**How Open Environmental Data is Used?** 

 Monitoring the use of open spatial data

 User Surveys for open environmental data users



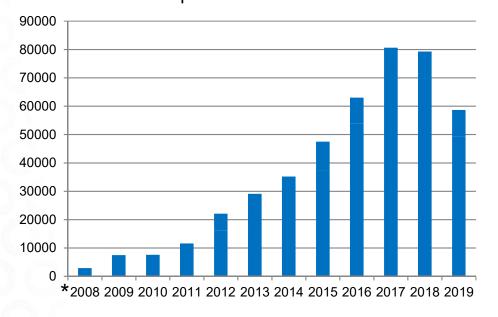


Kaisu Harju, Riitta Teiniranta
Finnish Environment Institute SYKE/Data and Information Centre
8.5.2020



# **Spatial Data Downloads 2008-2019**

Number of spatial data package downloads At SYKE's Open Data Portal



#### **Downloads TOP 3 in 2019**

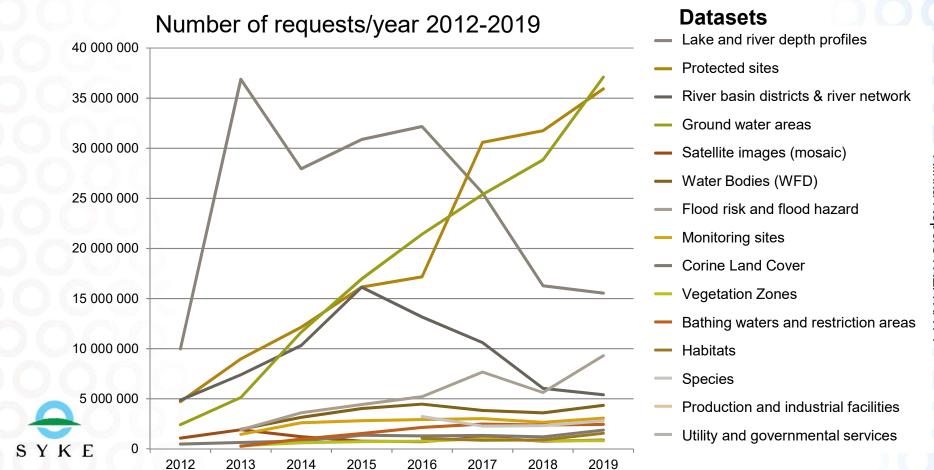
- Ground water areas
- Natura2000 areas
- 3. Corine Land Cover 2018



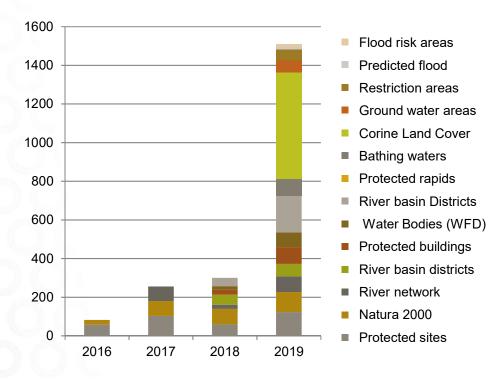
\*2008 open data policy adapted in SYKE

Statistics: Riikka Repo/SYKE/Data and information Centre

# Usage of SYKE's INSPIRE compliant WMS services



#### **INSPIRE GML Downloads**





Statistics: Riikka Repo/SYKE/TK/TPP

### Survey for SYKE's Open Data Users 2019

 Pop-up survey for SYKE's Open Data Service users at <u>www.syke.fi/openinformation</u> was open during 27.11.-13.12.2019

 The goal was to get information, who are the users of our open data services and for what purposes open data and information is used.

Similar kind of survey was made in 2017

Number of answers 2019: 198

• 2017: 251

Survey was carried out by Spatineo







patial datasets

Home > Open information

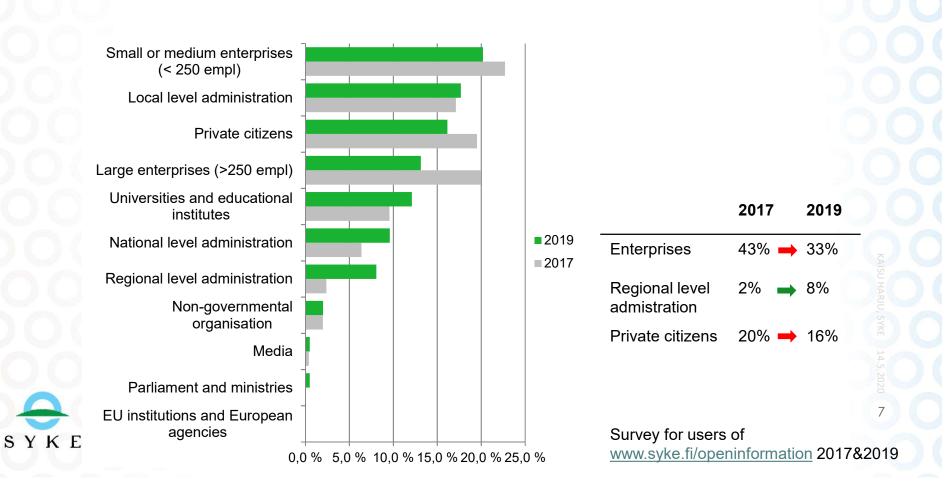
Atalilite observations

Open information

# WHAT KIND OF ORGANISATION ARE YOU REPRESENTING?



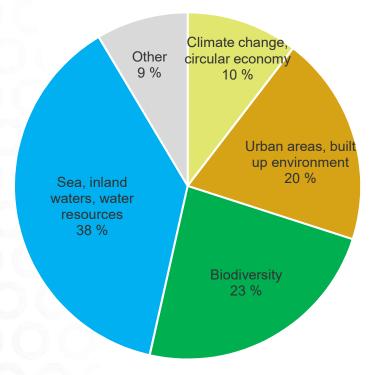
# Who Are the Users of SYKE's Open Data?



# WHAT KIND OF DATA THEMES ARE YOU SEARCHING?



# Which data themes are you interested in?



# Data themes according to the Strategic objectives of SYKE

SYKE's impact stems from its reliable, research-based data, which is used widely in environment-related decision-making both in Finland and elsewhere in the world. Our research and development work is proactive and ambitious. Through constructive cooperation we generate knowledge, understanding and solutions that:

- accelerate the transition needed for combating climate change and strengthening sustainable circular economy
- transform our urban areas into sustainability forerunners/trailblazers
- protect and enrich biodiversity thus also safeguarding human well-being
- ensure the sustainable use of water resources as well as the good condition of coastal and inland waters by novel combinations of methods a
- apply new approaches and methods of producing environmental information to respond to the emerging user needs of a digitalising society



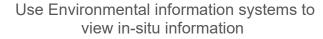
Number of answers: 327

# WHICH DATA FORMATS DO YOU PREFER TO USE?



Survey for users of www.syke.fi/openinformation 2019

# **Preferred formats for data usage?**



View environmental information visualised on web map applications

Download spatial dataset as files

Use spatial datasets via web map services (WMS, WFS)

View earth observation information on web map applications

Use In-situ data via API interface

Use earth observation information via web map services (WMS, WFS)



0% 5% 10%

15% 20%

25%

1 '



Survey for users of www.syke.fi/openinformation 2019

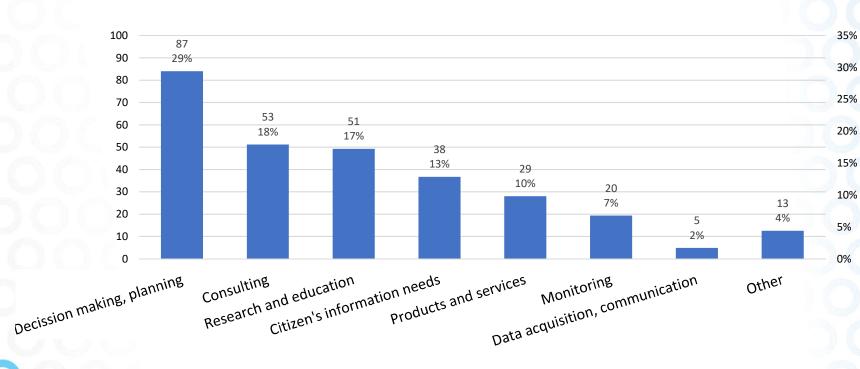
Number of answers 493



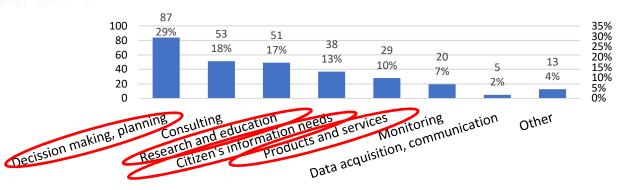




# For what purposes data is used?







DECISSION MAKING, PLANNING		
Preparing an expert opinion	8,4 %	25
Planning	8,1 %	24
Decission making	5,7 %	17
Processing permits	3,0 %	9
Strategy creation	1,3 %	4
Environmental impact assessment	1,0 %	3
Information for applying a permit	0,7 %	2

RESEARCH AND EDUCATION		
Research and development	6,1 %	18
Exercises related to studies	4,0 %	12
Education material	3,0 %	9
Training	1,3 %	4
Preparing of thesis/final project	1,0 %	3

CITIZEN'S INFORMATION NEEDS		
Information about the quality of the environment	6,1 %	18
Information for participating in the development of own		
neighbourhood	3,4 %	10
Information for planning leisure time activities.	2,7 %	8

PRODUCTS AND SERVICES		
Maintenance and further development of existing		
products and services	6,7 %	20
Development of new products and services	2,4 %	7
Development of own products and services based		
on open data (citizens)	0,7 %	2

Survey for users of www.syke.fi/openinformation 2019