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# Use of KPIs to show the impact of geospatial information

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# IMPORTANCE OF KNOWING THE IMPACT OF YOUR SPATIAL INFORMATION

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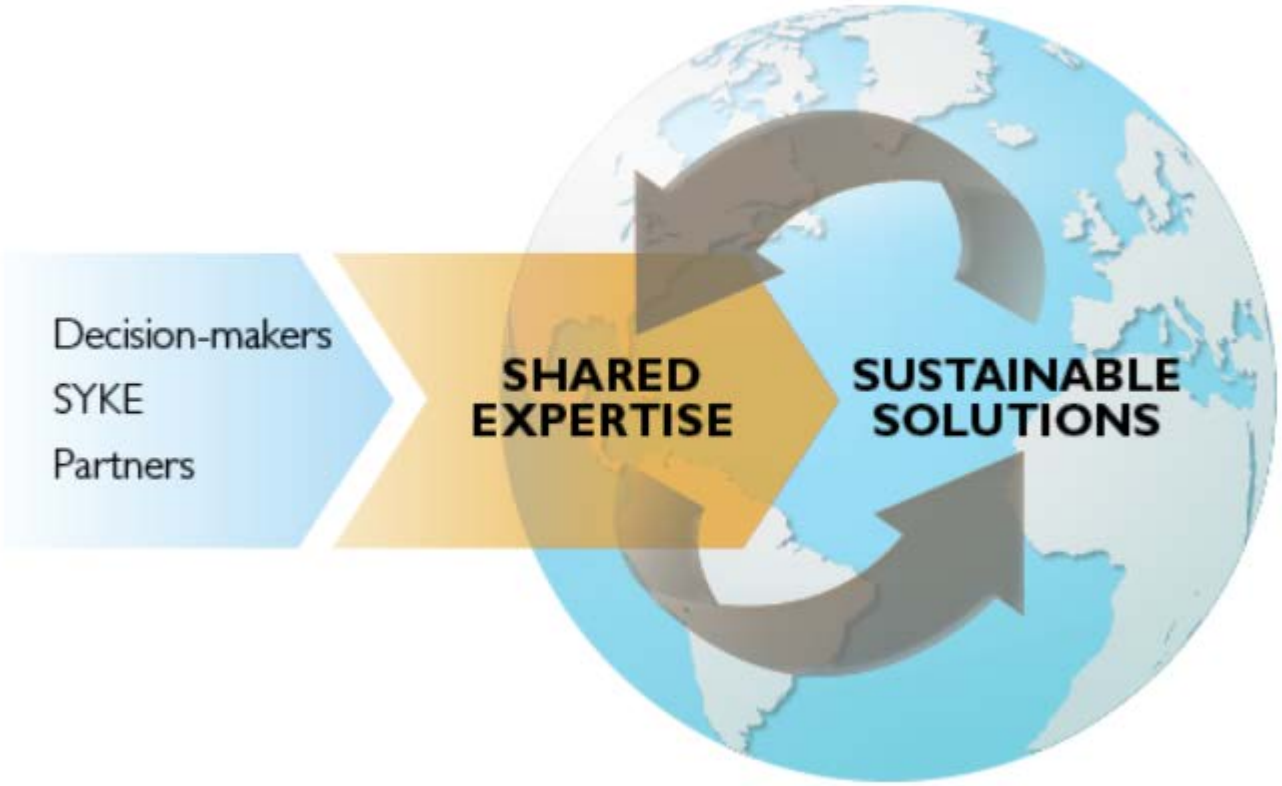
- My organization has strategic goals related to usage of spatial data...
- How many users are effectively utilizing the spatial information available?
- What are the different profiles of users?
- What datasets are essential to maintain, and available at all times?
- What indicators are relevant to my SDI operation/usage analytics?
- How can I measure the value of my Spatial Data Infrastructure?
- Difference in complying with standards (OGC & INSPIRE) vs providing high quality usage experience to users…

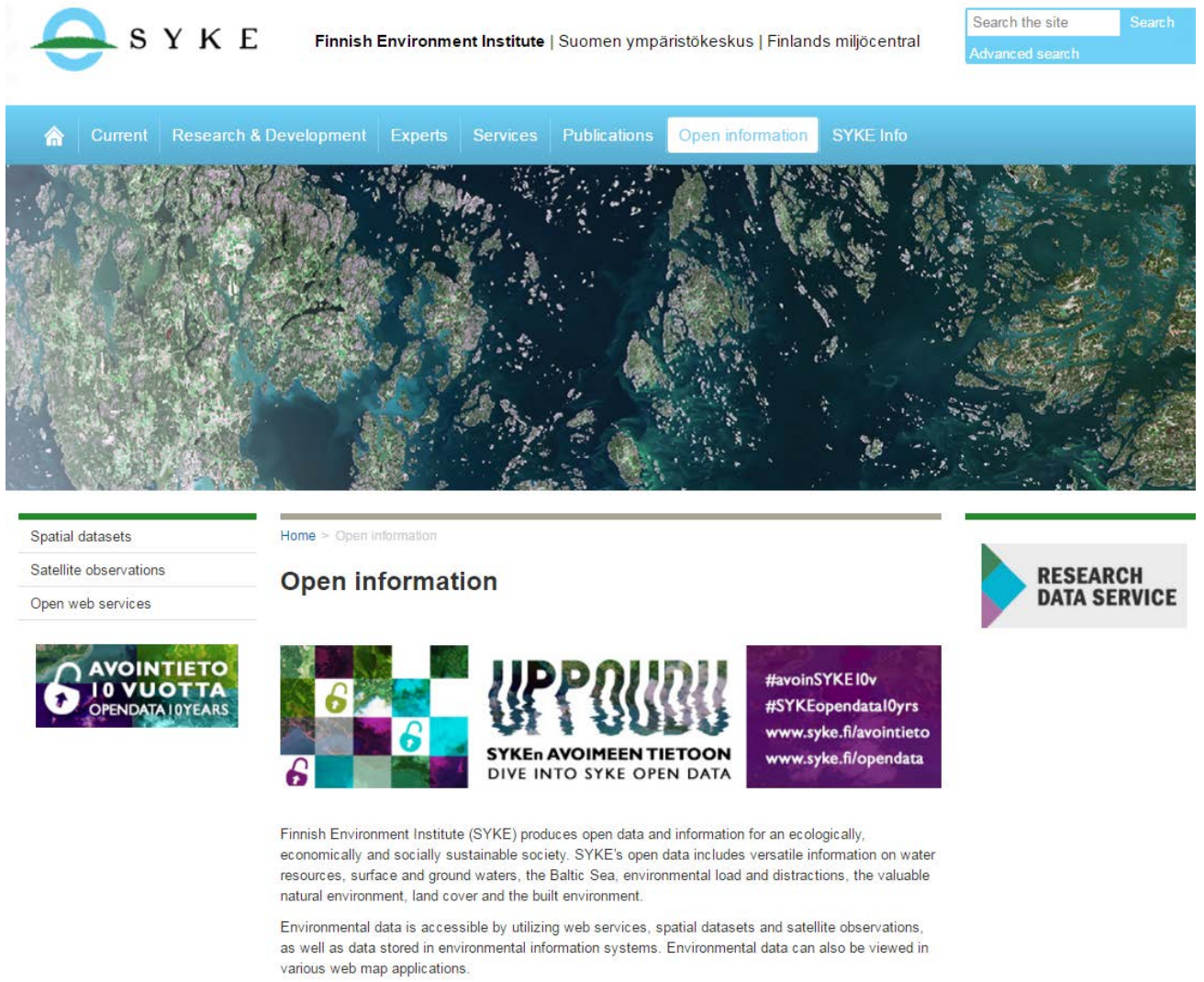
# Crucial information and innovative solutions for a sustainable society

- Respond proactively to society's ever-changing information needs.
- To make a difference for decision-making in the public and private sector through our internationally recognized research and development activities and our high-quality expertise.



# SYKE's Open Data Services

- Open environmental data available since 2008
  - 6602 Spatial datasets
  - Environmental information systems
  - Web map applications
  - Web services (77*)
  - Satellite observations
- Usage of open data increases every year → impact?
- [www.syke.fi/openinformation](www.syke.fi/openinformation)



# Spatineo Impact

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- Spatineo Platform
- Customer's data
- Automated surveys
- Third party data (IPs)

**Automated Data Collection**

**Assess Impact**

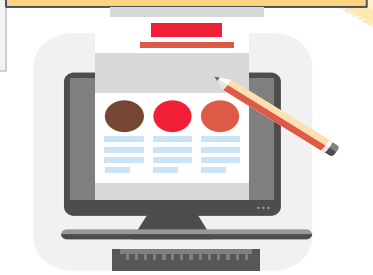
- Real-time dashboards
- Automated reports
- Transparency

Strategic goals → Measurable indicators

**Recognize your Success**

- Technology transfer
- Improvement of Indicators

**Implementation**



**Recommendations**

- Evaluate all options
- Specific technologies
- Communication with stakeholders

# How actively citizens are contributing to monitoring, observing and producing of data on nature? (F)

Lake wiki

Ice condition

Algal situation

Surface water temperature

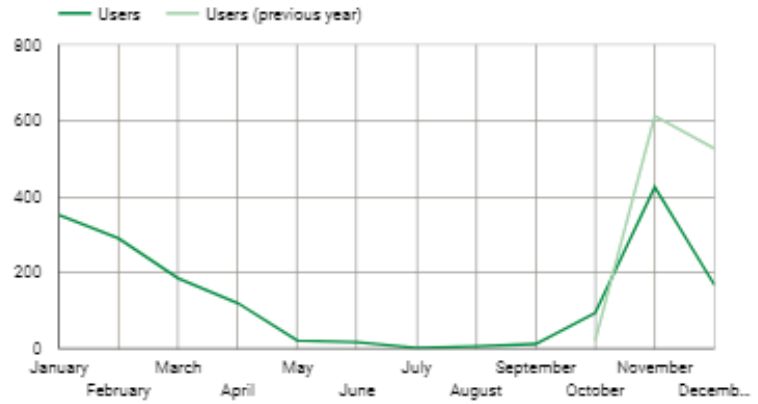
Jan 1, 2017 - Dec 31, 2017

*Number of Users and Unique Pageviews vs previous year*

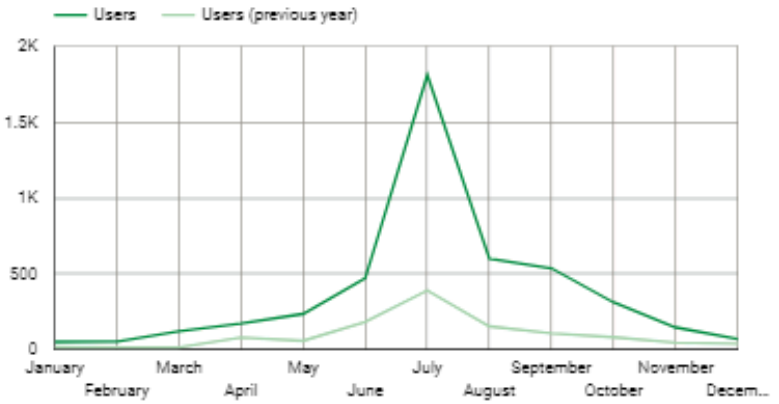
| | Page Title | Number of users | % Δ | Unique Pageviews | % Δ |
|---|---|---|---|---|---|
| 1. | Järviwiki | 33,068 | -14.6% | 46,964 | -12.5% |
| 2. | Jäätilanne – Järviwiki | 13,416 | -28.5% | 18,537 | -28.9% |
| 3. | Levätilanne – Järviwiki | 12,370 | -29.6% | 17,248 | -28.8% |
| 4. | Järvien nimet – Järviwiki | 9,694 | -16.9% | 10,417 | -17.9% |
| 5. | Levävahti/Miten tunnistan sinilevän? – Järviwiki | 6,653 | -55.4% | 7,437 | -55.2% |
| 6. | Itämeri – Järviwiki | 5,498 | 0.7% | 6,286 | -1.2% |
| 7. | Pintaveden lämpötila – Järviwiki | 5,101 | -20.1% | 6,759 | -20.1% |
| 8. | Suomen kunnat – Järviwiki | 3,384 | -19.5% | 3,763 | -20.6% |
| 9. | Järvitilastot/Syvimmät järvet – Järviwiki | 2,802 | 58.4% | 2,982 | 54.0% |
| | **Grand total** | **323,933** | **0.7%** | **908,124** | **-4.6%** |

1 - 1000 / 81727

*Monthly distribution of users of Talviseurantalähetti vs. previous year***




*Monthly distribution of users of Havaintolähetti vs. previous year***

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Data source: Google Analytics data from Järvi&Meri wiki

** See remark on last page

*Goal:*
Citizens' participate more widely in observing and collecting data from environment

*Impact indicator:*
Citizens' activeness in providing observations

## Are all the municipalities in the risk of flooding using flood risk data? (T)

Municipalities on the list TulvariskiKunnat using the data

Jan 1, 2017 - Dec 31, 2017

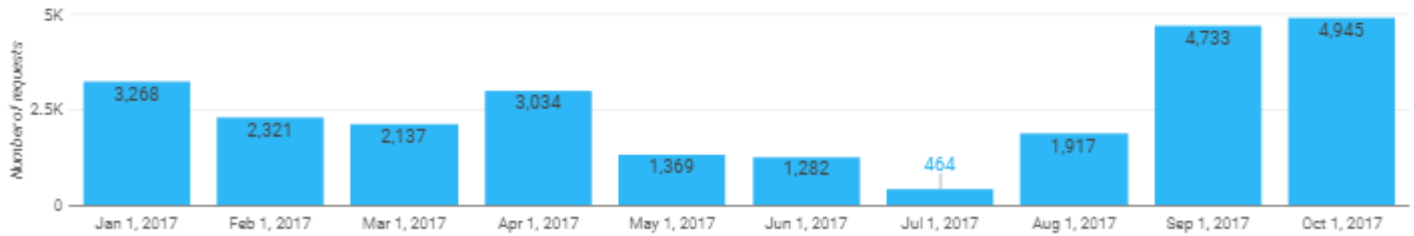
| | Name | Number of requests (%) |
|---|---|---|
| 1. | Helsinki | 46.9% |
| 2. | Ylivieska | 11.4% |
| 3. | Pori | 11.3% |
| 4. | Vaasa | 10.1% |
| 5. | Seinäjoki | 9.4% |
| 6. | Jyväskylä | 6.7% |
| 7. | Kotka | 1.9% |
| 8. | Turku | 1.1% |
| 9. | Kirkkonummi | 0.7% |
| 10. | Sipoo | 0.3% |
| 11. | Lapua | 0.1% |

1 - 11 / 11

Total number of Tulvariskikunnat

37

*Monthly distribution of data access requests by municipalities using flood risk data:*

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Data source: usage analytics from Spatineo Monitor
* See remark on last page

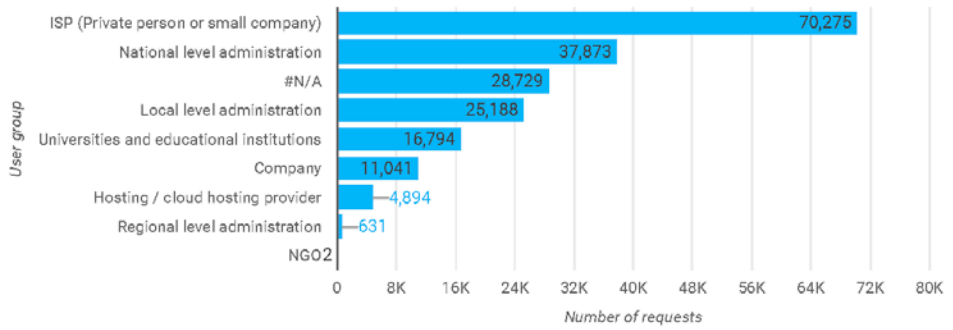
*Goal:*
Decrease the vulnerability of cities in climate change

*Impact indicator:*
All municipalities that have flood risk areas use data of flood risks

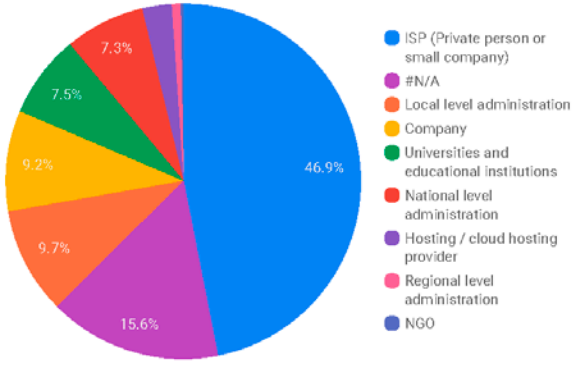
# Who are the specific users of data on built environment? (F)

Jan 1, 2017 - Dec 29, 2017

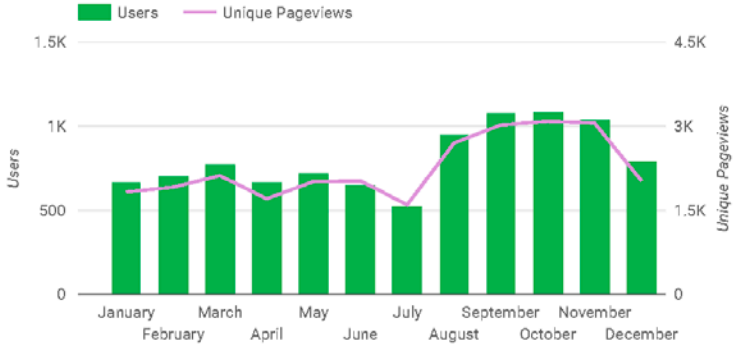
*Amount of requests per user group*




*Distribution of users in user groups*




*Monthly distribution of Users and Unique Pageviews*

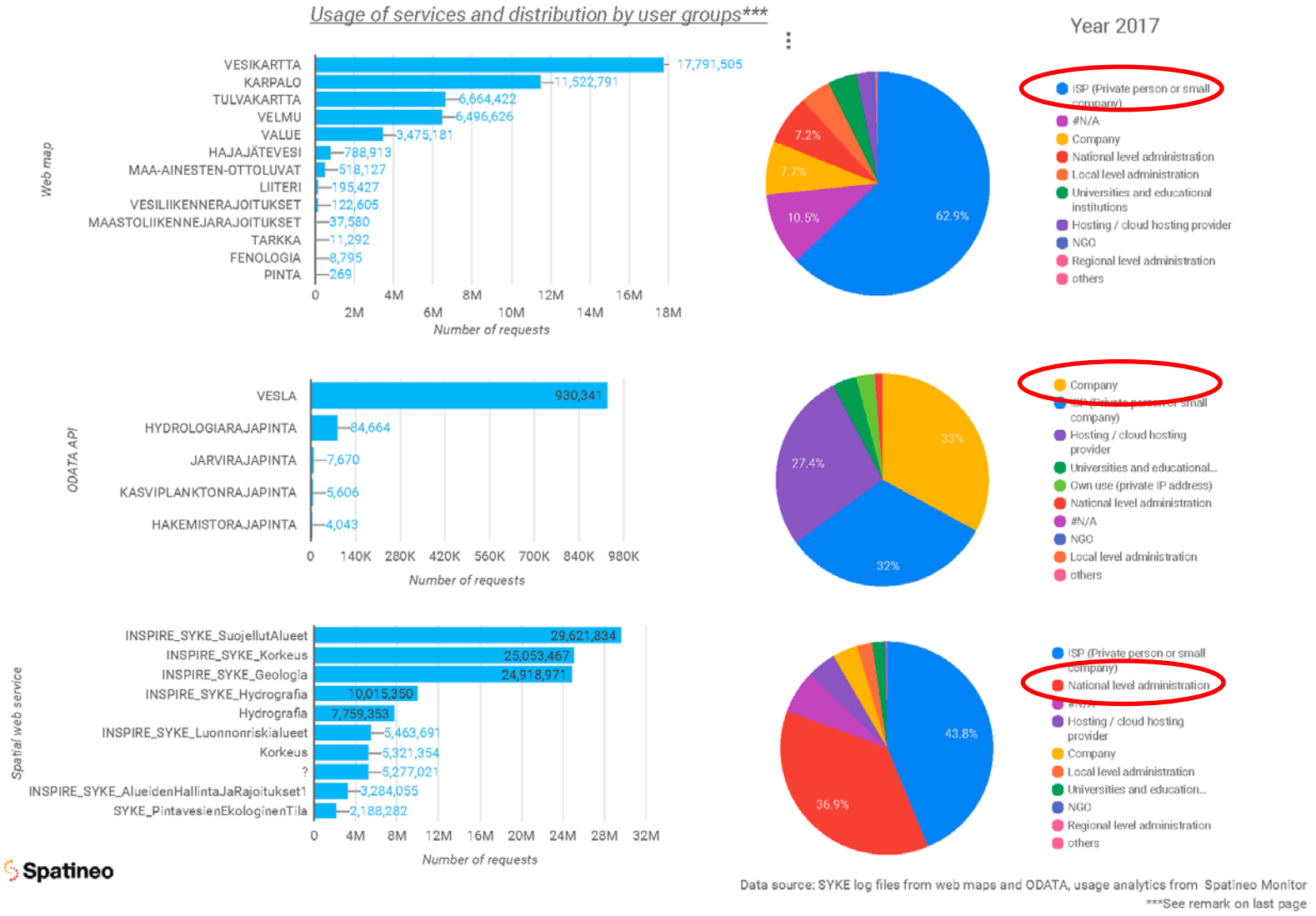



Data source: Google Analytics data and SYKE log files from LIITERI

*Goal:*
Comprehensive information on built environment to authorities, companies and citizens

*Impact indicator:*
Who are the specific users of data on built environment

# Who are the users and how much environmental information services are used? (F)




Data source: SYKE log files from web maps and ODATA, usage analytics from Spatineo Monitor

***See remark on last page

*Goal:*
Key information user groups use environmental information

*Impact indicator:*
Division of usage of environmental information in user groups

- Ensure that all information from web maps, data downloads and citizens' submissions of observations **are collected**
- A **further study** to understand why there are so significant differences in the amount of users of web maps
  - Natural? Potential users do not find web maps?
- **Better communication** of flood maps and flood information to municipalities
- Impact assessment can be developed based on **user experience** of SYKE:
  - Which **indicators** are most beneficial?
  - Do **new information** needs will arise along the year?
- Focus future work on **the use** of data

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