

## Potable Rainwater Catchment Systems in Lewis County

The purpose of this action is to consider adoption of **ARCSA/ASPE/ANSI Standard 63** and **Appendix K of the 2021 Uniform Plumbing Code** to **Lewis County Code Title 15** to permit construction and use of potable rainwater catchment systems. Included with the adoption is an Environmental Health Policy that defines applicability, review process, technical criteria, as well as design, construction, and operational conditions of approval required to meet these standards.

### Applicability

This approach is for situations where a conventional water source (e.g., drilled well or public water) is not feasible due to site constraints resulting in a documented and verified lack of water availability for an existing home. It provides a regulated alternative for establishing a potable water supply only in these limited situations. **The policy shall not confer water availability for new building permits, new subdivisions, shared or commercial-use, or any habitation beyond existing single-family residences.**

### Overview of the Standard

ARCSA/ASPE/ANSI Standard 63 establishes requirements for the engineered design, construction, and operation of rainwater catchment systems used for drinking water, ensuring systems meet health-based standards. Similar potable systems designed under Standard 63 have been implemented in Island, King, Kitsap, Pacific, San Juan, Skagit, Snohomish, Wahkiakum, and Whatcom Counties (per CJ Huxford, NW Rain Solutions).

### System Components:

- **Collection:** Approved, non-toxic roof surfaces and conveyances, screened gutters
- **Pre-Filtration:** Removal of debris prior to storage
- **Storage:** 40k+ gallon sealed cisterns, calming inlet and floating outlet, overflow skimmers
- **Treatment:** Engineered filtration and disinfection to potable standards
- **Distribution:** Delivery through approved plumbing

These components function together to maintain water quality from collection through use.

### Potable Standards and Operation

For approval, systems must achieve:

- No detectable E. coli
- Low turbidity
- Required pathogen reduction through disinfection treatment with failsafes
- IOCs below applicable MCLs

Ongoing owner-responsibilities include:

- Water quality testing
- Routine homeowner and professional inspection and maintenance
- Recorded owner, designer, and operator affidavits on property title

### Key Point

This is a limited-use option for adopting standards used throughout western Washington to review and approve potable rainwater systems when conventional water sources are not feasible.