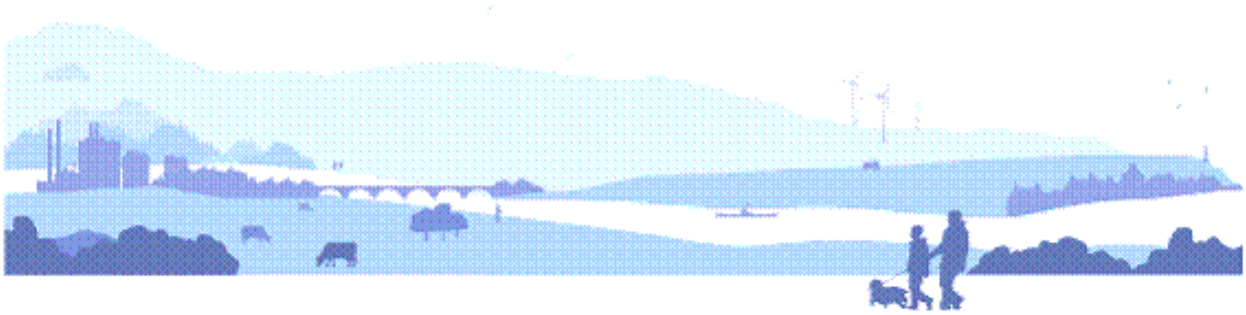
SEPA
Scottish Environment Protection Agency
Buidheann Dìon Àrainneachd na h-Alba

STATE OF SCOTLAND'S WATER ENVIRONMENT 2017

SUMMARY REPORT

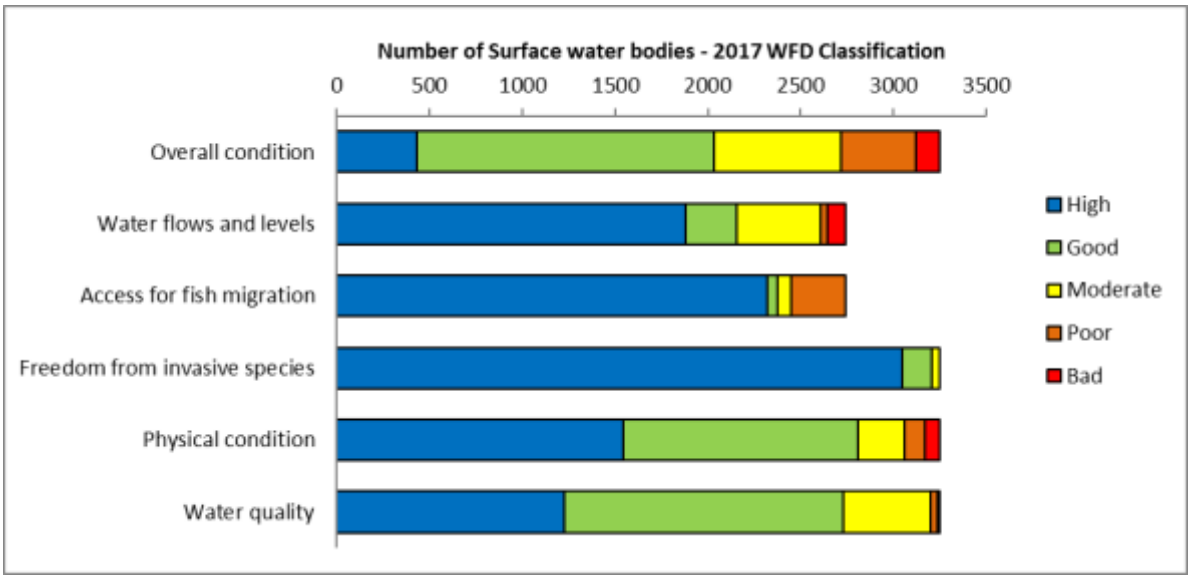


Co-ordination Unit

STATE OF THE WATER ENVIRONMENT IN 2017 CLASSIFICATION

The information in this report is based on the 2017 State of the Environment classification.

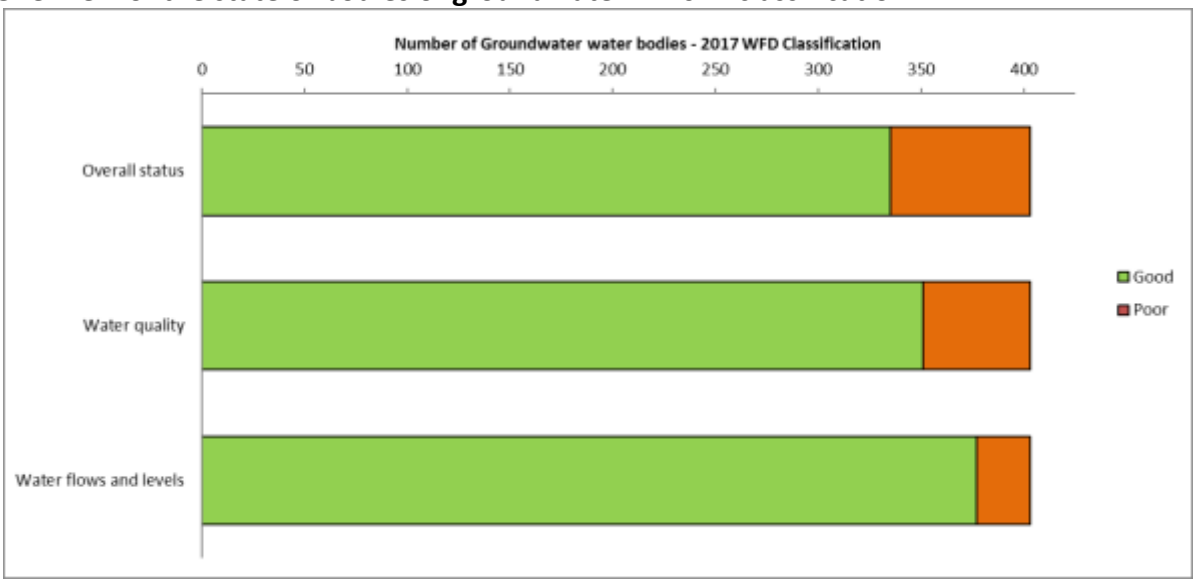
Overview of the state of bodies of surface water in 2017 classification



Note: "Good" means conditions consistent with good status or, in the case of heavily modified and artificial water bodies, good ecological potential. Bodies of surface water include rivers, lochs, estuaries and coastal waters.

Fish migration and water flows are not relevant to the marine environment, and so are excluded from the graph above.

Overview of the state of bodies of groundwater in 2017 classification



Note: Groundwaters are only classified as Good or Poor status.

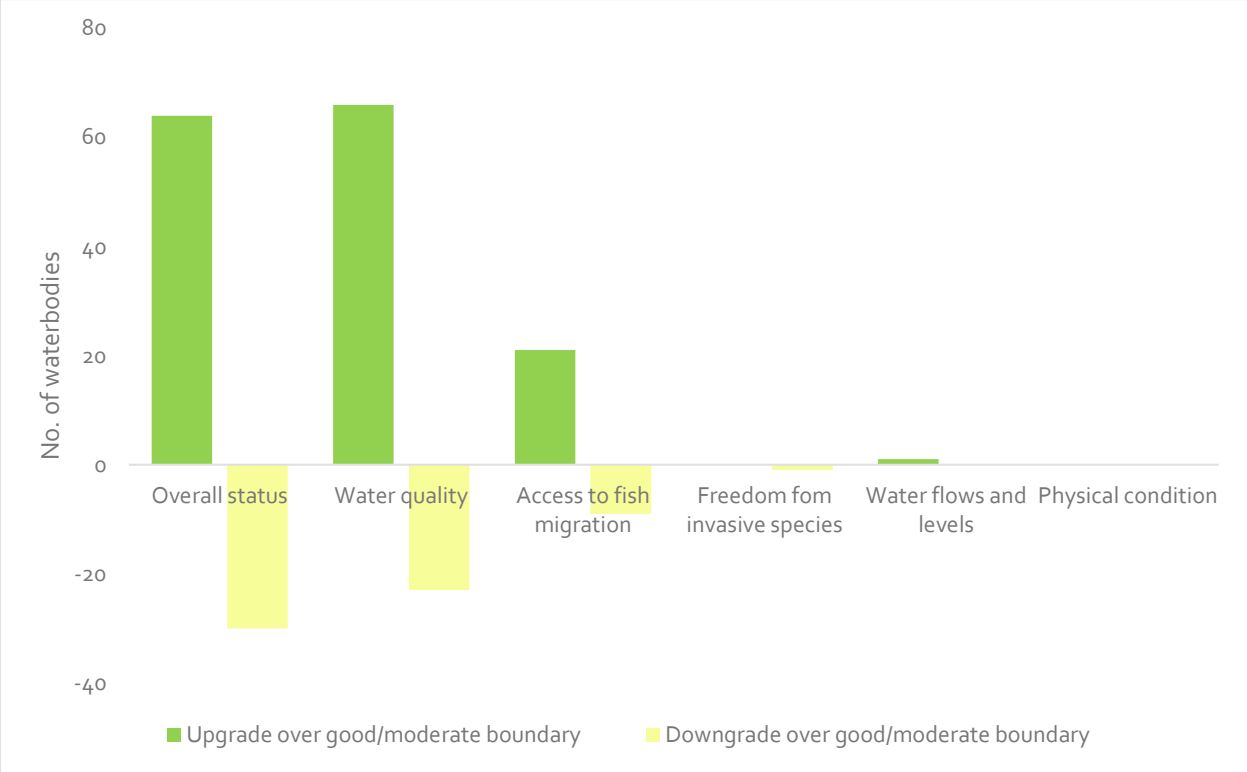
Our monitoring and modelling networks are designed to assess the greatest risks to the environment. Where we do not have evidence to the contrary we report status as high.

Overall, 64.9% of our surface and groundwater water bodies are at good or better status. This is a slight increase from 2016 (64.0%).

2017 WFD Overall Classification							
		Rivers	Lochs	Estuaries	Coastal	GW	Total
High/Good	Number	1329	210	42	455	335	**2371**
	Percent	55.2	62.9	87.5	99.6	83.1	**64.9**
< Good	Number	1080	124	6	2	68	**1280**
	Percent	44.8	37.1	12.5	0.4	16.9	**35.1**
Total	**Number**	**2409**	**334**	**48**	**457**	**403**	**3651**

WHAT'S CHANGED SINCE 2016?

Any changes in classification between years are investigated, and a "change reason" assigned.



Notes: The figure shows the number of water bodies which have moved across the good/moderate boundary between 2016 and 2017, for both groundwater and surface water bodies. Physical condition classification has rolled over since the 2014 State of the Environment Classification.

The majority of changes at overall status since 2016 are due to improvements in our understanding of the environment, resulting from additional data being collected, or new assessments having been undertaken.

There have also been "real" changes, where we are confident that the underlying quality of the environment has altered.

Change reason		Upgrades	Downgrades	Total
Real change	1 - Real upgrade due to measure	3	-	3
	2 - Real downgrade from authorised development	-	2	2
	3 - Real downgrade from pollution incident	-	-	-
	4 - Real environmental change/trend	1	2	3
Virtual change	5 - Change in understanding due to additional data (i.e. extending the data set)	54	20	74
	6 - Change in understanding due to a new assessment (i.e. no data previously)	6	6	12
	7 - Change in classification method/standard	-	-	-
	8 - Change in understanding and method/standard	-	-	-
	Total	**64**	**30**	**94**

WATER BODY CHANGES

This section explores the "real" changes to water bodies, and provides additional information on what has changed.

UPGRADES

There are four waterbodies that have improved due to real changes in the environment.

<u>Real upgrade due to measure</u>

- Improvement actions have resulted in three water bodies being restored to good ecological potential. These have been delivered through measures requiring the operator to provide adequate compensation flows downstream of hydro-electric plants.
    - **River Garry from Garry Intake to Errochty Water confluence (water body ID 6911):**
        - upgraded from *Bad Ecological Potential (BEP)* to *Good Ecological Potential (GEP)*
    - **Allt na h-Eilde (water body ID 20332):**
        - upgraded from *Moderate Ecological Potential (MEP)* to *Good Ecological Potential (GEP)*

- **Loch Eilde Mór (water body ID 100217):**
  - upgraded from *Bad Ecological Potential (BEP)* to *Good Ecological Potential (GEP)*

Real environmental change/trend

- An operator licence surrender resulted in one water body improving to high status.
  - **Abhainn na Glasa - Loch Morie to source (water body ID 20158):**
    - Upgrade from moderate to high due to hydrology improvement

DOWNGRADES

There are four waterbodies that have deteriorated due to real changes in the environment.

- The licensing of hydro-electric schemes caused three water bodies to deteriorate to moderate status.

Real downgrade from authorised development

- **Urlar Burn (water body ID 6637):**
  - Overall status good to moderate due to Hydrology downgrade
  - The scheme causing the downgrade has a derogation from RBMP cycle 1
- **Badachro River (water body ID 20471):**
  - Overall status good to moderate due to Hydrology downgrade and is derogated

Real environmental change/trend

- **Easter Fearn Burn (water body ID 20088):**
  - Overall status good to moderate due to Hydrology downgrade
  - Derogation assessments for this hydro-scheme are not yet completed

- The spread of an alien species caused one water body to deteriorate to moderate status.
  - **Cargen Pow/Bogrie Lane (water body ID 10600):**
    - A downgrade from good to moderate due to presence of North American signal crayfish - *Pacifastacus leniusculus* spreading from Lochfoot Burn