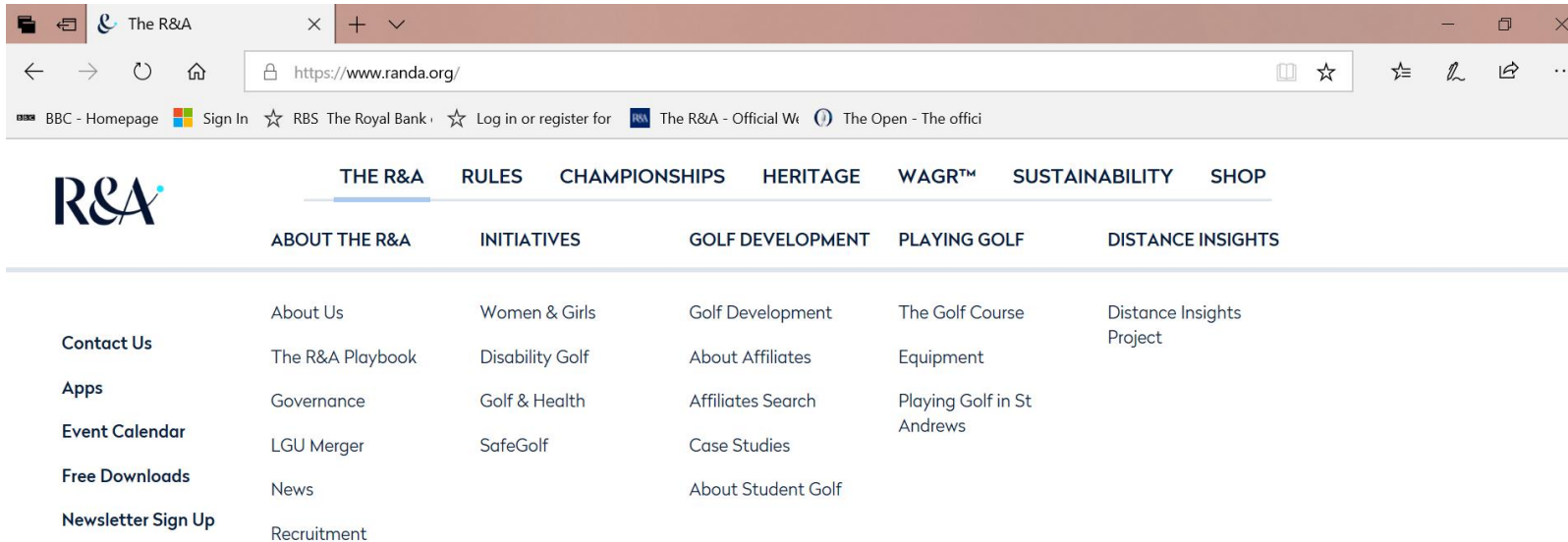


# Golf Course 2030

FEGGA Conference 20.02.19



# The R&A



The screenshot shows the R&A website homepage in a web browser. The browser's address bar displays <https://www.randa.org/>. The website features a top navigation bar with the R&A logo on the left and a menu of links: THE R&A, RULES, CHAMPIONSHIPS, HERITAGE, WAGR™, SUSTAINABILITY, and SHOP. Below this is a secondary navigation bar with links: ABOUT THE R&A, INITIATIVES, GOLF DEVELOPMENT, PLAYING GOLF, and DISTANCE INSIGHTS. On the left side of the page, there is a vertical list of links: Contact Us, Apps, Event Calendar, Free Downloads, and Newsletter Sign Up. The main content area is organized into columns corresponding to the secondary navigation links. The 'ABOUT THE R&A' column includes links to 'About Us', 'The R&A Playbook', 'Governance', 'LGU Merger', 'News', and 'Recruitment'. The 'INITIATIVES' column includes links to 'Women & Girls', 'Disability Golf', 'Golf & Health', and 'SafeGolf'. The 'GOLF DEVELOPMENT' column includes links to 'Golf Development', 'About Affiliates', 'Affiliates Search', 'Case Studies', and 'About Student Golf'. The 'PLAYING GOLF' column includes links to 'The Golf Course', 'Equipment', 'Playing Golf in St Andrews', and 'Distance Insights Project'.

**THE R&A** RULES CHAMPIONSHIPS HERITAGE WAGR™ SUSTAINABILITY SHOP

**ABOUT THE R&A** INITIATIVES GOLF DEVELOPMENT PLAYING GOLF DISTANCE INSIGHTS

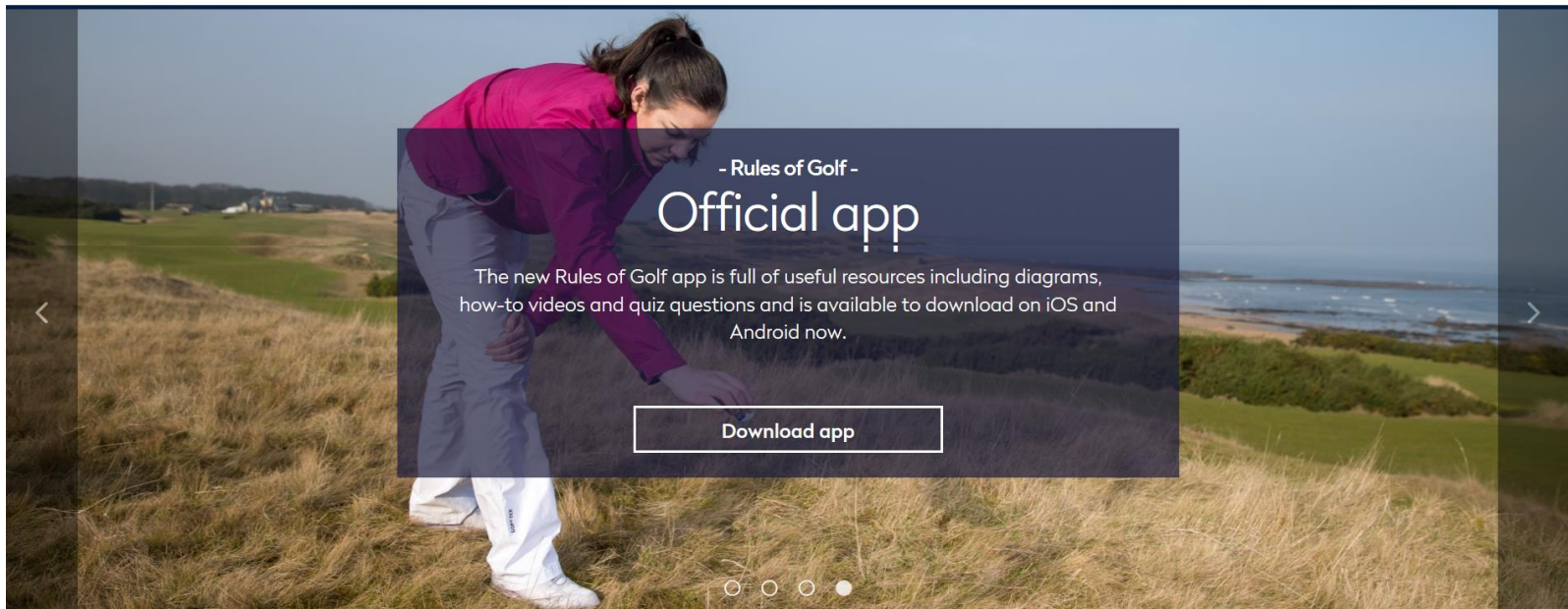
**Contact Us**  
About Us  
The R&A Playbook  
Governance  
LGU Merger  
News  
Recruitment

**Apps**  
Women & Girls  
Disability Golf  
Golf & Health  
SafeGolf

**Event Calendar**  
Golf Development  
About Affiliates  
Affiliates Search  
Case Studies  
About Student Golf

**Free Downloads**  
The Golf Course  
Equipment  
Playing Golf in St Andrews

**Newsletter Sign Up**  
Distance Insights Project



The promotional banner for the 'Rules of Golf Official app' features a background image of a golfer in a pink jacket and white trousers, captured in a mid-swing on a grassy golf course. A semi-transparent dark blue box is centered over the image, containing the text '- Rules of Golf -' and 'Official app' in a large, white, serif font. Below this, a smaller line of text states: 'The new Rules of Golf app is full of useful resources including diagrams, how-to videos and quiz questions and is available to download on iOS and Android now.' At the bottom of the box is a white rectangular button with the text 'Download app'. The banner is flanked by left and right navigation arrows and includes a series of four small white circles at the bottom center, with the fourth circle being filled, indicating the current slide in a sequence.

- Rules of Golf -  
**Official app**

The new Rules of Golf app is full of useful resources including diagrams, how-to videos and quiz questions and is available to download on iOS and Android now.

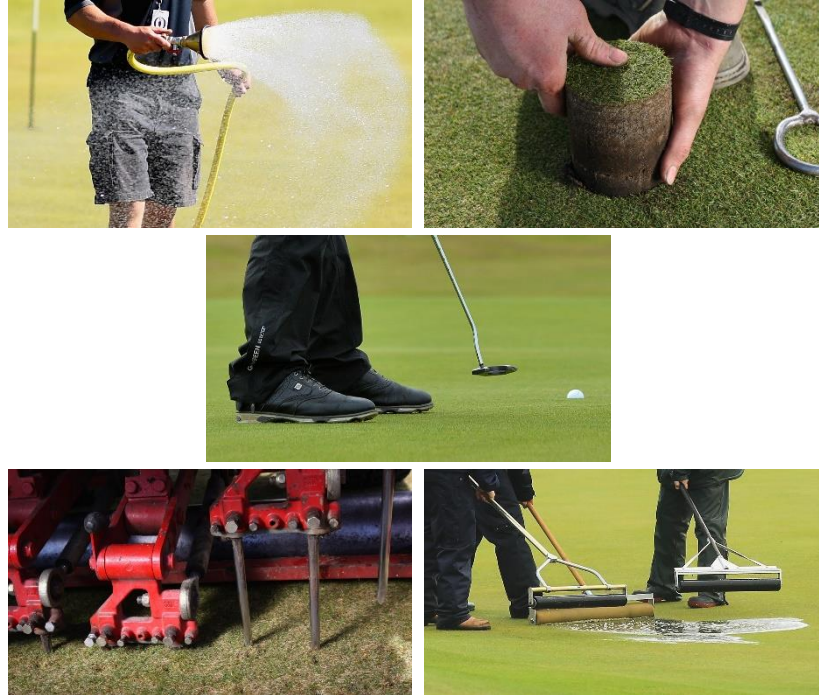
[Download app](#)

# 2019

- The Open
- Rules Modernisation
- Distance Insights
- Women's Golf Charter
- Golf and Health
- OnCourse®
- Golf Course 2030

# GOLF COURSE 2030

Great Britain & Ireland



An industry roadmap addressing challenges from, and taking opportunities presented by, the changing climate, resource constraints and regulation to secure optimal golf course condition and playability for current and future generations



# Why course condition and playability?



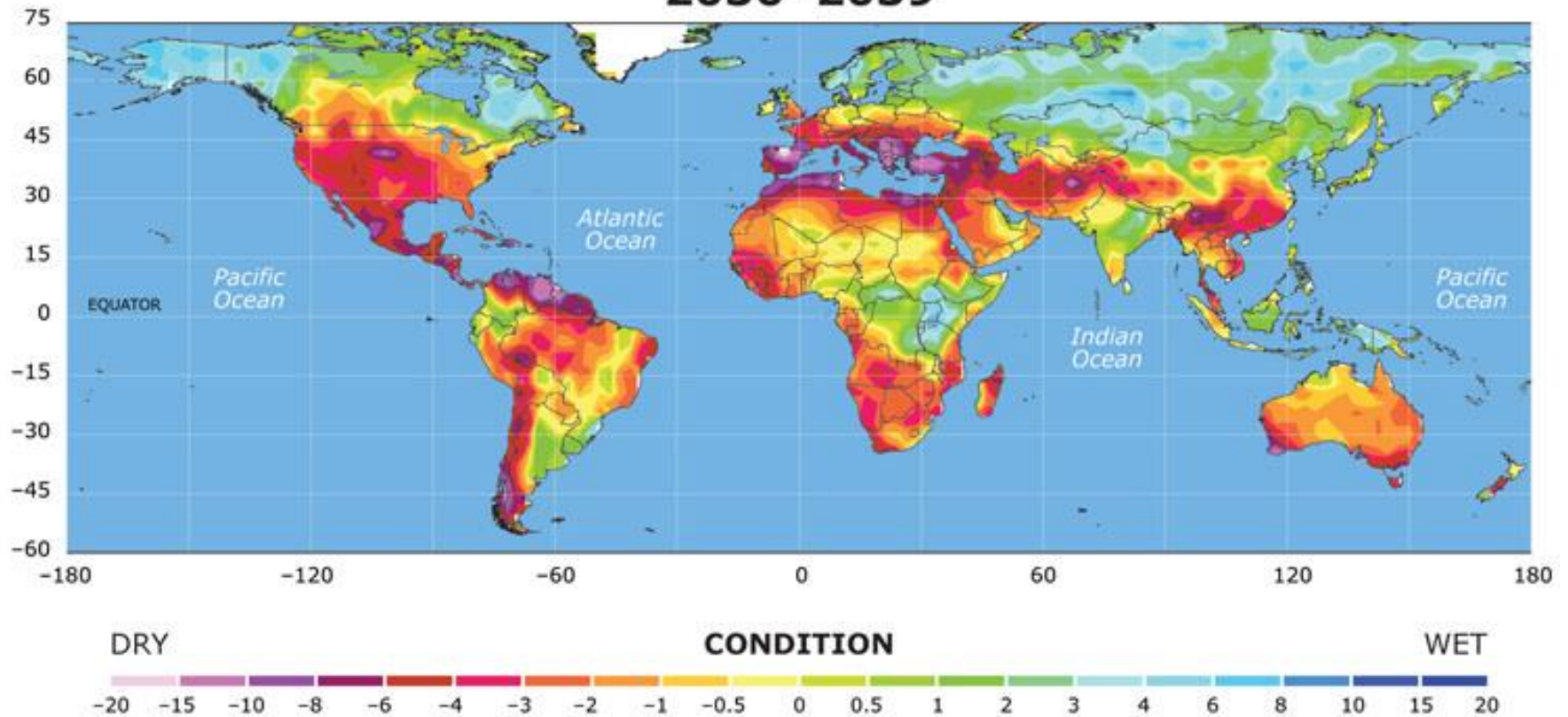
# Why 2030?



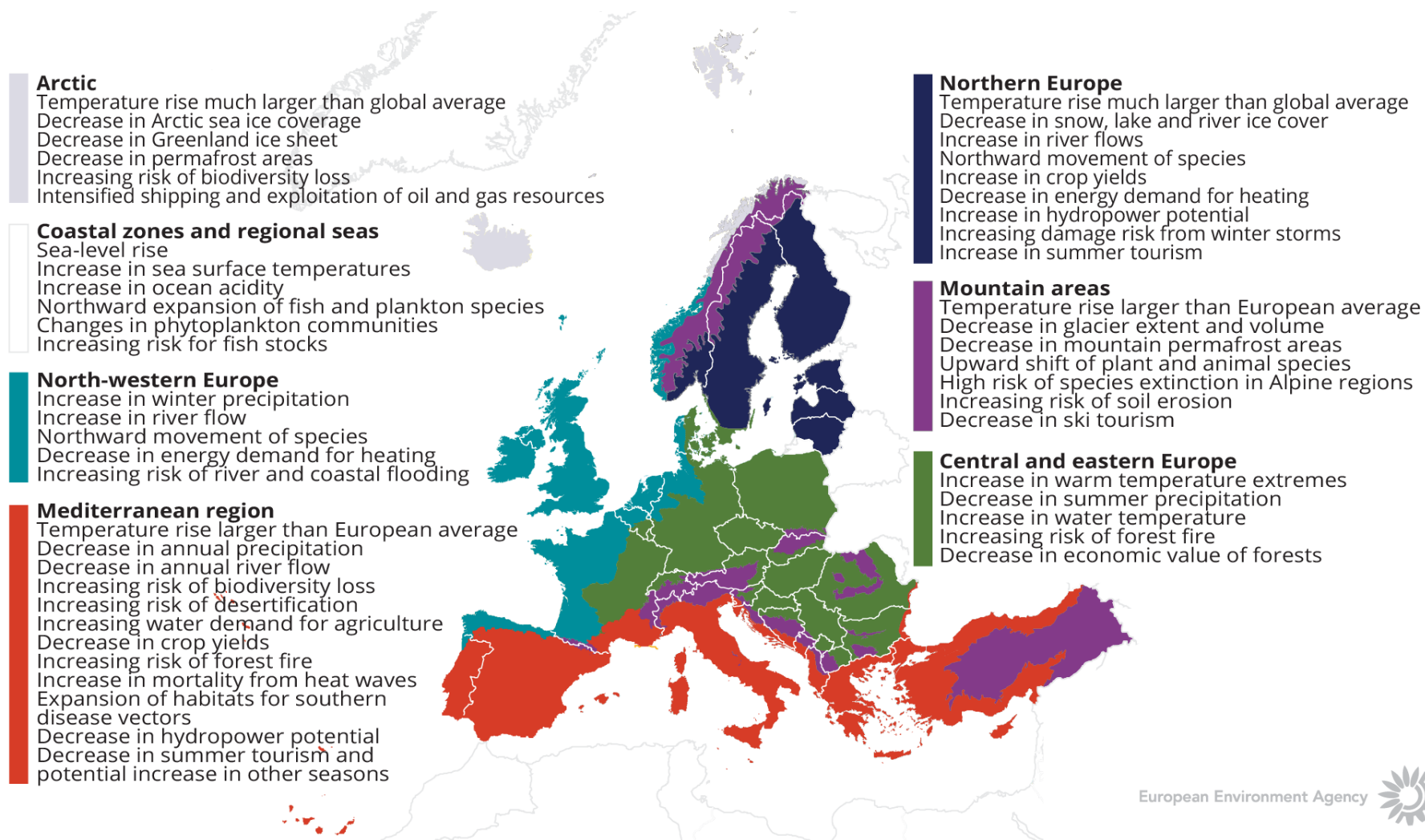


# Changing climate and weather patterns

**2030–2039**



# Changing climate and weather patterns





# Europe IN FLAMES as huge wildfires rage out of control in Portugal, France and Spain

RAGING wildfires are tearing through south western Europe with large areas of Portugal, France and Spain ablaze.

By SIMON OSBORNE

PUBLISHED: 12:34, Tue, Sep 6, 2016 | UPDATED: 13:26, Tue, Sep 6, 2016

SHARE     



## Europe hit by one of the worst droughts since 2003

AUG  
20  
2015

Much of the European continent has been affected by severe drought in June and July 2015, one of the worst since the drought and heat wave of summer of 2003, according to the [latest report](#) by the JRC's [European Drought Observatory \(EDO\)](#). The drought, which particularly affects France, Benelux, Germany, Hungary, the Czech Republic, northern Italy and northern Spain, is caused by a combination of prolonged rain shortages and exceptionally high temperatures.



# 82 die in Europe's worst floods for decades

By ANTHONY FRANCE, COLIN ADAMSON and HUMFREY HUNTER, Evening Standard

Torrential rains across central Europe have led to the worst flooding in decades, claiming the lives of 82 people.

At least 58 died in the Black Sea area at the weekend, where thousands of Russian tourists were caught out by floodwaters that swept cars and tents out to sea.

News > World > Europe

## Europe will soon be hit by deadly 'once-in-a-century' extreme weather every year

Severe wildfires, river floods and windstorms will affect certain areas of the continent every year

Peter Yeung | [@ptr\\_yeung](#) | Sunday 24 April 2016 16:15 BST | [133 comments](#)



 Like [Click to follow The Independent Online](#)



## WATER STRESS BY COUNTRY

ratio of withdrawals to supply

- Low stress (< 10%)
- Low to medium stress (10-20%)
- Medium to high stress (20-40%)
- High stress (40-80%)
- Extremely high stress (> 80%)

This map shows the average exposure of water users in each country to water stress, the ratio of total withdrawals to total renewable supply in a given area. A higher percentage means more water users are competing for limited supplies. Source: WRI Aqueduct, Gassert et al. 2013



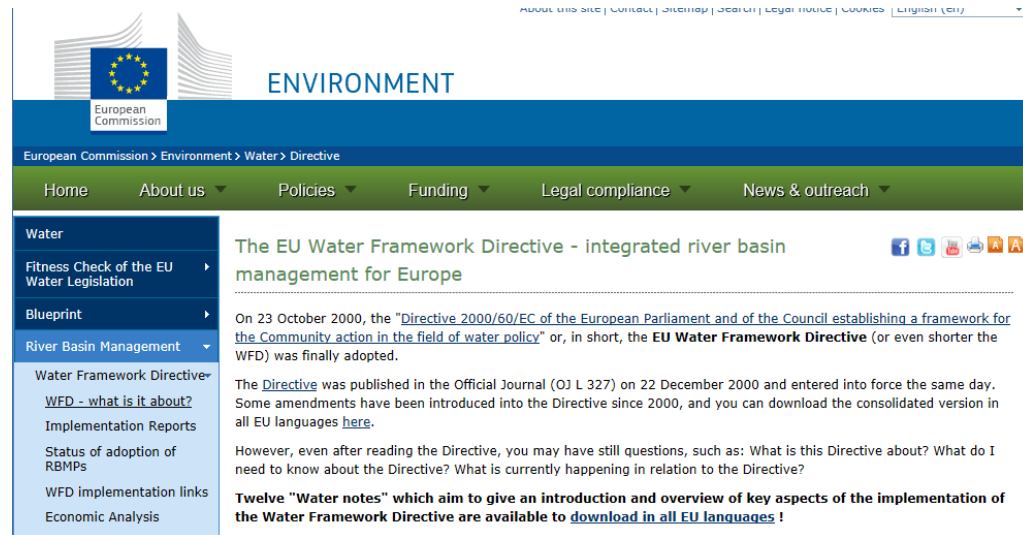
# Resources



# Regulation







European Commission

## ENVIRONMENT

European Commission > Environment > Water > Directive

Home About us Policies Funding Legal compliance News & outreach

Water

- Fitness Check of the EU Water Legislation
- Blueprint
- River Basin Management
  - Water Framework Directive
    - WFD - what is it about?
    - Implementation Reports
    - Status of adoption of RBMPs
    - WFD implementation links
    - Economic Analysis

### The EU Water Framework Directive - integrated river basin management for Europe

On 23 October 2000, the "Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy" or, in short, the **EU Water Framework Directive** (or even shorter the WFD) was finally adopted.

The **Directive** was published in the Official Journal (OJ L 327) on 22 December 2000 and entered into force the same day. Some amendments have been introduced into the Directive since 2000, and you can download the consolidated version in all EU languages [here](#).

However, even after reading the Directive, you may have still questions, such as: What is this Directive about? What do I need to know about the Directive? What is currently happening in relation to the Directive?

**Twelve "Water notes" which aim to give an introduction and overview of key aspects of the implementation of the Water Framework Directive are available to [download in all EU languages](#) !**



European Commission

## ENVIRONMENT

European Commission > Environment > Water > Blueprint

Home About us Policies Funding Legal compliance News & outreach

Water

- Fitness Check of the EU Water Legislation
- Blueprint
- River Basin Management
- Flood Risk Management
- Water Scarcity and Droughts
- Drinking Water
- Bathing Water

### Water reuse

**NEW** Proposal for a regulation on minimum requirements for water reuse

The European Commission proposed on May 2018 new rules to stimulate and facilitate water reuse in the EU for agricultural irrigation. Key documents:

- [Proposal for a regulation on minimum requirements for water reuse and annexes](#)
- [Impact assessment - summary and analytical models used in preparing the impact assessment](#)
- [Assessment of impacts on Research and Innovation](#)
- [Territorial impact assessment report](#)
- [JRC report on minimum quality requirements for water reuse in agricultural irrigation and aquifer recharge](#)
- [Press release - Questions and answers](#)



## WATER IS A FINITE PRECIOUS RESOURCE

Although 72% of the Earth's surface is covered with water, **less than 3% of this water is suitable for uses like drinking and irrigation.**

Source: Live Science

Across the EU, water shortages and droughts have increased dramatically in recent decades. They are likely to become more frequent and more severe in the future.

### WATER SCARCITY AFFECTS



at least **11%** of the European population



and **17%** of the EU territory

Source: EC - Water Scarcity and Drought in the European Union

### Mediterranean region

Around the Mediterranean\*, some **20% of the population lives under constant water stress** and in summer, over 50% of the population is affected by water stress.

\*Spain, Portugal, the Italian peninsula, Southern France, Cyprus, Greece and Malta

Source: IEA - Is Europe's freshwater use sustainable?

### WATER SHORTAGES

have a severe impact on agriculture, industry and tourism.

When less water is available, the environmental impacts can be huge – there is too little water in rivers and lakes, wetlands dry out, and salt water may intrude into groundwater resources.



**Water Scarcity** is no longer confined to a few corners of Europe, and is fast becoming a concern across the EU



**By 2030** water stress and scarcity will probably affect half of Europe's river basins

Source: EC - Report on the Review of the European Water Scarcity and Droughts Policy

EC - Would you drink your wastewater?


### We need to manage our water resources more efficiently


Treated wastewater is an effective alternative water supply. By boosting supplies of good quality water, in addition to water savings, it can help address water scarcity. Reusing water after appropriate treatment extends its life cycle, thereby preserving water resources.

# Pesticides

Commission and its priorities

Policies, information and services



English 

Search

European Commission > Food, farming, fisheries > Food Safety > Plants > Pesticides >

Plants

PESTICIDES

EU Pesticides database

Sustainable use of pesticides

Main Actions

Integrated Pest Management (IPM)

Approval of active substances

Authorisation of Plant Protection Products

Maximum Residue Levels

REFIT Evaluation

ALL TOPICS

## Sustainable use of pesticides

[Directive 2009/128/EC](#) aims to achieve a sustainable use of pesticides in the EU by reducing the risks and impacts of pesticide use on human health and the environment and promoting the use of Integrated Pest Management (IPM) and of alternative approaches or techniques, such as non-chemical alternatives to pesticides. Member States have drawn up National Action Plans to implement the range of actions set out in the Directive.


The [main actions](#) relate to training of users, advisors and distributors of pesticides, inspection of pesticide application equipment, the prohibition of aerial spraying, limitation of pesticide use in sensitive areas, and information and awareness raising about pesticide risks.

Member States must also promote Integrated Pest Management, for which, general principles are laid down in Annex III to the Directive.

The main purpose of this web-portal is to provide:

- key information on the sustainable use of pesticides and
- links to relevant information contained on official websites in the Member States.

There is a [search function](#) to help find the links you are looking for.



More information on main actions.


Share

RELATED LINKS


[National Action Plans \(English\)](#)


[Overview Report- Sustainable Use of Pesticides](#)

[Search our Database for Audit Reports on the Sustainable Use Directive](#)

[Low Risk Plant Protection Products](#) 


[Monitoring and Surveying of Impacts of Pesticide Use](#)


[Guidance Document](#)  [EN](#) [++](#)

[Study on the Impacts of the Use of Plant Protection Products](#) 

[Training for Governmental Officials \(BTSF\)](#)

[Standards for inspection of Pesticide Application Equipment](#)

[Inspection of Pesticide Application Equipment \(External Links\)](#) 

[Links to Related Policy Areas](#) 

RECENT EVENTS

# Pesticides

## Bee-harming pesticides banned in Europe

EU member states vote ushers in continent-wide suspension of neonicotinoid pesticides

● Have your say: is the EU right to ban pesticides?



▲ A bee collects pollen from a sunflower in Utrecht, the Netherlands. EU states have voted in favour of a proposal to restrict the use of pesticides linked to serious harm in bees. Photograph: Michael Kooren/Reuters.

Europe will enforce the world's first continent-wide ban on widely used insecticides alleged to cause serious harm to bees, after a [European commission](#) vote on Monday.

[Home](#) / [News](#) / [Agrifood](#) / [Pesticides](#) / France tables EU-wide non-agricultural pesticide ban

## France tables EU-wide non-agricultural pesticide ban

By Cécile Barbière | [EURACTIV.fr](#) | translated by Samuel White

📅 29-03-2017 (updated: 📅 30-03-2017)

Advertisement



France has banned the use of pesticides in public spaces. [Guillaume Baviera/Flickr]

Languages: [Français](#) | [Deutsch](#)

[Comments](#) [Print](#) [Share](#)

The senator behind France's ban on pesticides for domestic use has submitted a draft European resolution calling on the EU to follow the French example and implement a full ban on the non-agricultural use of pesticides. [EURACTIV France reports](#).

### Supporters



### EURACTIV Members

Brewers of Europe  
CEMA - European Agricultural Machinery  
EFFA - European Flavour Association  
ESA - European Snacks Association  
FEDIOL - European Vegetable Oil and Proteinme...  
FoodDrinkEurope





- **Green Deal sport and golfcourses**

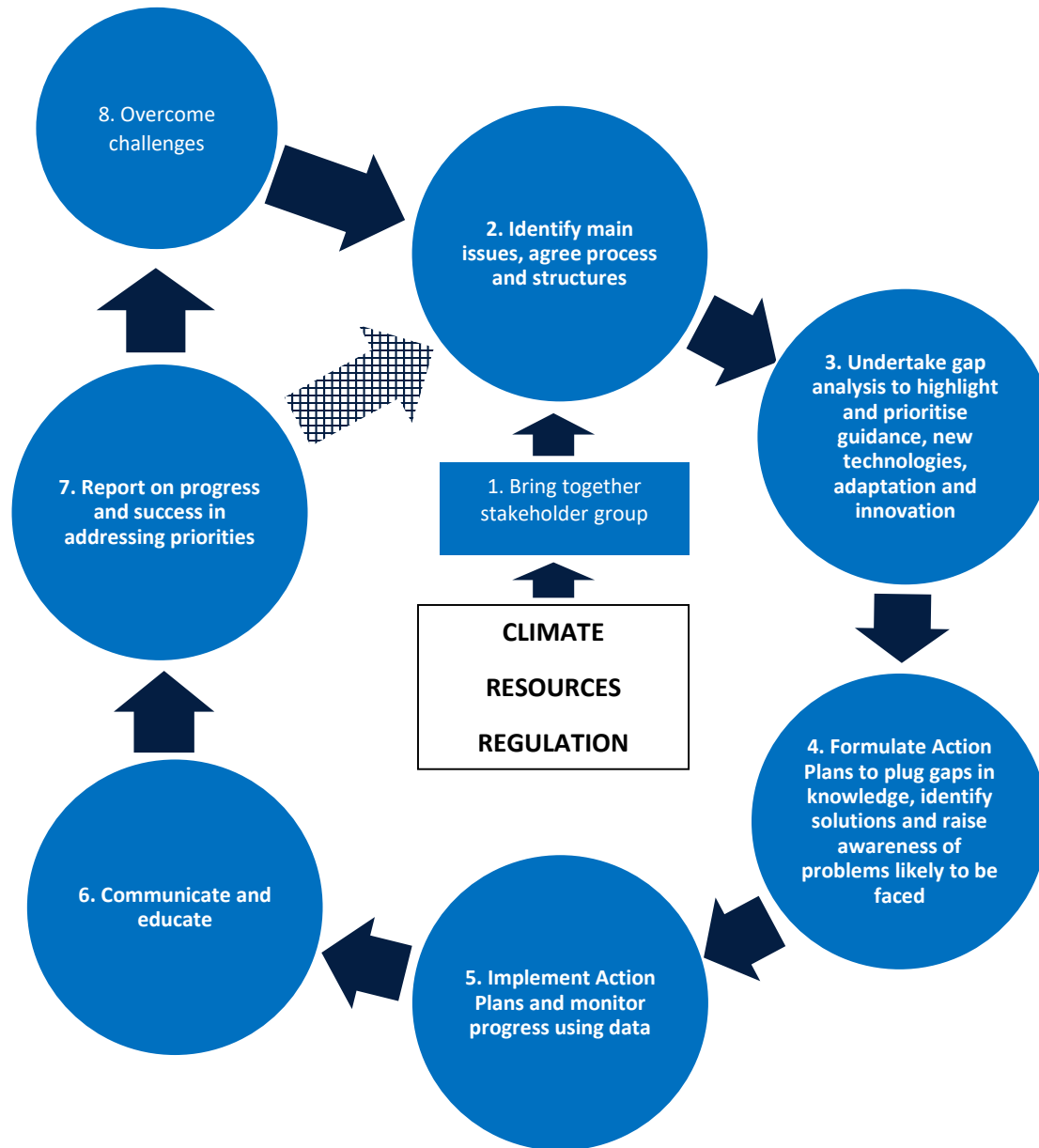
- ❖ **Temporary exemption on the ban until 2020**
- ❖ **Show a very strong reduction in pesticide use (pesticide-free)**
- ❖ **Excellent proof for any exceptions thereafter, if any (no guarantee)**
- ❖ **Innovation: identify bottlenecks and find solutions**

# Scenarios

Business as usual... to worst case.



# Process



# Timeline



2018

September      Industry stakeholder meeting in Manchester



# Industry stakeholders



The R&A

England Golf

Confederation of Golf in Ireland

Scottish Golf

Wales Golf

BIGGA

GCSAI

GCMA

CMAE

UK Golf Federation

PGA

EIGCA

STRI

RIPTA

GEO Foundation

European Tour

Ladies European Tour

SRUC Elmwood

Myerscough College

Crop Protection Association

Agricultural Engineers Association

Irrigation Consultants

British Society of Plant Breeders

Turfgrass Growers Association

Amenity Forum

University of St Andrews

BASIS

Labosport

FEGGA

# Timeline

2018

September      Industry stakeholder meeting in Manchester  
Agree on Priority Issues

- How do we make Golf Course 2030 relevant and compelling to key audiences, engaging golf facilities and golfers?
- Course condition and playability, with particular emphasis on putting surfaces – measurement, standards, education
- Resources, focusing on:
  - alternatives to synthetic chemical plant protection products
  - labour (recruitment, retention, education, the changing nature of the golf course workplace)
  - sand/aggregate availability
- Water as a limited resource (too little in dry summers) and coping with too much in wet winters
- Coastal change and its impact on golf courses

# Timeline

2018

September	Industry stakeholder meeting in Manchester Agree on Priority Issues
October	Working Party appointed



# Working Party



The R&A  
Scottish Golf  
GCSAI  
PGA

England Golf  
BIGGA  
GCMA  
EIGCA

- Review the initial analyses from stakeholders applying for the Lead role in the production of Action Plans
- Appoint stakeholders to take the Lead role in the production of Action Plans
- Review delivered Action Plans and set goals and targets for implementation
- Produce a 'Call for proposals' mechanism
- Consider proposals and produce a priority list of projects deserving support
- Decide if issues have been addressed satisfactorily.

# Timeline

2018

September	Industry stakeholder meeting
October	Working Party appointed Action Plan applications
November/ December	Action Plans awarded Action Plan preparation begins

# Action Plan allocation



- Making Golf Course 2030 relevant
- Course condition and playability
- Resources
- Water
- Coastal change

GEO Foundation

Myerscough College

SRUC

STRI

The R&A

# Timeline

## 2018

September	Industry stakeholder meeting
October	Working Party appointed Action Plan applications
November/ December	Action Plans awarded Action Plan preparation begins

## 2019

April	Action Plans delivered
May	Call for proposals against AP recommendations
August	Projects approved and commence

- GC2030 Action Plan to be delivered by GEO
- We will keep all industry stakeholders informed as we work through the process
- We will pursue opportunities to promote GC2030 at stakeholder events and through stakeholder publications
- We will enable stakeholders to disseminate Golf Course 2030 resources to relevant groups within their own networks using their own media channels (websites, social media, etc)
- We will engage with Government and NGOs to raise awareness of the actions golf is undertaking to encourage sustainability and best practice



# 2019-2020

- Continue the GB&I process
- Learn from the GB&I process
- Engage with selected European countries
- Work through GC2030 for Northern, Central and Southern European regions

# Break out session

In your designated groups:

1. List the industry stakeholders in your region who you feel **MUST** be consulted for the process to have credibility
2. Decide on the 3 priority issues in your region in relation to the impact of climate, resources and regulation on course condition and playability
3. Agree on 3 pieces of work that should be undertaken on each priority issue, e.g. advocacy, education, research
4. Put forward your 3 key target audiences who **MUST** be aware of the initiative and its outcomes and be prepared to explain why they are important
5. Propose the 3 essential communication channels to successfully hit your target audiences

# Break out session

In your designated groups:

1. Nominate a spokesperson
2. Take notes of all decisions made in relation to the 5 activities previously mentioned
3. Report back on the GC2030 process for your region

Thank You

