

Drinking Water Quality Index Explanation

The Drinking Water Quality Index (WQI) is intended to provide an easy to understand “ranking of water quality”. The Index is determined by comparing 23 commonly monitored chemical constituents within a community’s drinking water to the Saskatchewan Drinking Water Quality Standards and Objectives.

The water quality analysis data used to calculate the Index is based on what has been submitted by the communities within the last three years. The evaluation produces a number between 0 and 100 and in turn the numerical value is ranked as poor, marginal, fair, good, or excellent.

The results of testing for the following trace substances found in drinking water are used to calculate the index: Alkalinity; Aluminum; Arsenic; Barium; Boron; Cadmium; Chloride; Chromium; Copper; Fluoride; Hardness; Iron; Lead; Manganese; Nitrate; Selenium; Sodium; Sulphate; Total Dissolved Solids; Trihalomethanes; Uranium; Zinc; and pH.

Drinking Water Quality Index Rankings

- **Excellent - WQI Value 95-100:** Water quality is protected with a virtual absence of impairment; conditions are very close to pristine levels. These index values can only be obtained if all measurements meet recommended guidelines virtually all of the time.
- **Very Good - WQI Value 89-94:** Water quality is protected with a slight presence of impairment; conditions are close to pristine levels.
- **Good - WQI Value 80-88:** Water quality is protected with only a minor degree of impairment; conditions rarely depart from desirable levels.
- **Fair - WQI Value 65-79:** Water quality is usually protected but occasionally impaired; conditions sometimes depart from desirable levels.
- **Marginal - WQI Value 45-64:** Water quality is frequently impaired; conditions often depart from desirable levels.
- **Poor - WQI Value 0-44:** Water quality is almost always impaired; conditions usually depart from desirable levels.

Some waterworks may not have a Drinking Water Quality Index ranking. This can occur if a community failed to submit its required water samples for General Chemical or Health and Toxicity analysis in the last three years. Communities or pipelines that receive treated water from another waterworks or community should refer to the index value of their source community.

The Drinking Water Quality Index is **not** an absolute indicator of the overall safety of the water delivered to the consumers tap. It is one factor that a consumer may choose to consider in evaluating drinking water quality. A community’s water may meet the standards used to determine the Index, but may still not be safe to drink from time to time due to bacteriological factors, a lack of minimum treatment, infrastructure deficiencies, treatment or disinfection system upsets, or other unexpected occurrences. Please refer to www.SaskH2O.ca to determine if a Precautionary Drinking Water Advisory or Emergency Boil Water Order is in place for your community of interest.