Position note on compensation-only reservoirs in dry weather (June 2019)

Background
One of our lessons identified with the water industry following the hot, dry weather of 2018 is that there is a need for clarity about how compensation-only reservoirs (CORs) should be managed during this type of incident. The purpose of this note is to provide that additional clarity for water companies, Defra, ourselves in the Environment Agency and any other interested partners.

What is a COR?
A COR is a reservoir that is owned and operated by a water company but that has no links whatsoever (direct or indirect) to that company's public water supply network. So for example, the COR would not be listed as a source of supply in the company water resources management plan or as an option to provide public water supply in its drought plan. The main or sole function of the COR is to provide a discharge of water (known as a compensation flow) to the downstream watercourse. Appendix One contains some examples (not an exhaustive list) of situations that do and that don't represent a COR.

The legal requirement to provide a compensation flow from a COR is usually found in an abstraction licence, impoundment licence or in a local Act of Parliament. The statutory compensation flow required to be released may be either a single minimum flow rate or it may be more varied.

There are very few CORs in England - United Utilities and Yorkshire Water own the majority of them. The water company is the asset owner for the COR and is therefore responsible for its management and operation, including making, recording and reporting accurate compensation flow releases.

Roles and responsibilities for CORs in dry weather
The key legislation for drought incident management in relation to CORs is set out in the Water Resources Act 1991 (WRA 1991, Part 2, Chapter 3). In this note we make the assumption that the legal tests for both exceptional shortage of rain and for a serious deficiency of supplies (existing or threatened) have been met. In situations where these legal tests are not met then the drought permit and drought order legislation cannot be used.

For reservoirs that are linked (either directly or indirectly) to a water company public water supply network then it is the responsibility of the water company to apply for a drought permit or drought order to change a compensation release (and any other conditions) during a drought. However, for a COR it is the responsibility of the Environment Agency to apply to Defra for a drought order (using Section 73 of the WRA 1991) where we (EA) believe this is necessary to protect the environment. For example, this may be a drought order application to reduce the compensation flow rate so as to eke out releases for longer when storage in the COR is low.
It is essential that the water company and the Environment Agency collaborate fully and openly before, during and after dry weather in order to protect the environment. The water company should:

- Agree with the Environment Agency which (if any) of its reservoirs are CORs. The onus is on the water company to provide information to allow this agreement to be reached (for example, provision of infrastructure schematics and through a site visit to the relevant reservoir). If agreement cannot be reached on whether a reservoir is a COR or not at a technical level between the company and EA then it should be escalated using the senior manager and Director level liaison structures that are in place, until a decision is reached.

- Lead on work to develop triggers for CORs, in collaboration with EA, that allow timely actions to be taken in dry weather (feeding into both the company and EA local drought plans). We suggest the triggers should be produced within 3 months following agreement that a reservoir is a COR.

- Produce an up-front Environmental Assessment Report for CORs, including any monitoring and mitigation needed before, during and after dry weather incidents

- Work with the Environment Agency to draft all of the written material that would need to be submitted to Defra in a drought order application for a COR. The EA is responsible for making any drought order submissions to Defra for a COR during a drought incident.

- Operate the COR efficiently and effectively at all times, including making, recording and regular accurate reporting of compensation flow releases and storage in CORs (weekly provision of this information to the Environment Agency is likely to be appropriate unless more frequent provision of information is needed)

- Operate the COR in line with any drought order that Defra grants to the Environment Agency during a dry weather incident

- Work with the Environment Agency to capture and learn any COR-related lessons in the recovery phase of a drought incident

- Give the Environment Agency adequate notice of any planned changes to its network that may mean a reservoir could become a COR in the future

The Environment Agency should work with the water company as set out above, include any drought order options in its local drought plans and make any drought order application for a COR (in line with plans) to Defra during a drought. If a water company fails to work in a timely collaborative way with us (as outlined in this note) then we will consider taking other actions, such as enforcement action or action under the Environmental Damage Regulations (2009), in order to protect the environment during a drought. Guidance on the Environmental Damage Regulations is online here:-

Appendix One - examples of what is/is not a COR

Example 1: A compensation only reservoir (COR) – no abstraction or link to any abstraction for water supply. This is a COR.

Example 2a: The water company has an abstraction licence for public water supply from the reservoir. Even if this is normally unused (for example, a back-up source for drought), it is not a COR.
Example 2b: The water company has an abstraction licence for public water supply for reservoir A. Abstraction normally occurs, however the company decides to temporarily cease abstraction as levels in the reservoir have fallen. This is also not a COR as it has been used for water supply and will be again once levels in the reservoir recover.

Example 3: Compensation release requirements from reservoir A are tied to reservoir B (say, through an abstraction licence), which is directly/indirectly connected to water supply. This is therefore not a COR as there is a connection to water supply.

Example 4: There’s a minimum maintained flow (MMF) downstream of both reservoirs A & B. Reservoir A is indirectly linked to water supply through the MMF. This is therefore not a COR as there is a connection to water supply.
Example 5: A water company has arrangements by which it could transfer water out of reservoir A to another reservoir which is directly/indirectly connected to water supply. This is therefore not a COR as there is a connection to water supply.

Example 6: Reservoir C is supplied in part by public water supply reservoirs A and B upstream of it. This is therefore not a COR as there is a connection to water supply.
Example 7: Reservoir A inflows are influenced by upstream abstraction for water supply. This is therefore not a COR as there is a connection to water supply.