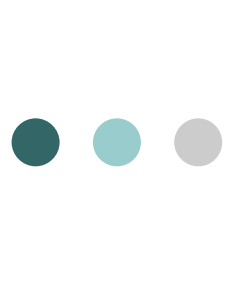




# Renewable energy and the public: a framework for understanding engagement with small-scale hydro

Joule Conference, March 08

Professor Gordon Walker  
Lancaster University



# Projects

- “Beyond Nimbyism: a multidisciplinary investigation of public engagement with renewable energy technologies”



- Funded under TSEC programme 2005-2009
- Manchester, Lancaster, Surrey, Northumbria, Loughborough



- North West Hydro Resource project
  - Funded by Joule Programme
  - WP5 on public engagement & acceptability

# ● ● ● | The “public”

- As **obstacle** to development
- As **supporters** of development
- As **producers** of renewable energy
  - household microgeneration
  - community renewables



# ● ● ● | The “public”

- Differentiating the public
  - Ordinary people
  - Lay experts
  - Interest/activity groups
  - The media – as public voice
  - Political representatives





# Framework

- What factors shape how ‘the public’ respond to proposed renewable energy projects?

industry, market & political context

**PROJECT  
AND  
DEVELOPER**

**'PUBLIC'  
PERCEPTIONS  
AND  
RESPONSES**

**PEOPLE  
AND  
PLACE**

socio-cultural and political context

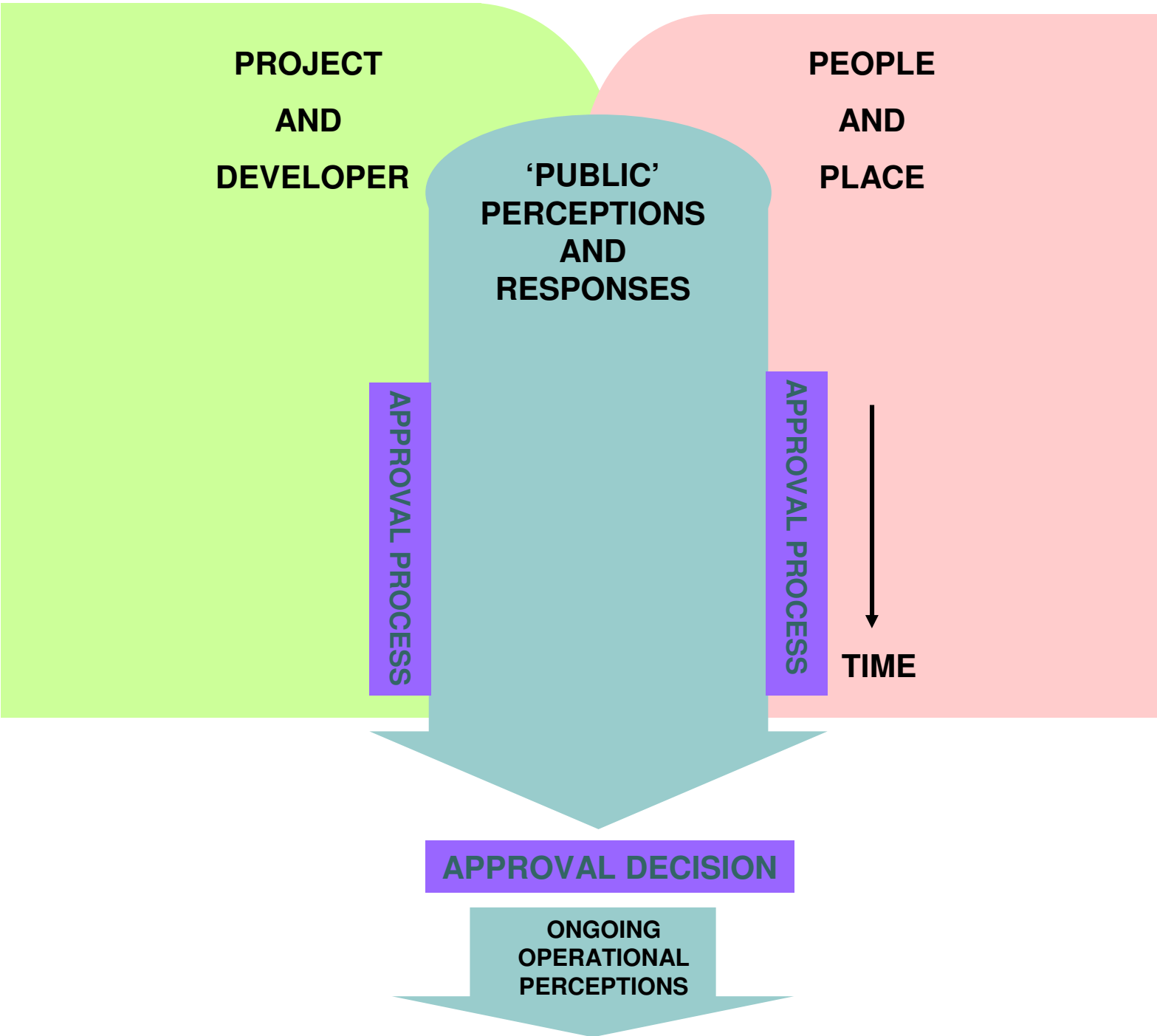
**APPROVAL PROCESS**

**APPROVAL PROCESS**

**TIME**

**APPROVAL DECISION**

**ONGOING  
OPERATIONAL  
PERCEPTIONS**



industry, market & political context

## PROJECT AND DEVELOPER

Technology  
Scale  
Purpose  
Proximity  
Organisation  
Ownership  
Reputation  
Engagement

APPROVAL PROCESS

## 'PUBLIC' PERCEPTIONS AND RESPONSES

## PEOPLE AND PLACE

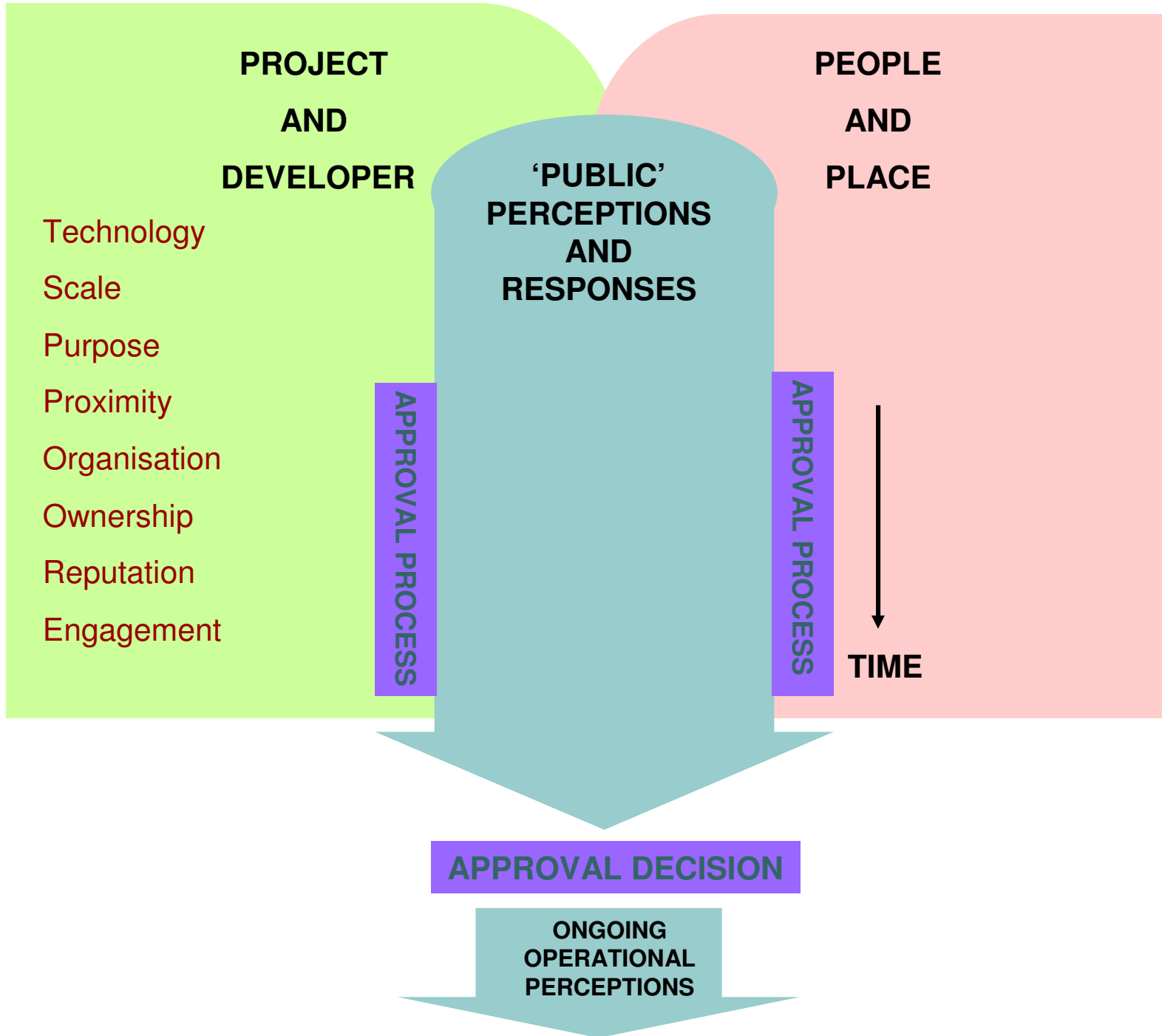
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APPROVAL PROCESS

## 'PUBLIC' PERCEPTIONS AND RESPONSES

## PEOPLE AND PLACE

Values  
Knowledge  
Citizenship  
Demographics  
Networks  
Activism  
Institutions  
History  
Landscape

APPROVAL PROCESS

TIME

socio-cultural and political context

APPROVAL DECISION

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industry, market & political context

## PROJECT AND DEVELOPER

Technology  
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APPROVAL PROCESS

## 'PUBLIC' PERCEPTIONS AND RESPONSES

Perceived  
Impacts  
Trust  
Equity  
Engagement

APPROVAL PROCESS

## PEOPLE AND PLACE

Values  
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socio-cultural and political context

APPROVAL DECISION

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PERCEPTIONS

# Small scale hydro and public responses

- Key factors?
  - scale – ‘small is ok’ contrast to large hydro
  - visibility– residential/visitor
  - history – precedence in infrastructure
  - sensitivity of location
    - environmental, heritage, recreational landscape





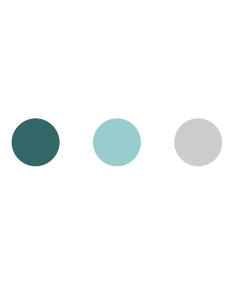
# Small scale hydro and public responses

- In 1995 Miles and Gail Fursdon of Old Town Farm, Poundsgate, transformed the 1936 mill on their family's farm into a micro-hydro power plant. With the help of eight friends, the Fursdons dug a 460 metre channel to transport water from a stream on their land to the new turbine, which they bought from the Czech republic. The turbine provides enough electricity to power not only their farm but also the three surrounding villages (about 80 households): some 400 megawatt hours a year which they sell back to the National Grid for £20,000. Having completely recouped their costs within five years the turbine has now become their primary source of income. **Far from having to counter public opposition to their plan, the turbine has become a local attraction – with talks, slideshows and guided tours led for local businesses and schools.**



# Small scale hydro and public responses

- Repowering strategy
  - use of established infrastructure and buildings
  - minimises disruption, visual impact, 'newness'
  - builds on historical connections
  - BUT tensions ...

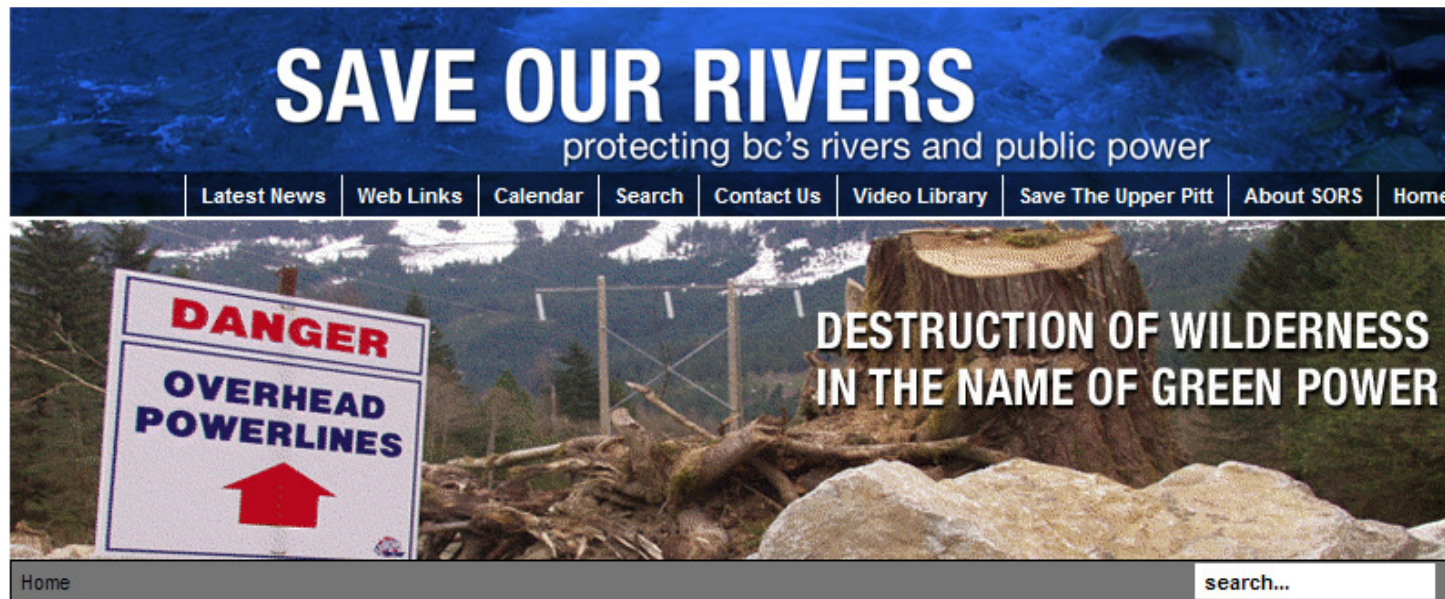


# Small scale hydro and public responses

*“there is a limit to what we can do because it is classed as a historic site. The site we have is unique; it would be totally different if we were a commercial business”*

*“we have to comply to keep things as they would have been in the 11<sup>th</sup> century, so our hands are tied even though the site had development potential”*

Source: Caine J (2008)



<h3>THE ISSUE</h3> <p>We as a population in BC face a historic challenge. All through time our rivers have flowed freely. Our provincial government is quietly giving away rights to our public rivers for private power production to some of the world's biggest corporations. Not only is new private river power</p>	<h3>OUR GOALS</h3> <p>To educate the people of BC-owners of the finest, greenest, most profitable public electricity system in the world-to save our rivers and our renewable energy assets. This means that together we must take charge of our environment by making elected people accountable to</p>	
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- Current Opposition to Canadian 'run of river' hydro projects
- <http://ashlu.info/video/bcrivers.html>

"Here I thought they were building a nice, little, green-power plant, it turns out it is a major development, with major environmental impact."

"There are 498 licences for micro-hydro projects in B.C. -- and people had better wake up to what it really means.....

I was incredibly naive to accept these projects as green."

[http://www.salmonopolis.ca/salmonopolis/dynamicImages/2791\\_Green\\_power.htm](http://www.salmonopolis.ca/salmonopolis/dynamicImages/2791_Green_power.htm)



# Engaging the public

- What are appropriate strategies?
  - Not 'one size fits all'
  - Staged & structured approach??
    - scoping impacts/potential concerns
    - key informants and interest groups (e.g. other river users)
    - local publicity
    - local meetings, consultation, participation
    - community benefits





# Reflections

- Small-scale hydro in UK in general, at the moment, not publicly controversial
- Repowering strategy part of this
- Always potential for public concerns, in particular as scale & prevalence grows – be prepared?
- Take public seriously – engage and respond