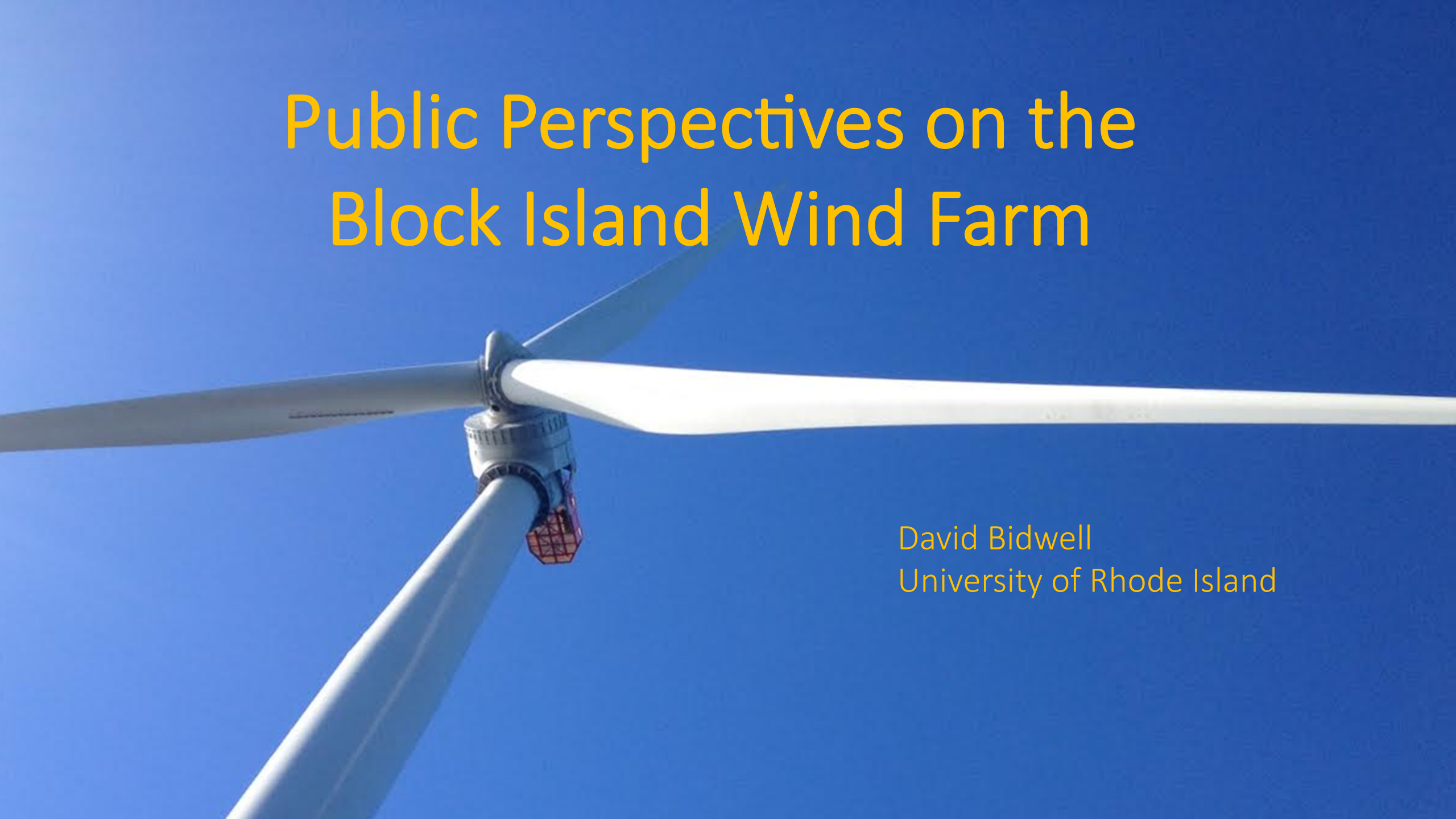


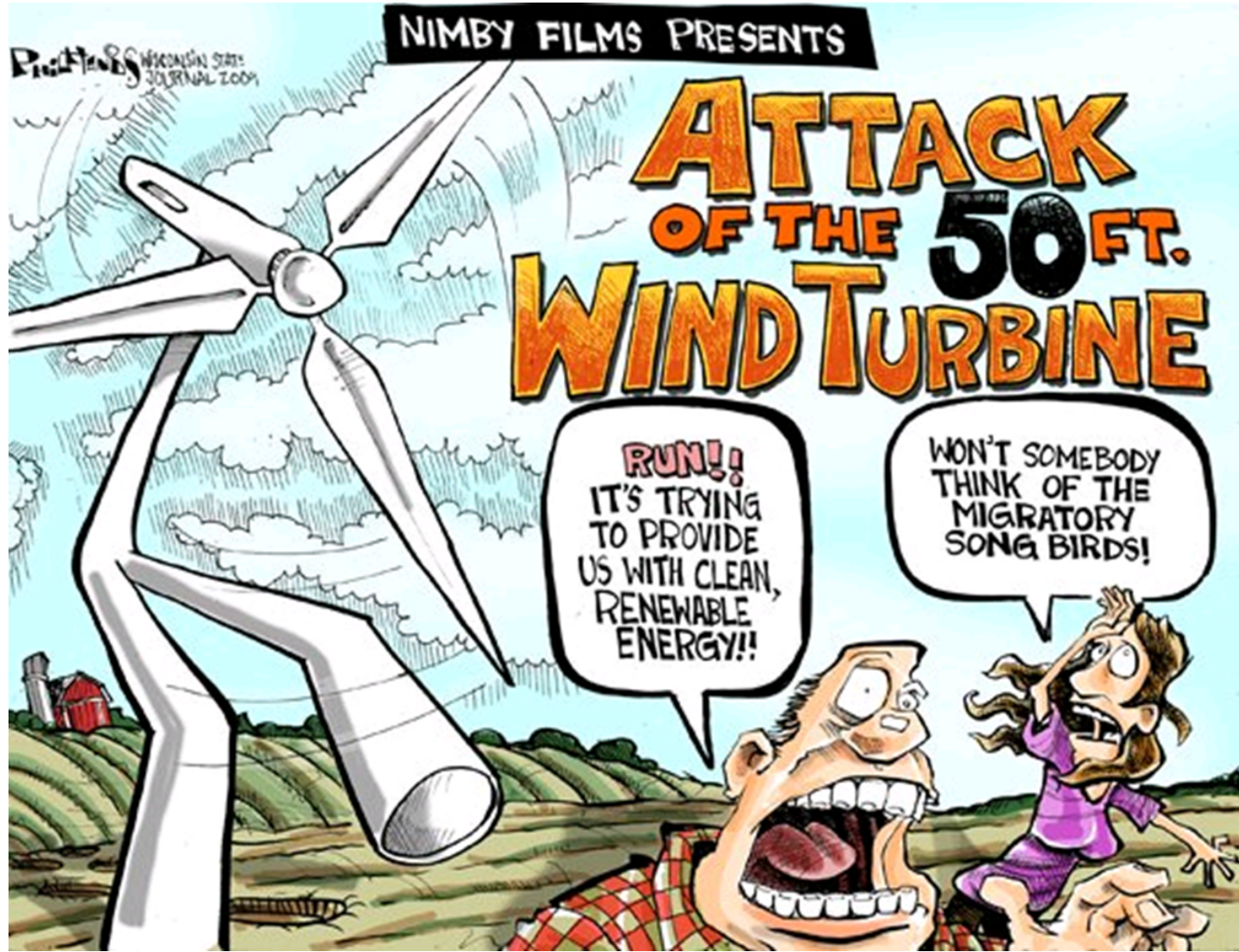
Public Perspectives on the Block Island Wind Farm

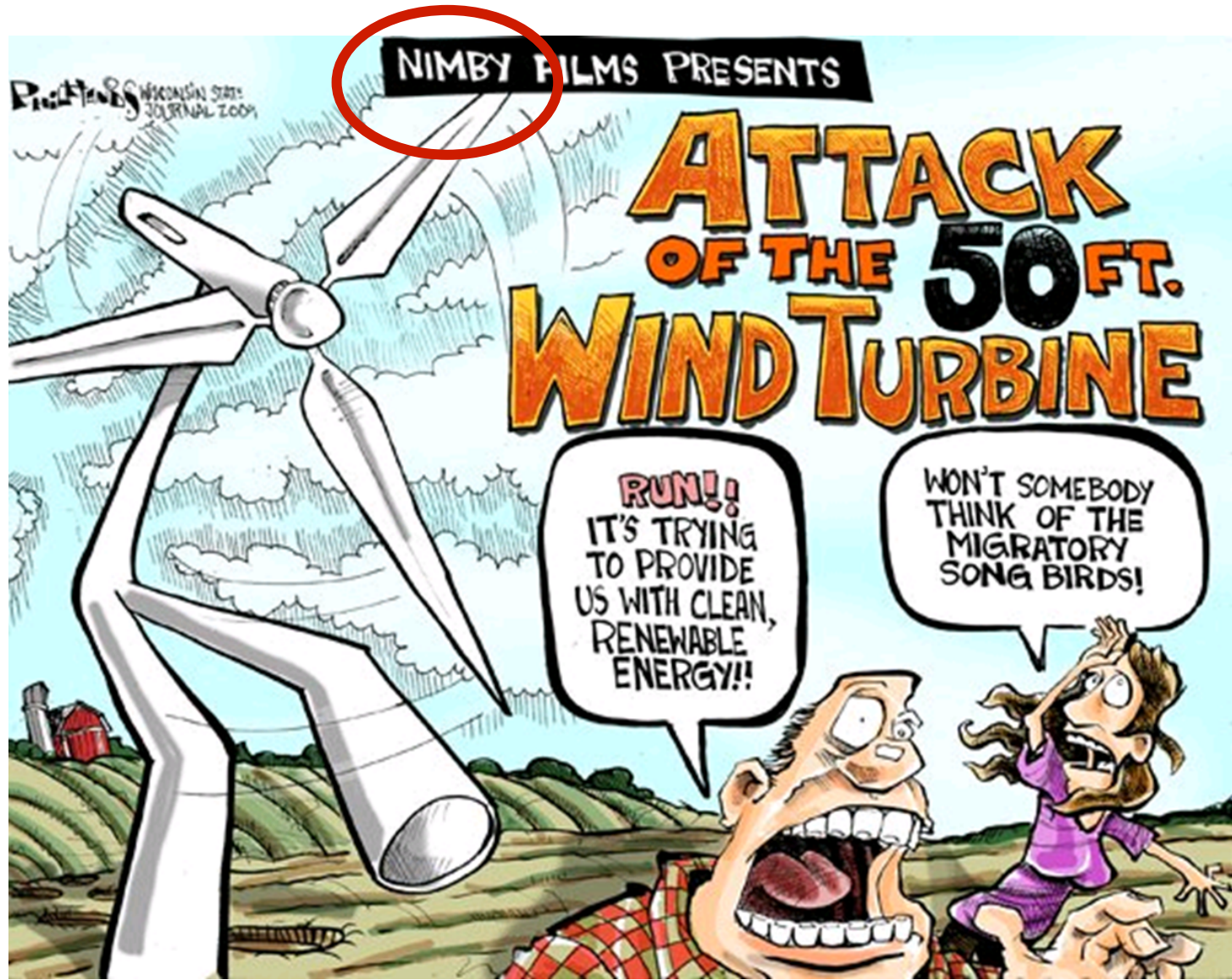
David Bidwell
University of Rhode Island



Lessons

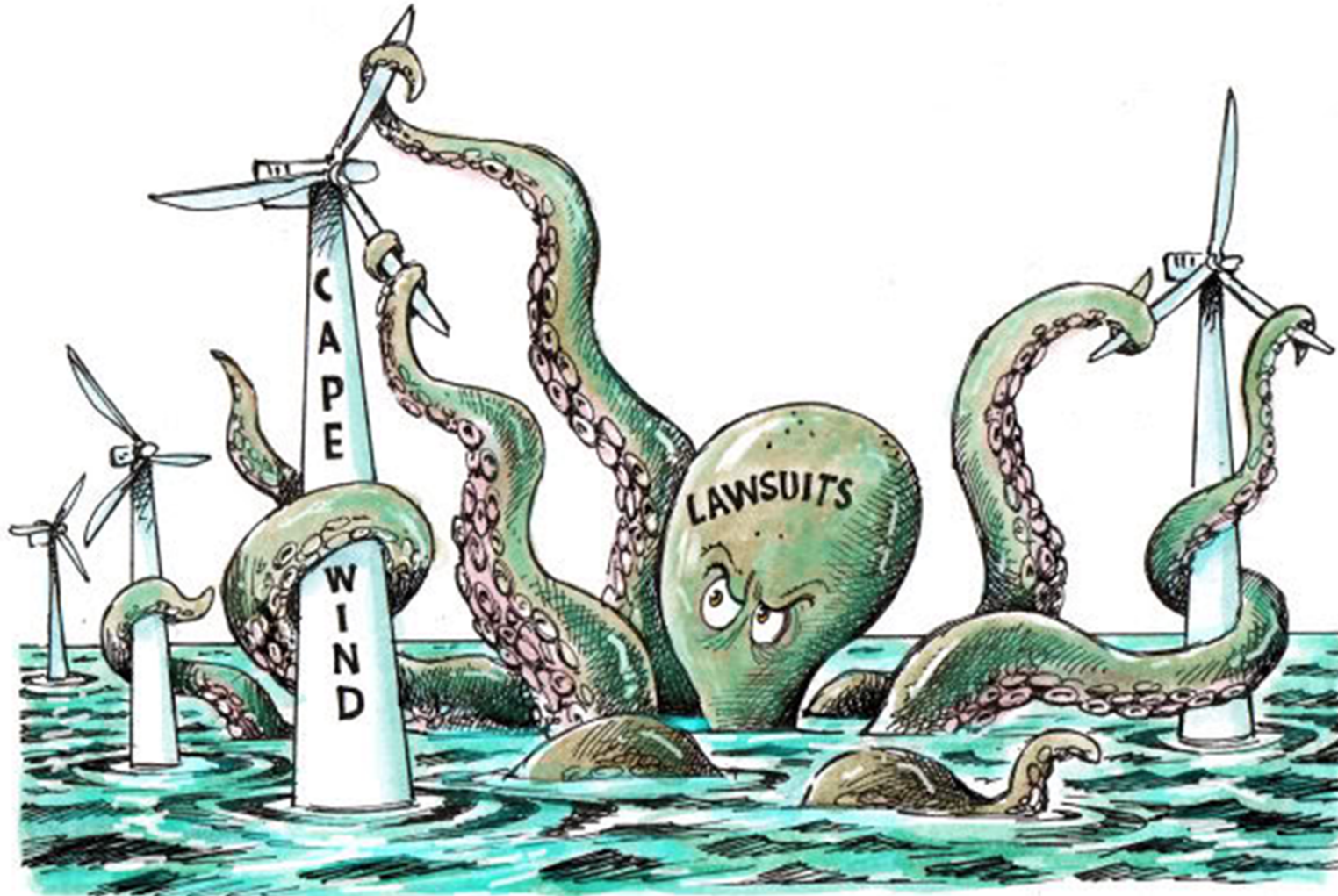
- The “Public” is not monolithic
- Symbolism matters
- Values and beliefs matter
- Anticipation might be worse than reality





Public Acceptance Literature

- Self Interest (NIMBY)
- Democratic Deficit
- Conditional Support
- Place Attachment and Protection
- Values and Symbolism



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Coastal Residents Perspectives



Photo: Deepwater Wind

Methods

- Project led by Jeremy Firestone (Delaware)
- Mail and internet surveys to three strata: Block Island, Border Ocean, and Near Ocean
- Two wave survey
 - Construction: Summer 2016 (676 completed)
 - Post-Completion: Spring 2017 (420 individuals)
- Weighted results for descriptive statistics; unweighted for regression analysis

Findings

- Substantial support for the project. Greater than 80% support or lean support in all strata.
- Strata bordering ocean increased support from construction (56%) to operation (73%).
- Opponents disagree that turbines “fit” the landscape and dislike turbines’ appearance.
- Symbolic meanings are important (“progress towards clean energy” vs. “loss of something intangible”).

Findings

| Description | BI | | Coastal RI | |
|--|---------|--------|------------|--------|
| | Support | Oppose | Support | Oppose |
| Impressive | 68.5% | 15.9% | 42.7% | 2.0% |
| Too Big | 8.5% | 20.1% | 1.6% | 34.1% |
| Attractive | 29.4% | 1.9% | 16.0% | 0.0% |
| Unattractive | 3.8% | 43.5% | 6.5% | 39.1% |
| Beautiful | 35.9% | 7.5% | 6.1% | 0.0% |
| Industrial | 5.3% | 63.9% | 16.6% | 61.5% |
| Amazing | 39.0% | 6.4% | 21.3% | 0.0% |
| Ordinary | 0.3% | 35.7% | 14.7% | 4.4% |
| Adding to the island/coastal character | 18.8% | 0.0% | 12.7% | 0.0% |
| Detracting from the island/coastal character | 17.1% | 48.3% | 14.6% | 45.2% |
| Symbolic of progress towards clean energy | 71.7% | 16.8% | 83.9% | 27.2% |
| Cause the loss of something intangible, where all you see is the ocean | 13.7% | 73.4% | 20.5% | 42.2% |
| Other | 9.8% | 29.2% | 3.3% | 23.3% |

Values and Ocean Beliefs



Methods

- Intercept survey on Block Island in Summer 2015
- 624 completed surveys (visitors and full-time and seasonal residents)
- Factor analysis to identify latent variables
- Path analysis

Bidwell (2017). Ocean beliefs and support for an offshore wind energy project.
Ocean & Coastal Management 146:99-108.

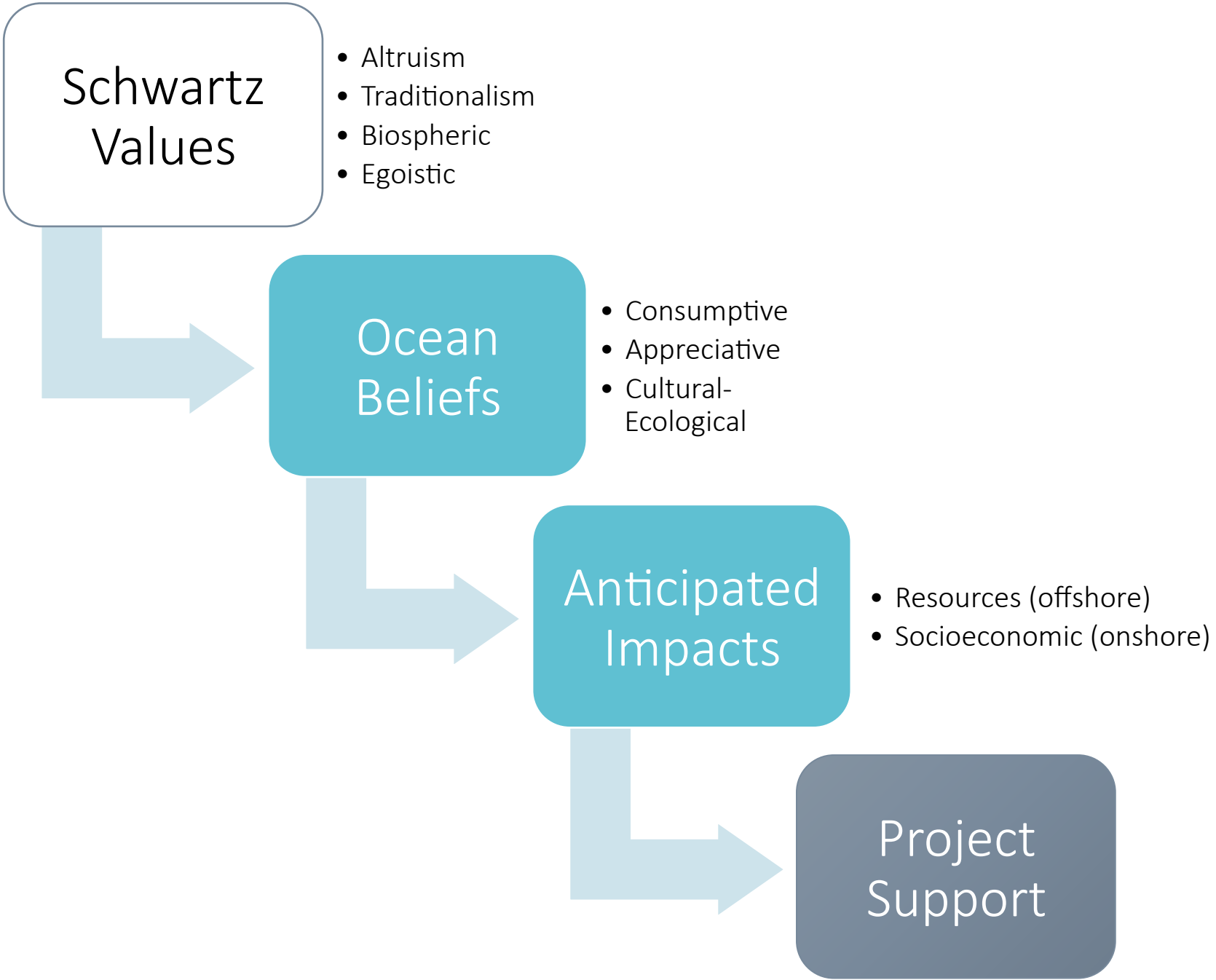
Values



Beliefs



Norms



Findings

- Anticipated effects on natural resources and socioeconomics are strongest direct predictor of support.
- Consumptive beliefs about the ocean predict support for project, but also predict beliefs about impacts.
- Altruistic values buoy support, while traditional values predict less support. Similar effects on beliefs about impacts.

Tourists' Perspectives



Methods

- Intercept surveys on Block Island Summers 2015-2017
- 1097 completed surveys
 - 865 Visitors
 - 232 Seasonal residents
- Multiple regression analysis

Findings

- Moderate support from tourists (5.55/7.0). 73.8% of sample slightly to strongly support project; 10% slightly to strongly oppose it.
- Age and income predict support. Republicans less supportive than Democrats.
- Altruism associated with higher support, while traditionalism predicts less.
- Visitors are more supportive than Seasonal Residents.
- Tourists who report having seen the project during construction or operation are more supportive, as are people surveyed in 2017.



Photo: Alaina Dawson

Acknowledgments

Mail surveys supported by First State Marine, LLC. Collaborators are Jeremy Firestone and Meryl Gardner (University of Delaware). Thanks to graduate students Lauren Knapp and Christine Hirt (UD) and Joe Dwyer and Katie Denman (URI).

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Findings: Mail Survey

| Stratum | Block Island | | Border Ocean | | Near Ocean | |
|------------------------|------------------|----------------|------------------|----------------|------------------|----------------|
| n | 112 | | 172 | | 128 | |
| | Pre-installation | Post-operation | Pre-installation | Post-operation | Pre-installation | Post-operation |
| Oppose | 15.2% | 11.5% | 11.4% | 9.1% | 5.1% | 5.2% |
| Lean oppose | 0.6% | 3.5% | 1.5% | 1.9% | 1.2% | 3.2% |
| Neutral | 1.1% | 2.3% | 0.3% | 0.7% | 2.4% | 3.6% |
| Lean support | 12.8% | 11.5% | 31.0% | 15.4% | 30.4% | 17.2% |
| Support | 70.2% | 71.1% | 55.7% | 72.8% | 60.8% | 70.9% |
| Mean (1-5) | 4.22 | 4.27 | 4.18 | 4.41 | 4.41 | 4.45 |
| Mean difference | p=.73 | | p=.012 | | p=.603 | |

Findings: 2015 Intercepts

| | Egoism | Biospherism | Altruism | Traditionalism | Appreciative | Consumptive | Ecological | Recources | Socioeconomic |
|---------------|--------|-------------|----------|----------------|--------------|-------------|------------|-----------|---------------|
| Appreciative | .109 | .454 | --- | --- | --- | --- | --- | --- | --- |
| Consumptive | .161 | .180 | --- | --- | --- | --- | --- | --- | --- |
| Ecological | .123 | .478 | --- | --- | --- | --- | --- | --- | --- |
| Resources | .109 | .004 | .179 | -.235 | -.140 | .377 | --- | --- | --- |
| Socioeconomic | .051 | .057 | .234 | -.169 | .000 | .318 | --- | --- | --- |
| Support | .058 | -.001 | .258 | -.229 | -.042 | .334 | -.088 | .303 | .426 |

Standardized Total Effects

| Variable | Model 1 | Model 2 | Model 3 | Model 4 | Full Model |
|-----------------------|---------|----------|----------|----------|------------|
| Constant | 5.928 | 5.442 | 5.028 | 4.159 | .241 |
| Age | -.006 | -.007 | -.005 | -.007 | .000 |
| Education | -.068 | -.059 | -.058 | -.060 | -.030 |
| Income | -.020 | .007 | -.004 | .016 | .023 |
| Gender (Female) | .025 | -.098 | -.110 | -.046 | -.128 |
| Altruism Values | | .518*** | .515*** | .470*** | .201** |
| Egoism Values | | .099 | .093 | .022 | -.033 |
| Biospherism Values | | -.013 | -.011 | -.007 | -.039 |
| Traditionalism Values | | -.518*** | -.512*** | -.457*** | -.176* |
| Place Attachment | | | .027 | .007 | -.005 |
| Visitor (<1 month) | | | .345* | .268 | .007 |
| Consumptive Beliefs | | | | .670*** | .152* |
| Appreciative Beliefs | | | | .098 | .112 |
| Ecological Beliefs | | | | -.382** | -.243* |
| Resource Impacts | | | | | .501*** |
| Socioeconomic Impacts | | | | | .723*** |
| | | | | | |
| R ² Change | | .064*** | .009 | .086*** | .361*** |
| R ² | .007 | .071 | .080 | .166 | .527 |

2015-2017 Tourists' Support for BIWF

| | | | | | |
|-------------------|-------|------|-------|--------|------|
| (Constant) | 4.705 | .460 | | 10.233 | .000 |
| 2016 | .093 | .112 | .028 | .834 | .405 |
| 2017 | .578 | .146 | .136 | 3.947 | .000 |
| Seasonal Resident | -.227 | .112 | -.059 | -2.023 | .043 |
| Female | -.159 | .095 | -.050 | -1.673 | .095 |
| Q14_Age | -.006 | .003 | -.062 | -2.010 | .045 |
| Q16_Education | .005 | .050 | .003 | .107 | .915 |
| Q17_Income | -.056 | .029 | -.061 | -1.945 | .052 |
| Seen Project | .322 | .109 | .102 | 2.953 | .003 |
| Q18_Party | -.119 | .043 | -.090 | -2.791 | .005 |
| Altruism | .389 | .070 | .243 | 5.554 | .000 |
| Egoism | .123 | .047 | .080 | 2.601 | .009 |
| Traditionalism | -.323 | .072 | -.174 | -4.471 | .000 |
| Biospherism | .089 | .074 | .052 | 1.203 | .229 |

2017 Responses to the question, “How will the Block Island Wind Farm affect the likelihood of you visiting Block Island in the future?”

