



Water Safety Planning (WSP)

آب سالم زیربنای سلامتی و حیات



WHAT IS WSP ?

Water safety planning is basically a proactive risk assessment and risk management approach that encompasses all stages in a water supply from catchment to consumer. It is recommended by WHO as the most effective means of consistently ensuring the safety of drinking-water supply.

SARI, IRAN WATER TREATMENT PLANT



WATER SAFETY PLANNING OCCURS IN FOUR PHASES

WSP DEVELOPMENT: The WSP is established, and all 10 modules are developed and documented in the WSP.

WSP OPERATION: The WSP is applied routinely – that is, in activities that are conducted daily, weekly, and so on.

WSP VERIFICATION: WSP verification programmes take place.

WSP review: The entire WSP is periodically reviewed. It is updated if needed

WHY WATER SAFETY PLANNING IS REQUIRED?

WSP implementation results in a better understanding

of water supply systems and potential risks to public

health. The risk prioritization process assists

decision-makers at all levels in maximizing public health

protection with available resources..

THE RESULTS OF THE IMPLEMENTATION OF THE PROGRAM:

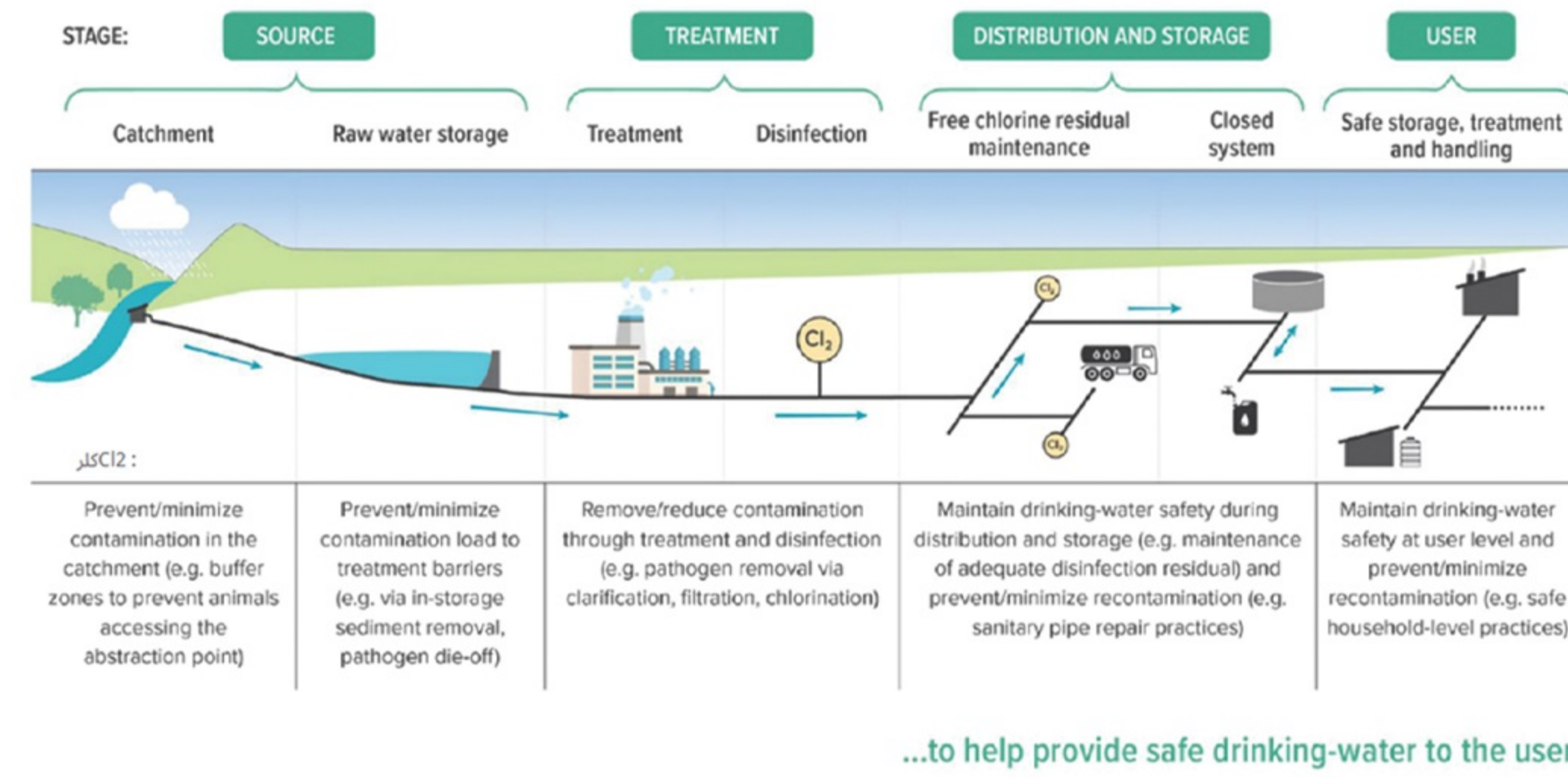
- Prevention of drinking water source pollution
- Water treatment to reduce pollution to meet standards
- Prevention of recontamination of water during storage , distribution and consumption

INTRODUCING PROGRAMME ON WATER SAFETY PLANNING (WSP)

Date: 28 to 30 August 2024 in Sari, Iran

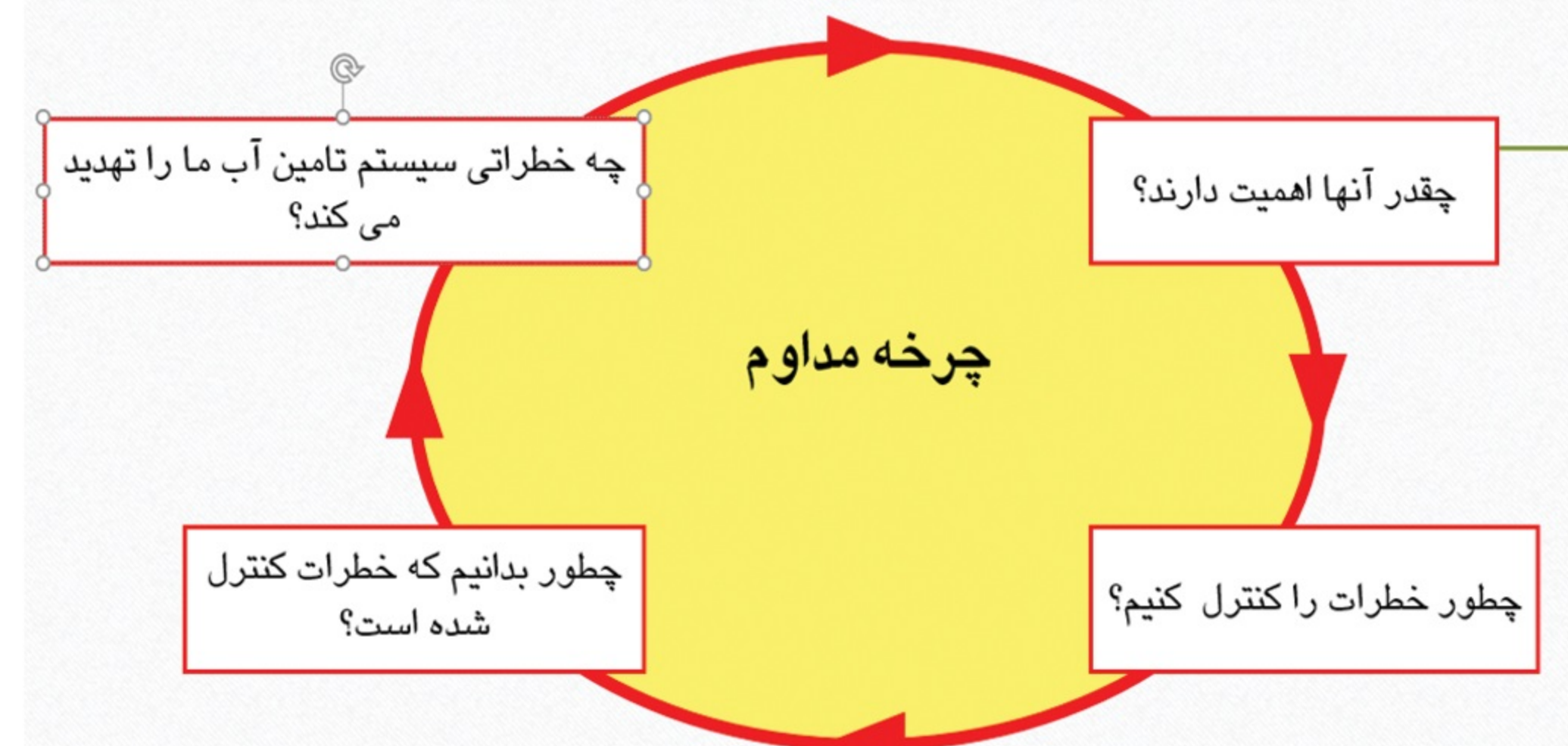
Venue: 25th Iran International Congress of Microbiology

Water safety planning manages risks throughout the entire water supply chain...



...to help provide safe drinking-water to the user

WSP یک چرخه مداوم فکر کردن است!



The purpose of the drinking water safety program is to ensure the quality of drinking water based on risk assessment and management:

Prevention of drinking water source pollution

Water treatment to reduce or eliminate pollution to meet standards

Prevention of recontamination of water during storage, distribution and consumption



شرکت آب و فاضلاب استان مازندران

تصفیه خانه آب به روش اسمز معکوس

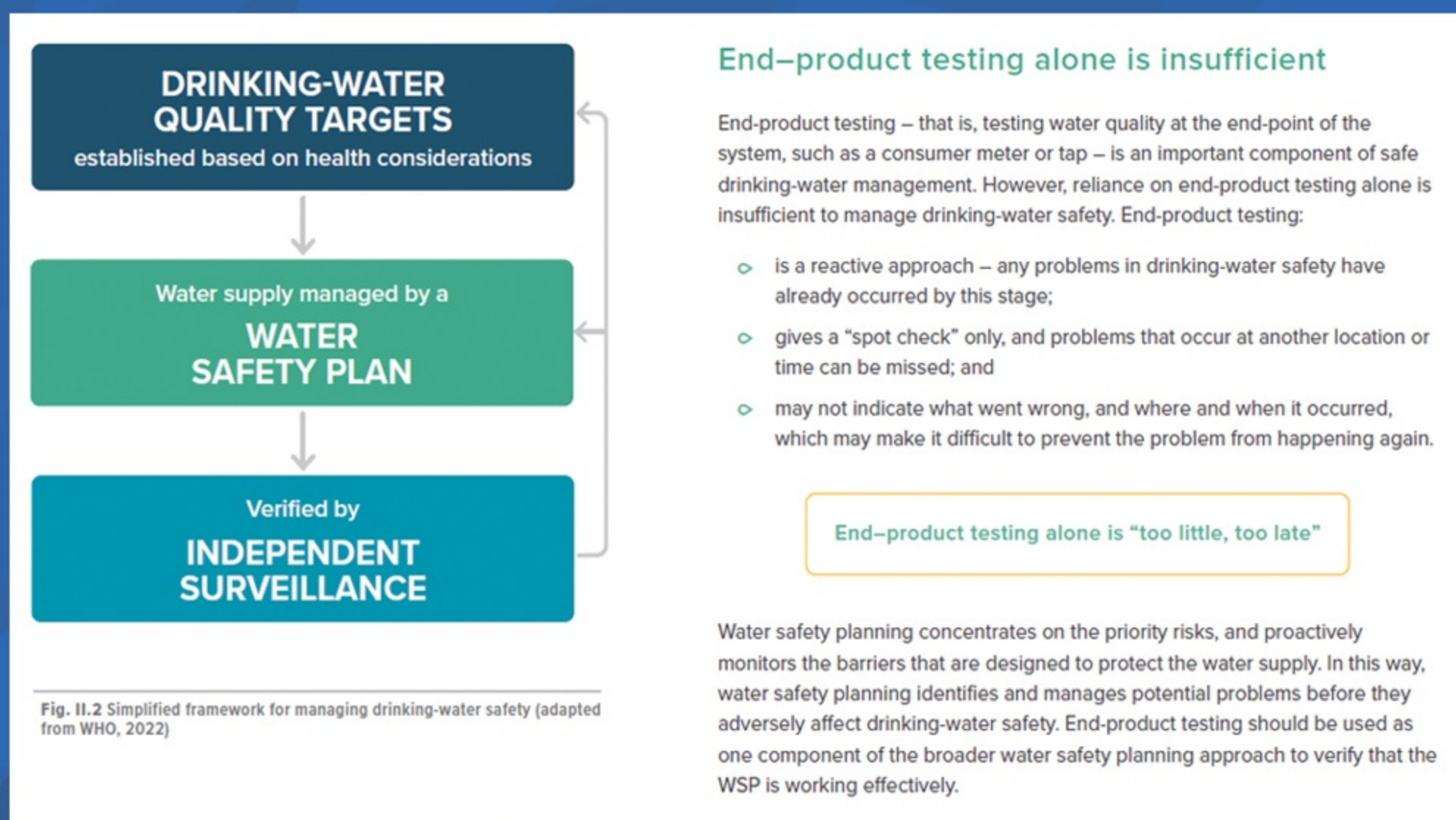
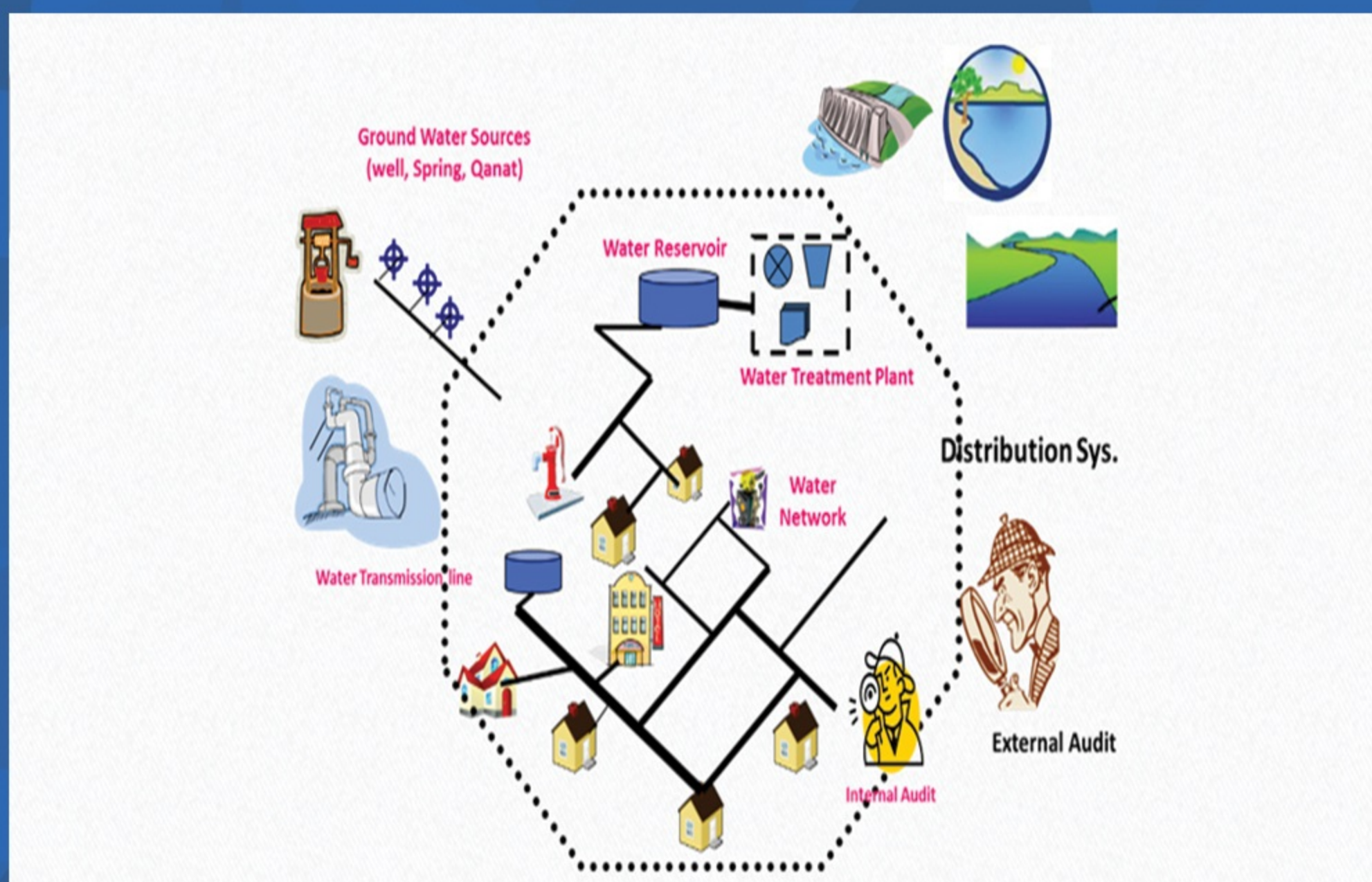


Fig. 11.2 Simplified framework for managing drinking-water safety (adapted from WHO, 2022)



OVERVIEW OF WATER SAFETY PLANNING IN ACTION:



Overview of water safety planning in action:

Water safety planning is a continuous and iterative process for making stepwise improvements in the management of drinkingwater supplies. Water safety planning occurs in four phases

. **WSP DEVELOPMENT:** The WSP is established, and all 10modules are developed and documented in the WSP.

. **WSP OPERATION:** The WSP is applied routinely – that is,in activities that are conducted daily, weekly, and so on.

. **WSP VERIFICATION:** WSP verification programmes take place.

. **WSP REVIEW:** The entire WSP is periodically reviewed.It is updated if needed (e.g. after an incident, a significantchange in the water supply or an audit). This review leads back to the WSP development phase.

Critical to success is ensuring that the WSP is a living document that is embedded within routine water supply management, and is continuously reviewed and progressively strengthened.

The WSP development phase is an important first step, but water safety planning will be ineffective without WSP operation, verification and review. These phases are crucial for ongoing and effective implementation of WSPsand for the benefits of water safety planning to be achieved and sustained.