncertainty, and risk

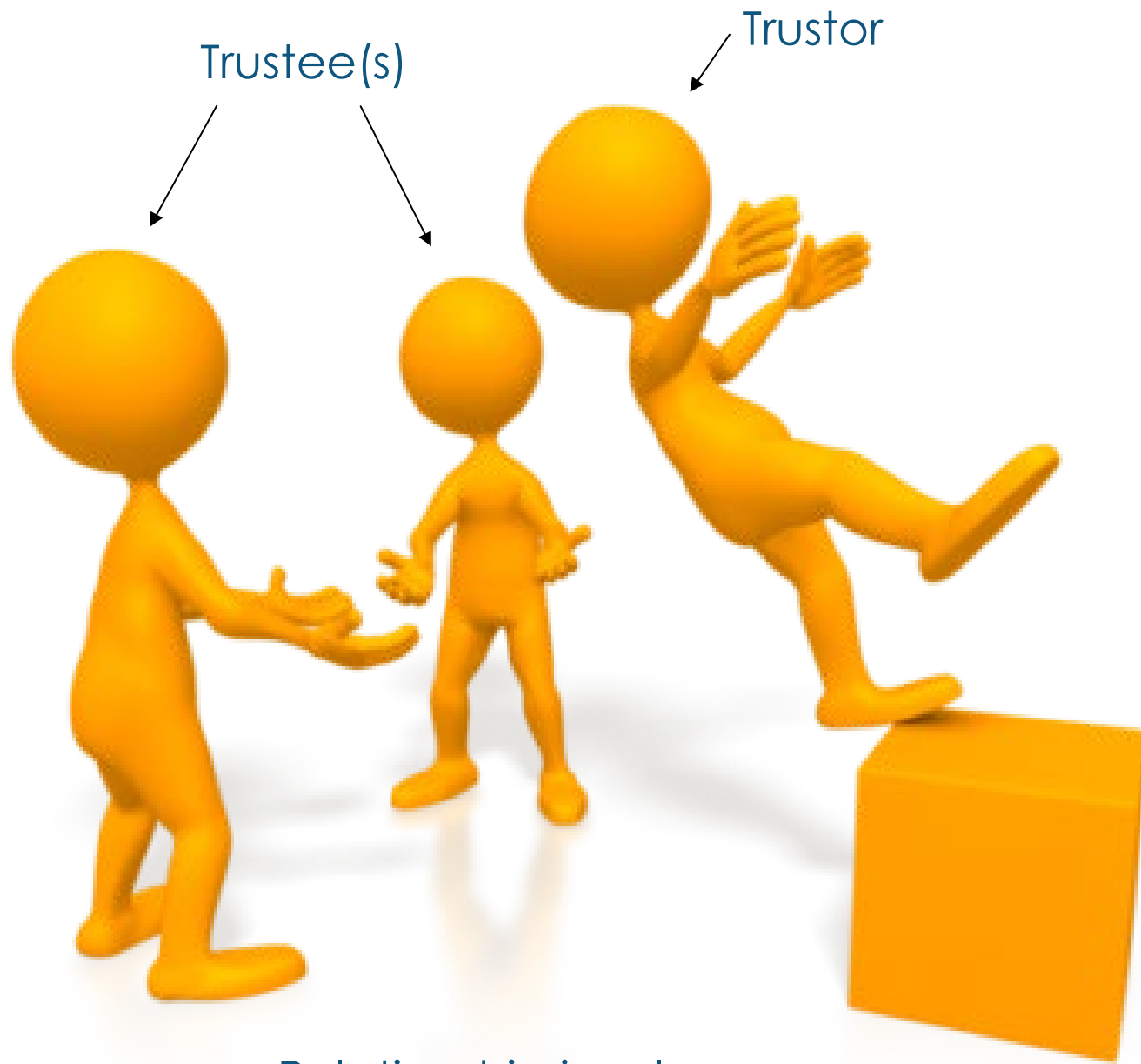
Key Elements:

Characteristics of trustor

Trustor's perceptions of
trustee(s) characteristics:

- Ability
- Benevolence
- Integrity

*See [Toman, Curtis, and Shindler, 2021](#)



Relationship involves
interdependence, uncertainty, and risk

Key Elements:

Related considerations:

- Identities
- Power
- Justice

*See [Dietsch et al. 2021](#) ; [Saif, Keane, & Staddon, 2022](#)



Trust:

Willingness to accept vulnerability to another in the face of uncertainty

Distrust:

Explicit unwillingness to accept vulnerability due to expectations of harm or undesirable outcomes

Distrust ←————→ Trust

No Trust → High Trust

High Distrust ←———— No Distrust

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Distrust:

Explicit unwillingness to accept vulnerability due to expectations of harm or undesirable outcomes



Context matters!

*See Saif, Keane, & Staddon, 2022



We might not
experience the
context in the
same way.



Is Trust/Distrust...
Unidirectional or
Reciprocal?

What other
considerations
are relevant?

*What factors would
make you more
willing to take part
in the trust fall?*

Less willing?



Types of Trust:

- ▶ Dispositional
- ▶ Affinitive
- ▶ Rational
- ▶ Systems-based
(or procedural)

*Also applies to types of distrust





Dispositional Trust

- Tendency or pre-disposition to be trusting (or distrusting)
- Based on past experiences, culture
- Stable, slow to change (baseline)





Affinitive Trust

- Feelings of affinity, kinship, generally liking trustee(s)
- Based on social connection, shared values, identities
- Interpersonal, relatively fluid:
 - + commonalities, positive shared experiences, demonstrations of genuine care
 - integrity / relationship breaches

The more I like you personally, the more likely I am to develop affinitive trust in you.





Rational Trust

- Expectations of positive, beneficial outcomes
- Based on competence, past performance, goal alignment
- Interpersonal, relatively fluid:
 - + demonstrating competence and ability, follow through
 - performance failures





Systems – based (procedural) Trust

- Confidence in rules/systems/procedures that guide relationship
- Based on joint agreement procedures are fair, transparent, legitimate
- Relatively fluid:
 - + co-production, collaboration, power sharing
 - coercive processes, power imbalances





What do the different trust types look like in the day-to-day work of the Portland-Vancouver Urban Refuge Program?



Dispositional



Affinitive



Rational



Systems-based

What forms of trust
do you think are
strongest in your
partnership? As
evidenced by....

Areas for **growth**? As
evidenced by...



Dispositional



Affinitive



Rational



Systems-based



Trust Diversity

Important for long-term collaboration

Buffers relationship when challenges arise, form(s) of trust decrease



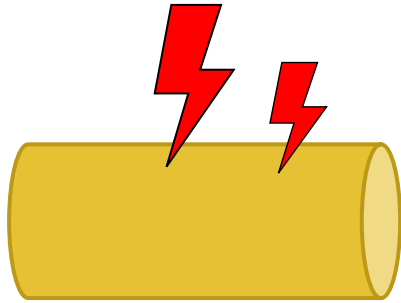
Dispositional



Affinitive



Rational



Systems- based



Trust Diversity

High affinitive trust can help buffer against performance failures that erode rational trust



Dispositional



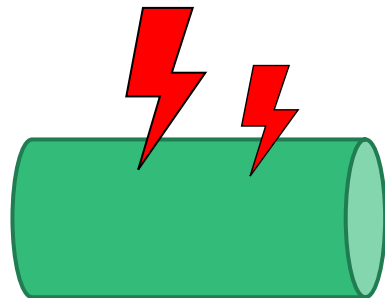
Affinitive



Rational



Systems-based

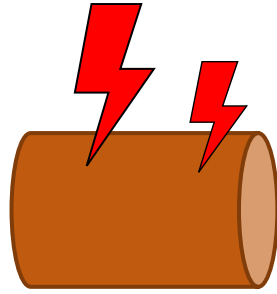


Trust Diversity

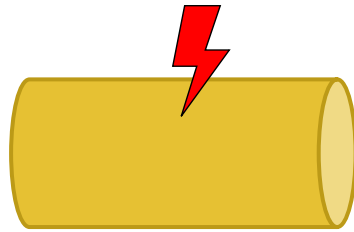
Interpersonal (affinitive and rational trust) can help buffer against changes to our system / procedures



Affinitive



Rational



Systems- based

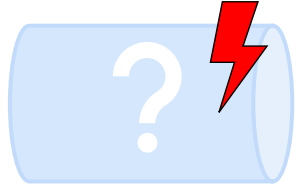


Trust Diversity

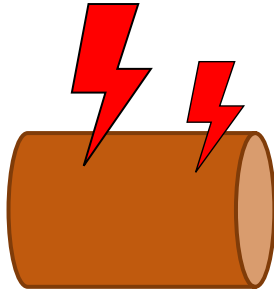
Given turnover, systems-based trust can help buffer partnership while interpersonal trust (affinitive and rational) develop among new partners



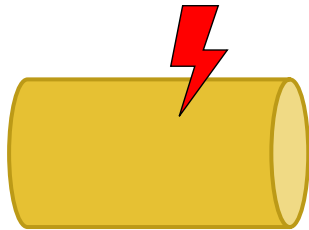
Dispositional



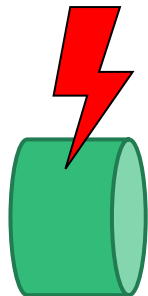
Affinitive



Rational



Systems-based



Trust Diversity

When all forms of trust
experience disruption...

?



Dispositional



Affinitive



Rational



Systems-based



Trust Repair

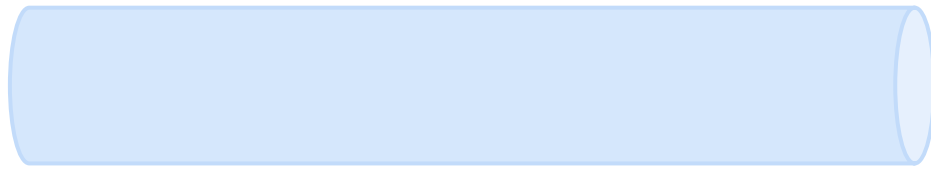
Recognize confirmation bias

Regulate distrust

Demonstrate trustworthiness



Dispositional



Affinitive



Rational



Systems-based



Trust Complacency

Not ideal...
but also not usually a risk

Trust through Partnership Lifecycle

- [Coleman and Stern \(2018\)](#) studied 4 initiatives in Collaborative Forest Landscape Restoration Program
- Affinitive important for convening members during start-up
- Rational & procedural gained importance for recruitment and retention
- Procedural as platform for further rational and affinitive development

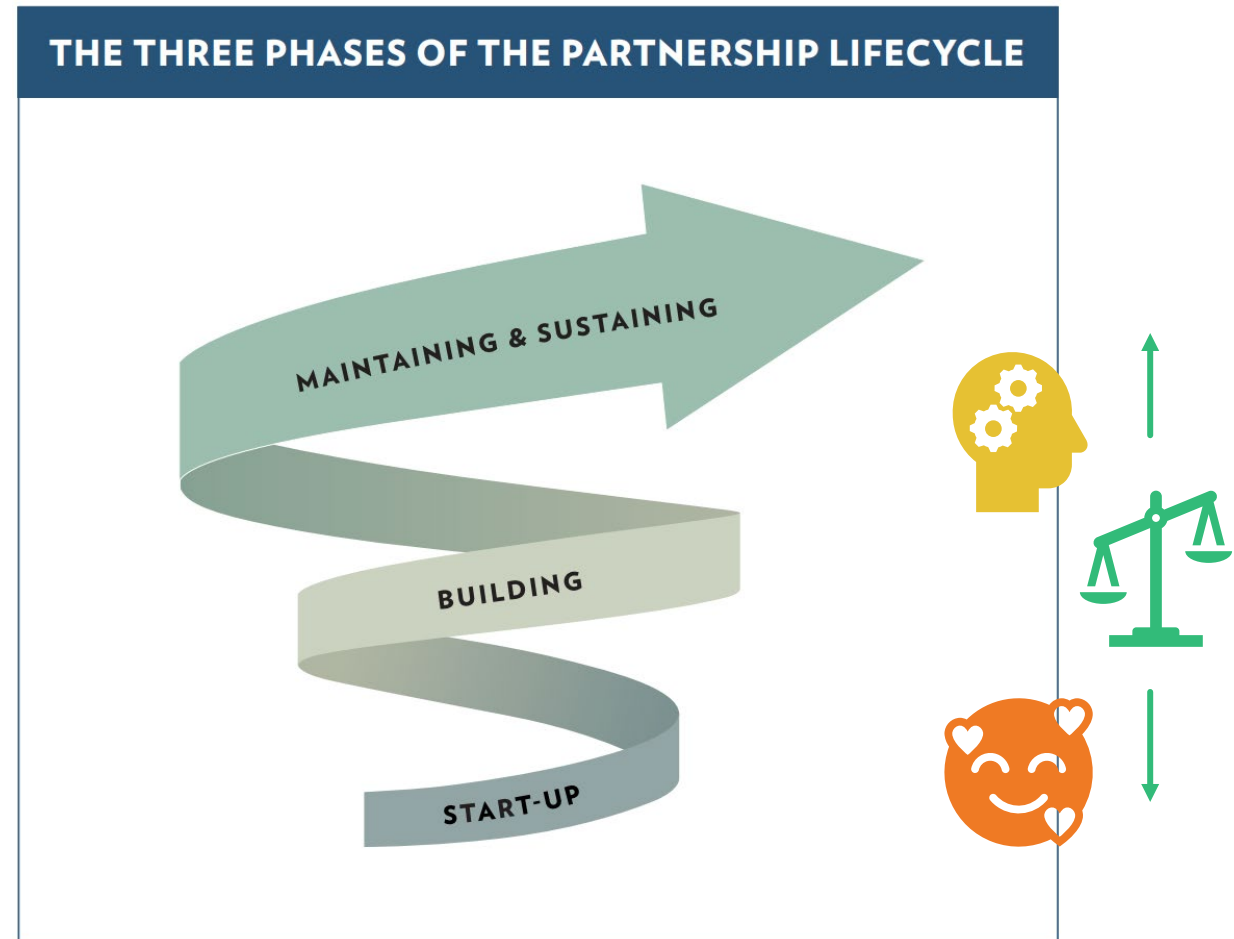


Figure from: [Mickel, A. E., & Goldberg, L. \(2018\)](#). Generating, Scaling Up, and Sustaining Partnership Impact: One Tam's First Four Years.

Stretch Break



Self-Reflection



Dispositional



Affinitive



Rational



Systems-based

What forms of trust do you think...

- ▶ are **strongest**? As evidenced by....
- ▶ are **gaps**? As evidenced by...

*What **strategies** could you employ to **grow your gaps**?*



Debrief and Q/A?



Trust Ecology in U.S. FWS

- Monitoring & Evaluation for Youth Employment Program (YEP) at Portland-Vancouver Urban Wildlife Refuge
- Intentionally focus on affinitive, rational, and procedural trust in program design
- Pilot year (2022) for YEP evaluation including trust ecology measures
 - Entry/exit questionnaires and interviews
 - Weekly logs
 - Monthly logs
- 2023 (second pilot) simplified data collection to use only:
 - Entry/exit questionnaires and interviews

Program Rubric

Value (near-term results)

Value Measures	Measure: Trust	Exemplary	Accomplished	Developing	Beginning
		3	2	1	0
	Trust Ecology The extent to which YEP participants experience a change in their trust level with the PVURP during the course of their employment in the program. Trust measures will come from the concept of Trust Ecology, which defines four areas of trust: <ul style="list-style-type: none"> Dispositional Trust Rational Trust Affinitive Trust System-based/Procedural Trust 	100% of participants experience an overall increase in trust with the PVURP over the course of their employment in the program.	50%-99% of participants experience an overall increase in trust with the PVURP over the course of their employment in the program.	1%-49% of participants experience an increase in overall trust with the PVURP over the course of their employment in the program.	No participants experience an overall increase in trust with the PVURP over the course of their employment in the program.

Definitions

Dispositional Trust:

The extent to which the trustor (participant) has a general predisposition to being trusting or distrusting.

- Based on past experiences and culture
- NOTE: This area of trust tends to be stable and slow to change, so it will not necessarily be a reasonable expectation for it to change during one YEP employment period. It is, however, useful to know what a participant's dispositional trust level is in order to better contextualize changes in the other three trust areas.

Rational Trust:

The extent to which the trustor (participant) believes that the outcomes of the trustee's (PVURP) actions will benefit them

- Interpersonal, based on perceptions of competence, past performance, predictability, goal alignment

Affinitive Trust:

The extent to which the trustor (participant) feels an affinity or kinship with the trustee (PVURP)

- Interpersonal, based on feelings of social connected, perceptions of shared values and/or identities, etc.

System-based/Procedural Trust:

The extent to which the trustor (participant) has confidence in the rules/systems/procedures that guide interactions between the trustor and the trustee (PVURP)

- Based on joint agreement that procedures are fair, transparent, and legitimate

PVURP:

In this trust context, this refers to the participant's experience working with the core components of the PVURP: URST, Refuge staffs, Friends, and core partners/contractors

Trust Ecology in U.S. FWS

- Couplets of questions in our entry/exit surveys are used to quantify trust using a Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).
- We intend to code entry/exit interview notes and supervisor change logs to add qualitative data to our dataset.



Dispositional

I usually trust people until they give me a reason not to trust them.



Affinitive

The PVURP shares values similar to mine.



Rational

Being an apprentice with the PVURP will benefit my professional development.



Systems based

The PVURP has rules and procedures that will ensure I am treated fairly.

Qualitative Measures of Trust

- Within 4 case studies
Coleman and Stern (2018) conducted interviews, site visits and participant observation, content analysis of archival documents



Affinitive

“Hearing them talk about their perspectives, talking with them informally, riding with them in the truck on a field trip getting to know them, getting to know them personally and hearing more about their situation.”

Quantitative Measures of Trust

- [Lutter et al. \(2018\)](#) used survey to measure trust determinants of landowners (trustors) participating in an NRCS program (trustee) single-item indicators.
- *Each measured on a 5-point scale:*
 - 1 = Strongly disagree
 - 3 = Neither
 - 5 = Strongly agree



Affinitive

You feel that you have similar values to NRCS employees, partner biologists, and partner foresters



Rational

You trust the expertise of NRCS employees, partner biologists, and partner foresters to help you achieve your land management goals



Systems-based

The rules and procedures of the NRCS habitat program ensure that you are treated fairly

Quantitative Measures of Trust

- [Grupper et al. 2021](#) used survey research to measure trust among community residents (trustors) for their local water utility (the trustee).
- Multi-item indicators for affinitive, rational, and systems-based trust



Dispositional

I find it hard to trust others

5-point scale: 1 = Definitely not true, 3 = Unsure, 5 = Definitely true



Affinitive

Interest alignment: My water utility cares about the quality of my drinking water at least as much as I do

Encapsulated interests: My water utility has my best interests at heart

Values similarity: My water utility shares values similar to mine

Caring: My water utility cares about my well-being

7-point scale: 1 = Strongly disagree, 4 = Neutral, 7 = Strongly agree