

# Shaping Opinion: How Narratives Affect Policy Preferences of the Portneuf River



Molly Draben and Dr. James W. Stoutenborough  
Department of Political Science

## Abstract

The Narrative Policy Framework (NPF) has been influential in changing the way political scientists analyse the narratives that individuals and institutions adhere to. However, the NPF assumes that people are influenced by narratives, but this has never been tested. The literature goes off of this assumption and analyses the structures of narratives and who is using them. This assumption has created a hole in the literature that could weaken the theory. By looking at public opinion data on narratives we are able to see if and how people and institutions are influenced by different narratives. We found that people are, in fact, influenced by narratives, but to which degree varies.

## Literature

- The NPF assumes that an individual's policy preferences are influenced by policy narratives
  - However, this has never been empirically tested
- The theory supports this assumption
  - Narratives are used to expand/ shrink the scope of conflict
  - Humans live in a bounded reality and make judgements based on prior beliefs/ knowledge
  - Narrative structures have been used to predict support/ opposition
- Research Question: Do policy narratives predict an individual's policy preferences?**

## Methods

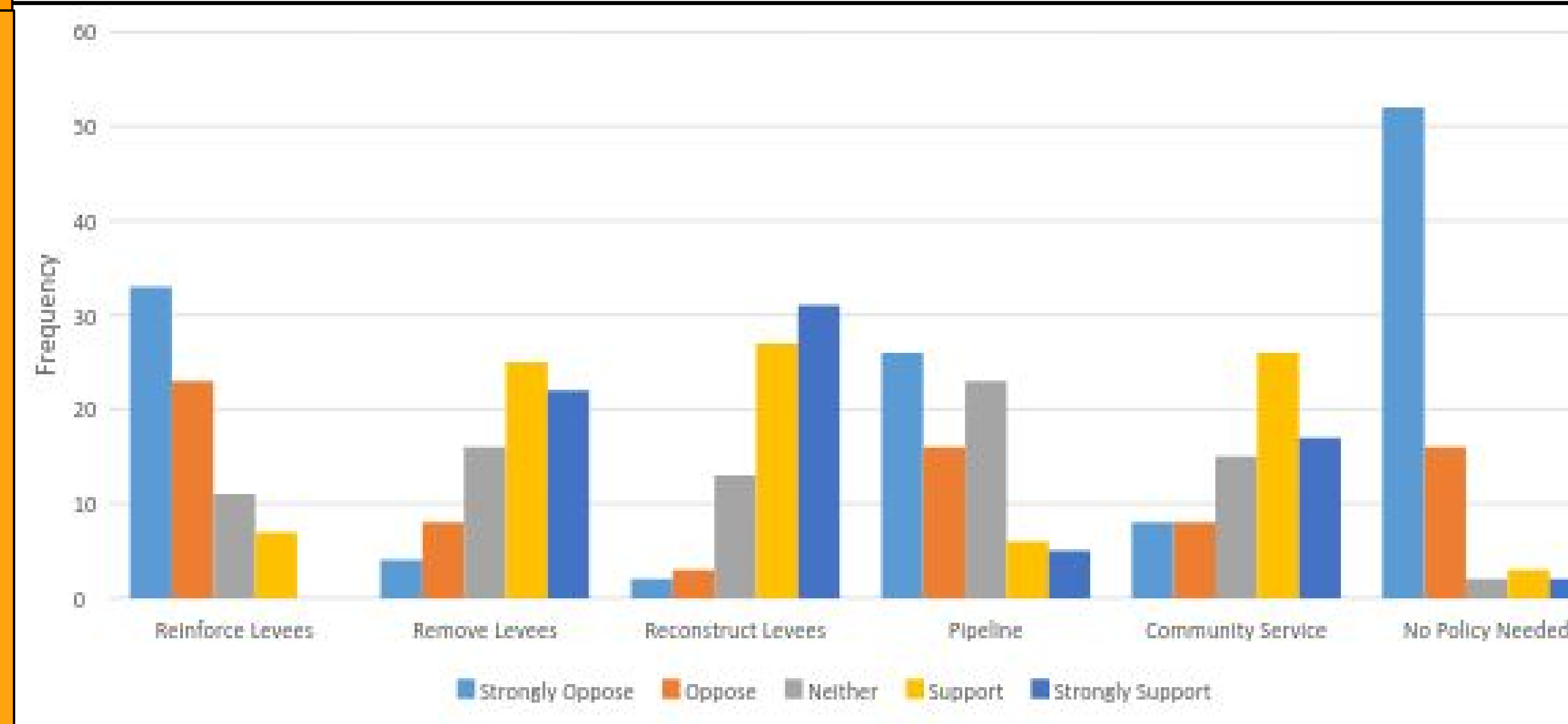
- Survey of 157 identified Portneuf River stakeholders. 85 completed surveys (45% response rate)
- Models - Ordered logit with robust standard errors

**Table 1: Impact of Policy Narratives on Policy Preferences**

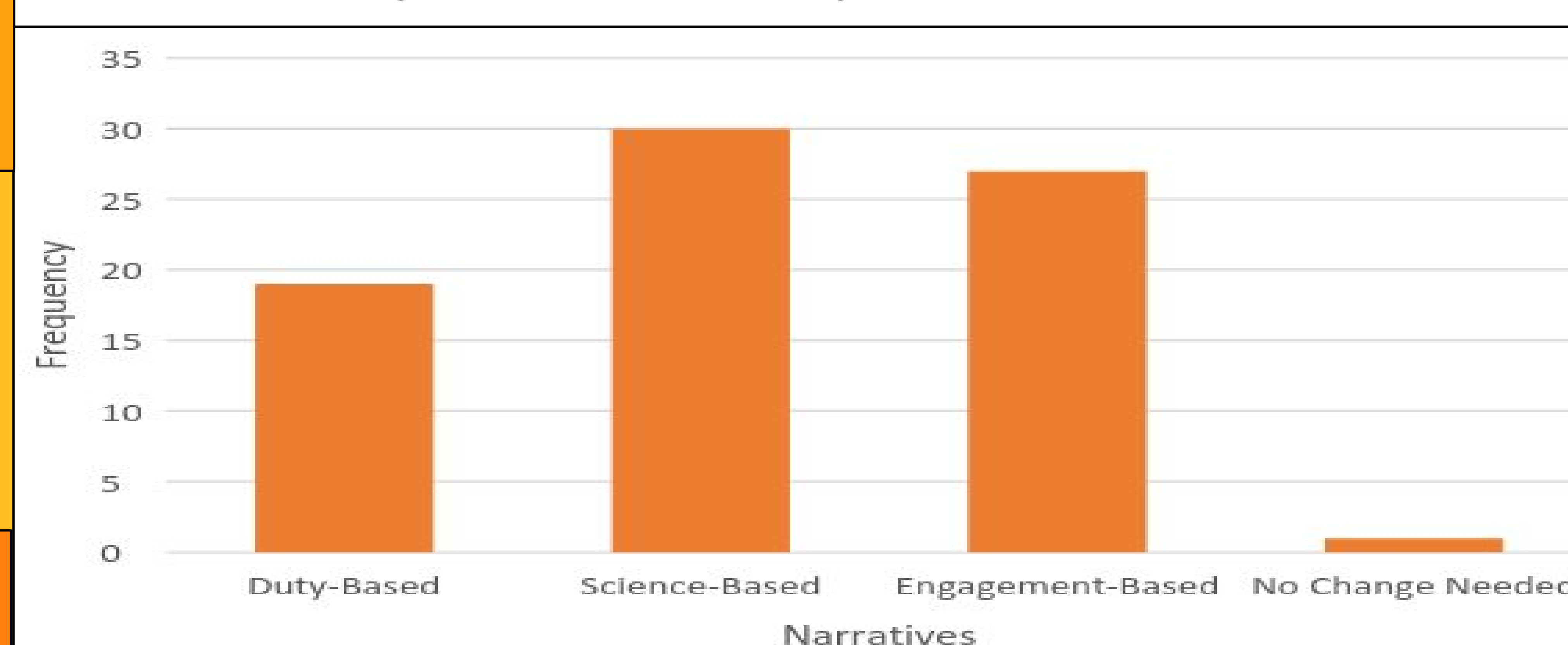
	Reinforce Levees		Remove Levees		Reconstruct Levees		Pipeline		Community Service		No Policy Needed	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
<b>Policy Narratives</b>												
Duty-Based	-.49 (.44)	.270	.78 (.44)	.080	.78 (.50)	.122	.44 (.44)	.320	.71 (.40)	.077	-.91 (.45)	.045
Engaged Citizen	.25 (.40)	.527	.33 (.35)	.345	.10 (.38)	.788	1.02 (.37)	.007	.60 (.32)	.065	.37 (.48)	.442
<b>River Recreation</b>												
River Attractive	-.32 (.17)	.062	.25 (.16)	.131	.15 (.15)	.307	.10 (.17)	.565	-.09 (.15)	.566	.16 (.21)	.432
River Management Strategy	-.29 (.19)	.123	.38 (.17)	.026	.53 (.14)	.000	.32 (.21)	.122	-.01 (.15)	.941	-.37 (.17)	.034
	-.65 (.22)	.004	.89 (.23)	.000	-.56 (.17)	.002	-.39 (.20)	.055	-.16 (.19)	.396	-.24 (.25)	.322
<b>Demographics</b>												
Female	-.12 (.38)	.749	-.17 (.33)	.608	-.24 (.34)	.482	.05 (.31)	.864	-.26 (.32)	.413	.33 (.50)	.514
Age	.02 (.01)	.055	-.04 (.01)	.003	-.006 (.01)	.603	.01 (.01)	.398	-.02 (.01)	.051	.001 (.01)	.949
Political Ideology	.52 (.29)	.078	-.22 (.24)	.349	.26 (.24)	.282	-.08 (.25)	.741	-.39 (.24)	.101	.86 (.30)	.005
Years of Education	.05 (.07)	.458	-.02 (.06)	.744	.07 (.08)	.352	.24 (.06)	.000	.01 (.05)	.801	-.18 (.08)	.027
<b>Cut Point 1</b>	-1.40 (1.90)		-.06 (1.69)		-.31 (2.11)		5.05 (1.95)		-3.50 (1.50)		3.20 (2.40)	
<b>Cut Point 2</b>	-2.22 (1.93)		.77 (1.81)		.25 (2.15)		5.76 (1.94)		-2.95 (1.44)		4.07 (2.35)	
<b>Cut Point 3</b>	.69 (1.95)		1.89 (1.89)		1.29 (2.12)		6.96 (1.98)		-2.23 (1.43)		4.31 (2.32)	
<b>Cut Point 4</b>	-		3.06 (1.94)		2.28 (2.13)		7.50 (1.98)		-1.26 (1.43)		4.85 (2.29)	
<b>Number of Observations</b>	63		63		63		63		64		63	
Wald Chi2	33.47	.0001	37.01	.0000	28.75	.0007	26.76	.0015	13.82	.1291	28.84	.0007
McFadden's R2	.1810		.2048		.1250		.1326		.0616		.1697	
Log Pseudolikelihood	-61.94		-72.75		-72.27		-79.90		-90.60		-47.55	

Robust Standard Errors in Parentheses. Two-Tailed Test.

**Figure 2: Stakeholder Support of River Policy Proposals**



**Figure 1: Stakeholder Policy Narrative Preferences**



## Key Findings

- Reinforce Levees**
  - Policy narratives do not predict policy support
  - River recreation predicts policy opposition
  - A preference towards restoring river ecology predicts opposition
- Remove Levees**
  - Duty-based narratives predict policy support
  - Support for policies that make the river more attractive predict support
  - Support for policies that restore river ecology predicts support
- Reconstruct Levees**
  - Policy narratives do not predict policy support
  - Support for policies that make the river more attractive predict support
- Pipeline**
  - Engaged citizen narratives predict support
  - Support for risk aversion river policies predicts opposition
- Community Service**
  - Both duty-based and engaged citizen narratives predict support
- No Policy Action**
  - Duty based narratives predict opposition
  - Opposition for policies that make the river more attractive predicts opposition

## Future Direction

- Publishing and contributing to NPF literature
- Further analysing how people are influenced by different narratives to find the most viable way to clean the Portneuf River
- Applying methods to analyse how institutions are influenced by narratives