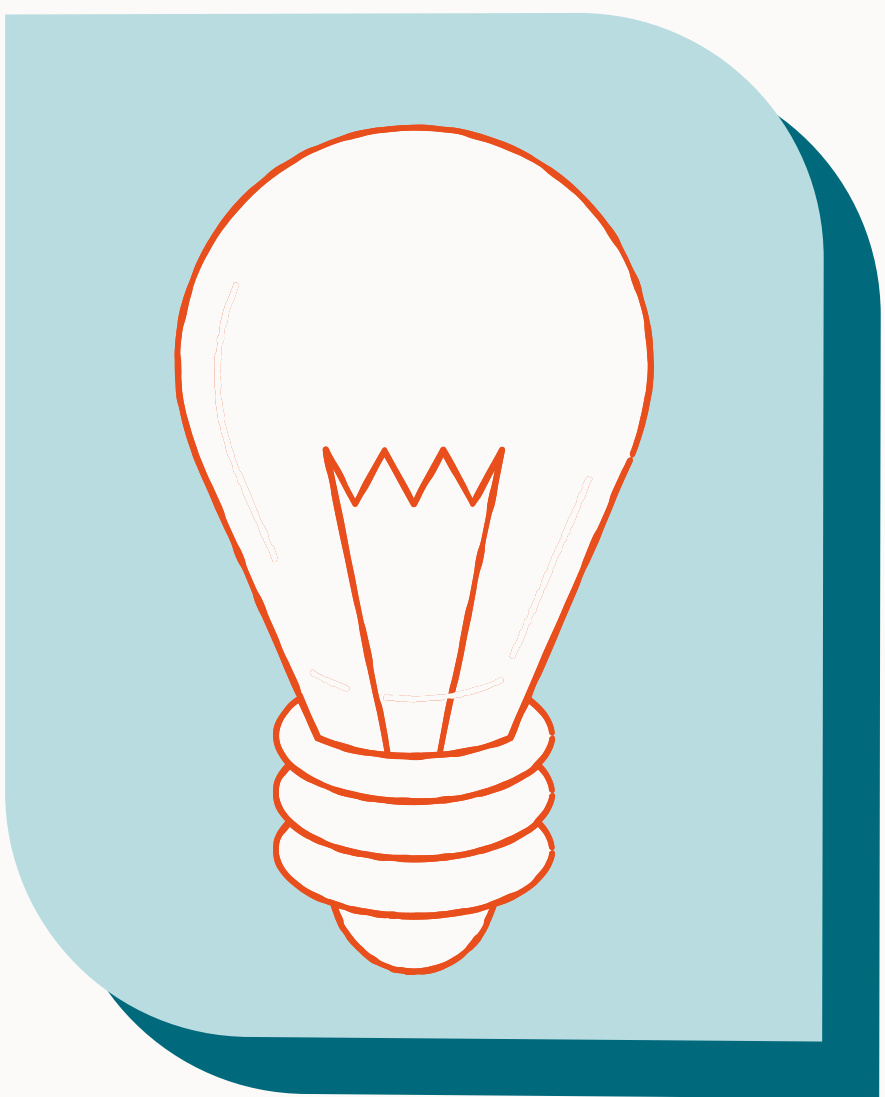


# HUMAN FACTORS IN WATER QUALITY

Scottish Water engaged in **IHF**'s services to provide subject matter expertise in applying HF principles to codesign improved approaches in water quality incident investigations and root cause analysis (RCA's) with operational representatives. We also undertook learning interventions to upskill employees involved in carrying out investigations and analysis.



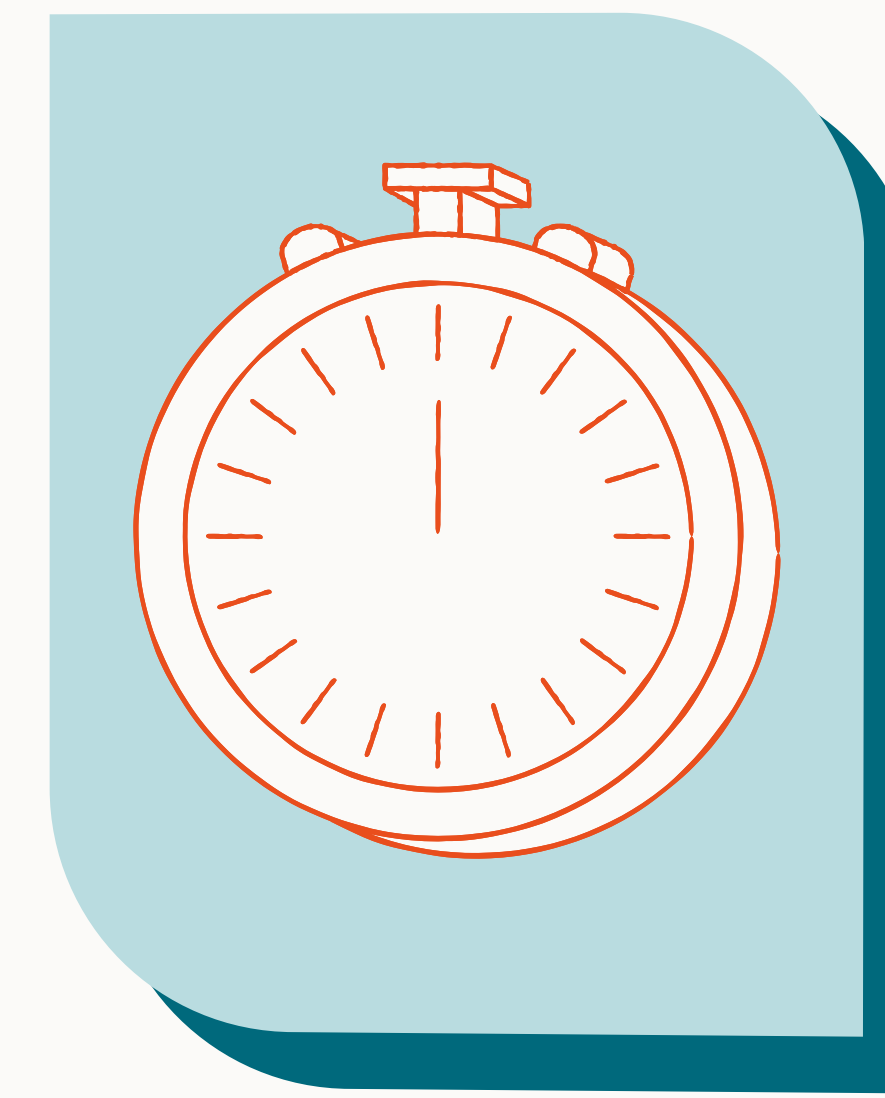
## OBJECTIVES

- Identify** how Scottish Water currently conducts water quality investigations.
- Understand** the level of HF consideration throughout current investigations.
- Explore** how HF can be integrated within the water quality investigative process.



## METHODOLOGY

1. Review Documentation.
2. Site Visit.
3. Engagement Workshops.
4. Feedback Analysis.
5. Implement, Update, and Learning.

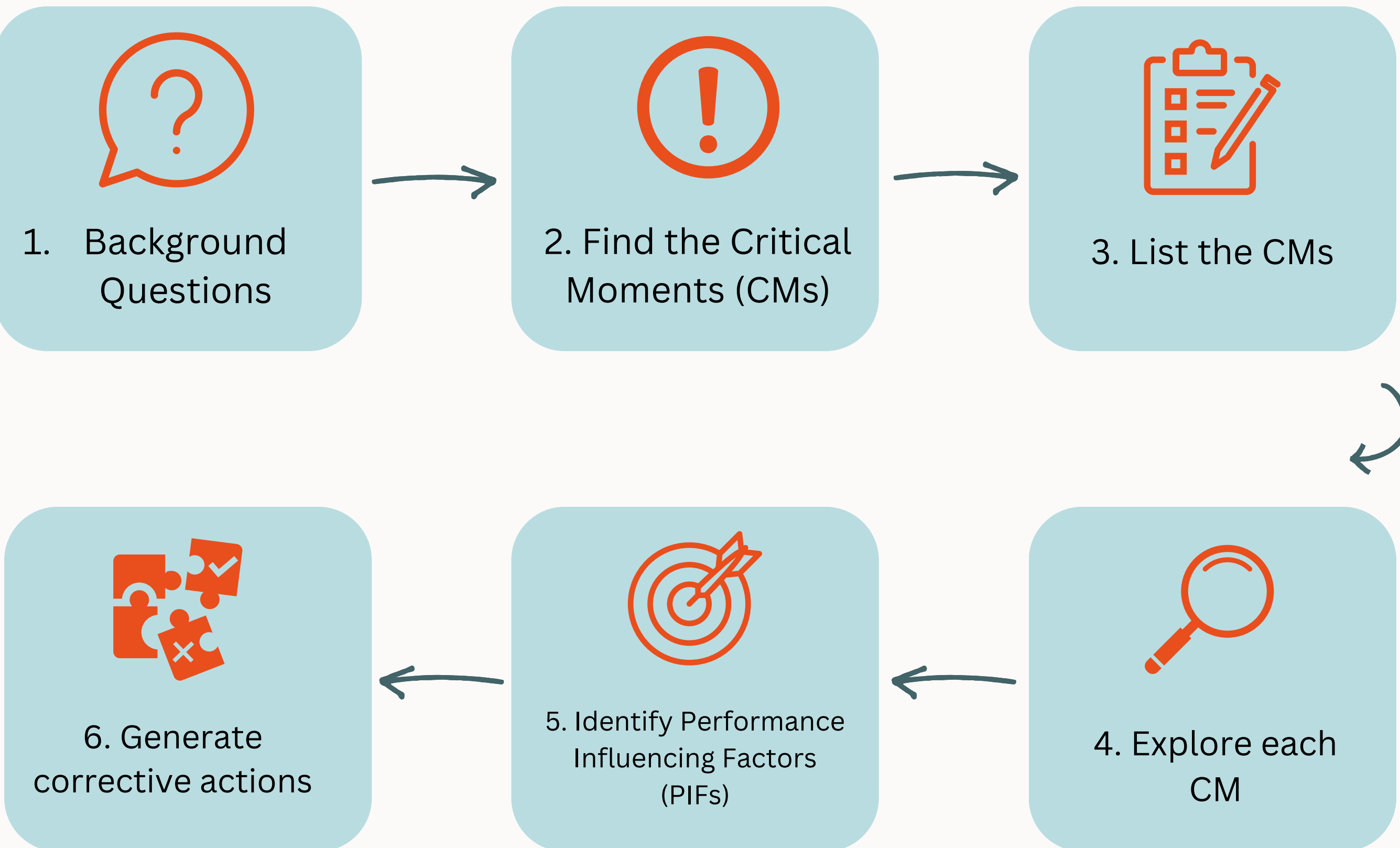


## RESULTS

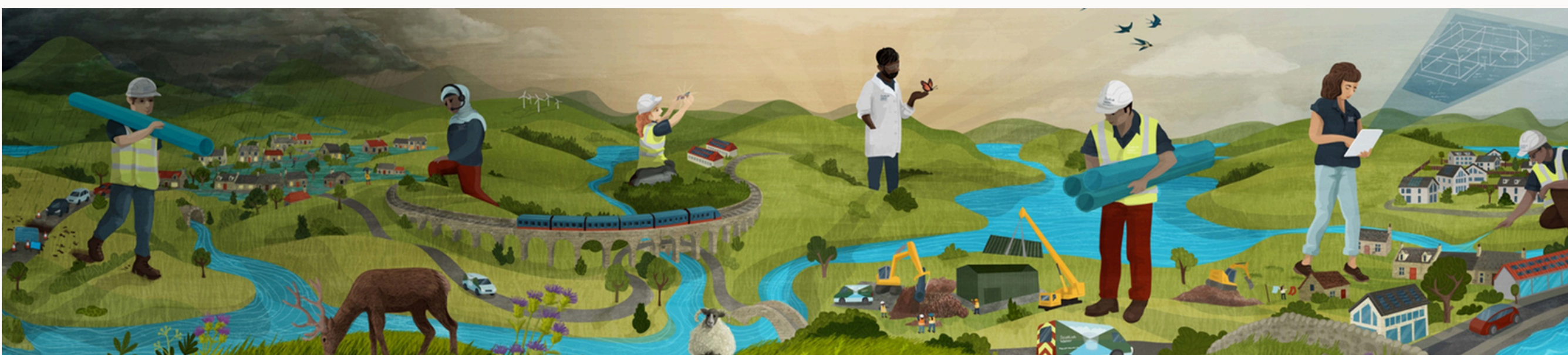
The tool helped Scottish Water stakeholders spot gaps in HF knowledge and enhance their investigation process to involve stakeholders and make effective, manageable recommendations.

## RCA TOOL

The HF Root Cause Analysis (RCA) tool was codesigned to introduce HF thinking into the existing water quality investigation process. The tool enabled the operators to identify human error types, uncover Critical Moments in an incident and ascribe Performance Influencing Factors (PIFs) to an event - recognised as essential HF functions in an investigation.



The HF RCA tool was adapted from our HF Air incident investigation process and software product.



## CONCLUSION

The end of this project marks the initial steps for Scottish Water to become an emerging HF organisation, with a focus in the future on becoming a learning organisation with a just and fair culture regarding the human contribution to water quality events and within the broader organisation.

