Final conference

30th June 2014, Boulogne-sur-Mer

Results of ISECA surveys:
1. General perception on eutrophication in the 2Seas Region
2. Socio-economic perception on eutrophication in the 2Seas Region

Carolien Knockaert
Annelies Goffin
Flanders Marine Institute (VLIZ)
1. General perception on eutrophication

- Have people ever observed foam on the beach?
- How do people think and feel about the foam?
- Do they know about the eutrophication phenomenon?

→ Do we need to communicate towards general public?
1. General perception on eutrophication

<table>
<thead>
<tr>
<th>Main statistics</th>
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</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
</tr>
<tr>
<td><strong>Date</strong></td>
</tr>
<tr>
<td><strong>Method</strong></td>
</tr>
<tr>
<td><strong># responses</strong></td>
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</tbody>
</table>
1.3 Analysis and results

1. General perception on eutrophication

What % of respondents has already seen foam on the beach?

- YES: 61%
- NO: 39%
1.3 Analysis and results

1. General perception on eutrophication

What causes the foam?

50% of all respondents has no idea on the cause or origin of the foam phenomenon!

- Caused by human activities: 78%
- Due to an accidental pollution: 30%
- Natural biological phenomenon: 53%
1. General perception on eutrophication

If the foam is caused by human activities, is it related to:

- Climate change?
- Soil pollution?
- Water pollution?
1.3 Analysis and results

1. General perception on eutrophication

If the foam is caused by human activities, it is related to:

- Water pollution:
  - Not at all: 4
  - A little: 33
  - Mainly: 57
  - Exclusive: 6

- Soil pollution:
  - Not at all: 16
  - A little: 64
  - Mainly: 17
  - Exclusive: 3

- Climate change:
  - Not at all: 34
  - A little: 50
  - Mainly: 14
  - Exclusive: 2

Almost all respondents think the foam is caused by a combination of human activities but mainly due to water pollution.
1. General perception on eutrophication

How do people feel or think about the foam?

- Pollutes swimwater: 74%
- Unsightly: 86%
- Stinks: 35%
- Dangerous for animals (dogs, fish, ...): 80%
- Dangerous for humans: 43%
1. General perception on eutrophication

Do you know the phenomenon of eutrophication in our coastal areas?

- Yes: 4%
- A little: 12%
- Not at all: 84%

84% of respondents doesn’t know at all the eutrophication phenomenon!
1. General perception on eutrophication

- 61% of respondents has already seen foam on the beach
- 53% supposes it is a natural phenomenon but amplified with human activities (78%)
- 62% thinks the foam is dangerous: 43% says it is dangerous for humans, 80% thinks it is dangerous for animals
- 84% is not aware of the eutrophication phenomenon!
1. General perception on eutrophication

Communication in the ISECA project was necessary to inform people on the eutrophication phenomenon in general!

- **Web Information Server (WIS)**
- **Creation of educational tools**
- **Creation of communication tools**
- **Organisation of communication events**

References:

2.1 Aim of the survey

2. Socio-economic perception on eutrophication

Aim of survey?

- Integration of socio-economic and socio-professional criteria
- Is the perception in United Kingdom, Belgium, France and the Netherlands the same?
- Are they willing to address or to get involved in solving the eutrophication problem?

→ Do we need to change the management and policy on eutrophication (and water quality in general)?

→ Is further communication towards general public necessary?
### 2. Socio-economic perception on eutrophication

#### Main statistics

<table>
<thead>
<tr>
<th>Where</th>
<th>Belgium / Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>France</td>
</tr>
<tr>
<td></td>
<td>United Kingdom</td>
</tr>
<tr>
<td></td>
<td>Other (outside the 2Seas Region)</td>
</tr>
<tr>
<td><strong>When</strong></td>
<td><strong>2012 – 31(^{th}) May 2014</strong></td>
</tr>
<tr>
<td><strong>Method</strong></td>
<td><strong>Active / passive</strong></td>
</tr>
</tbody>
</table>
2.2 Main statistics

2. Socio-economic perception on eutrophication

Survey on public interest on the quality of coastal waters

The purpose of this survey is to determine the public’s perception of water quality and its effects on public use. It also aims at better defining the public’s willingness to contribute to improvements.

(Survey as part of the INTERREG IVA Seas "ISECA" project - Information System on the Eutrophication of our Coastal Areas)

1. How often do you visit the beach? *
   - Daily
   - Once a week
   - Several times a week
   - Once a month
   - Several times a year
   - Never

2. For what purpose(s) do you go to the beach? *
   - Walk
   - Run
   - Swim
   - Boating
   - Work
2. Socio-economic perception on eutrophication

“The World Wide Web of ISECA respondents”

*Total: 590 respondents*

*Interreg 2Seas Region: 520*
2. Socio-economic perception on eutrophication

Children: 57%
Sex: M 52%, F 48%

Age category:
- <25: 31%
- 26-40: 46%
- 41-60: 12%
- >60: 11%

Professional category:
- Working class: 80%
- Non-working class: 11%
- Retired: 9%

Annual household:
- Low: 35%
- Average: 50%
- High: 15%
2. Socio-economic perception on eutrophication

ISECA Category

- Scientist: 37%
- Farmer: 1%
- Fisherman: <1%
- Teacher: 9%
- General public: 52%

General public: 63%
Scientist: 37%
2. Socio-economic perception on eutrophication

Our visit to the beach

Frequency

- Never: 1%
- Several times a year: 6%
- Once a month: 11%
- Once a week: 14%
- Several times a week: 56%
- Daily: 90%

Activity (%)

- Other: 6
- Surf: 3
- Fish: 6
- Boat: 8
- Run: 13
- Work: 17
- Swim: 39
- Walk: 90
2.4 Analysis and results

2. Socio-economic perception on eutrophication

Have people ever seen foam / green algae on the beach?

- Total: 81%
- Belgium: 92%
- France: 90%
- United Kingdom: 79%
- Non-Interreg: 61%

81% of all respondents has already observed foam at the beach. The occurrence of foam seems to be a bigger problem in the 2Seas Region.
2. Socio-economic perception on eutrophication

*Does the general public know what is causing the foam?*

<table>
<thead>
<tr>
<th>Country</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>50</td>
</tr>
<tr>
<td>Belgium</td>
<td>50</td>
</tr>
<tr>
<td>France</td>
<td>48</td>
</tr>
<tr>
<td>UK</td>
<td>55</td>
</tr>
</tbody>
</table>

1/2 or 50% of the general public does not know what is causing the foam on the beach.
2.4 Analysis and results: focus on general public

2. Socio-economic perception on eutrophication

Do they know the eutrophication phenomenon?

Total general public

- Not at all: 14%
- A little: 46%
- Very well: 21%

84% of general public in the 2Seas Region (Belgium: 86%, France: 88% and UK: 79%) is not or almost not aware of the eutrophication phenomenon!
2.4 Analysis and results: focus on general public

2. Socio-economic perception on eutrophication

Is the knowledge of eutrophication related to age or education?

There seems to be no pronounced difference in knowledge between age and educational level of general public.
2.4 Analysis and results: all respondents

2. Socio-economic perception on eutrophication

Would you accept an increase in the water bill to improve water quality?
What is the amount you are willing to pay (WTP)?

<table>
<thead>
<tr>
<th></th>
<th>WTP (%)</th>
<th>20 € (in %)</th>
<th>35 € (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>64</td>
<td>95</td>
<td>46</td>
</tr>
<tr>
<td>Belgium</td>
<td>67</td>
<td>95</td>
<td>45</td>
</tr>
<tr>
<td>France</td>
<td>55</td>
<td>94</td>
<td>40</td>
</tr>
<tr>
<td>UK</td>
<td>67</td>
<td>100</td>
<td>61</td>
</tr>
</tbody>
</table>
2.4 Analysis and results: all respondents

2. Socio-economic perception on eutrophication

Is the WTP related to the frequency of beach visits?

The WTP seems not to be increasing with the number of visits to the beach, and seems even a little lower for people that visit the beach more than once a week.
2. Socio-economic perception on eutrophication

*Is the WTP related to our activities at the beach or in the sea?*

Respondents that perform beach activities with that involve more contact with water (swimming, surfing), have a higher WTP compared to respondents that walk along the beach.
2. Socio-economic perception on eutrophication

Is willingness to pay related to our households (HH)?

On average, respondents with a higher income have a higher WTP.
2. Socio-economic perception on eutrophication

What are the main reasons that 36% of all respondents is not willing to pay?

- Polluters should pay: 66%
- I already pay too much tax: 52%
- Government should pay: 40%
- Can't afford to pay: 15%
2. Socio-economic perception on eutrophication

What other measures would they take when not willing to pay?

- Check water connection with sewer network: 80%
- Paying more for vegetables to encourage environmentally friendly agriculture: 70%
- Taxes must already be allocated to preservation of the environment: 36%
- Pay for R&D: 12%
- Pay in a conservation trust fund: 6%
2. Socio-economic perception on eutrophication

- 81% of all respondents has already observed foam on the beach but is more likely to appear in the 2Seas Region (87% vs 61% outside).

- Only 50% of general public has an idea on the cause of the foam.

- 84% of general public in the 2seas Region is not informed on the eutrophication of our coastal areas!
2. Socio-economic perception on eutrophication

✓ 64% of all respondents is willing to accept an increase in the water bill to prevent or limit eutrophication: 95% is willing to pay 20 €/year, less than half (46%) is willing to pay 35 €/year.

✓ The main reasons respondents do not want to pay is that polluters should pay (66%), they already pay too much tax (52%) and the Government should pay to obtain a better water quality (40%).

✓ If people do not want to pay, they do want to take other measures to improve water quality: check their sewer (80%) and pay for environmentally friendly agriculture (70%), however...only 12% would pay for R&D.
THANKS FOR YOUR FOAMING ATTENTION

Thanks to:
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- All survey respondents