

The Minerals Planning Conference

Priorities for a New Government







Collaborative water resources planning & minerals

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Minerals Planning Conference 19 June 2024

Water Resources – The Challenge

We all need water, to drink, grow food, manufacture products, extract minerals

We also need water in our rivers to support a healthy environment

Economic and population growth means we will need more water in the future The climate is changing. Less rainfall in the summer means lower river flows

We will see more severe and more frequent droughts

There will be less water available for use

Water resources issues for minerals extraction

- Abstraction of water is a critical part of the minerals industry
- Dewatering required to allow mineral extraction
- Water is used at stages in the production process (e.g. mineral washing, mineral processing, concrete mixing and placing, cooling, dust suppression, vehicle cleaning)
- Location specific water abstraction needed where the minerals are in the ground
- Mineral extraction operations exempt from abstraction licensing until 2021 transition
- Abstraction licences are time limited may not be renewed on the same terms
- Water often recycled and returned to a local water course, which may be different to where it was taken from

Water Resources West



Example catchment



Multi-scale collaborative planning

Water Resources West

Regional

National

Water Resources West a multisector collaboration

A group of abstractors, their representatives and their regulators. Working together to ensure the sustainability of water resources, considering wider societal needs, environmental improvement and crosssector opportunities. Our members

Minerals sector represented by the Mineral Products Association

West

Aublic Water Supply

WRW: Water needs today and growth by 2050

Minerals sector

Other 330

9 million litres per day consumptive

200 million litres per day total licenced volume including non-consumptive

over 50 licence holders

Growth in consumptive abstraction (million litres per day)

Meeting our water resources needs

reducing water

demand

Growth, climate change and other drivers create a need to find 1,200 million litres per day

Making catchments more resilient

A variety of nature-based solutions (NBS) and natural flood management (NFM) solutions

Reducing demand from the public water supply system

exisiting surplus and

drought measures

200

Water company abstraction will be significantly lower, even allowing for growth, freeing up water availability for environmental benefit and/or other use

600 800 400 1,000 1,200 Local solutions by abstractors supported by engagement Making the most of existing assets and new sources where sustainable, including with partners Water

new sources

and transfers

non-

PWS

Resources canals

West

duarries

Innovation

Smarter water management Funding available!

Quarries providing water resources

- Quarries can provide water storage as part of their restoration plan
- This puts the minerals sector in a unique position
- Some examples that feature in current plans, coming into supply in 2040's to 2050's
- West Midlands Quarry, filled from River Severn
- East Midlands Quarry, filled from River Trent
- Mendips Quarry, filled from Bristol Avon
- Further potential to consider flood risk management

Regional plan offers a voice for minerals sector on water resources issues

Highlighting key aspects for the sector:

- Minerals operations routinely include sustainable water management facilities, which ensure, excess water falling within the operations is collected, stored and utilised in the sustainable management of the water environment
- Periods of drought may affect day-to-day operation of a site, to process mineral or use water in environmental controls, such as dust suppression
- Significant delays in determination of water resources applications for new licence applications
- Disparity between the planning permission to extract minerals and the water abstraction licensing
- Progressive quarry restoration opportunities for water storage, biodiversity net gain etc
- Need for planning at an early stage •
- Interdependencies with other sectors: e.g. minerals needed for water treatment, construction etc

Water esources Vest

Headlines from WRW survey of abstractors

of abstractors would experience a major or significant impact if their licence was reduced by 25%.

68% of abstractors are interested in working with others in their catchment but only 1% are part of an abstractor group.

- Don't assume abstraction licences will be there for ever
- Consider water storage as a remediation option
- Engage with regional groups
- Ensure that together we understand the risks, actions and opportunities
- Get in touch if you have ideas for how wireless technology can improve water management in the minerals sector

Operators in the Water Resources West region are encouraged to register their interest in future engagement

www.waterresourceswest.co.uk/get-involved

Water Resources West