

Appendix G: Indicator Quality Review Form

A. General Background

1. What is the theme this indicator is part of (e.g., land, water, air, global change, human health, ecological health)?
2. What is the name of the Indicator/data set?
3. What is the question the indicator set is being proposed to address?
4. How does this indicator address the questions? (conceptual relevance)
5. Does this indicator/data set require additional processing to optimally address this question and if so, what?
6. Has this indicator previously been peer reviewed? If so, please provide details. This question has been moved from Data Processing and Analysis section.

C. Sample Design

1. Generally describe how the data are/were collected (Research, general monitoring, compliance monitoring, regulatory requirement)?
If collected under a regulatory requirement, please specify the regulation and links to the regulation and associated guidance.

2. What was the sample design or the monitoring plan?

3. Were any specific strata omitted from the sampling plan (e.g., small systems not in the sampling plan, roads less than 2 miles long, habitat types less than 20 acres)?

4. Which of the processes below was used to select the sites where information is/was collected?
 - a) Sites selected using a statistical design that enables generalization to entire resource (e.g., probability survey design to select sample of lakes or streams for the United States. such as NRI, NASS, FHM, FIA)
 - b) Sites determined to meet administrative or regulatory requirements such as sources of or water supply systems.
 - c) Sites chosen to address suspected or known problems (e.g., Hot spots).
 - d) Randomly selected sites.
 - e) Sites selected in unknown way.

D. Coverage

1. Is there uniform national coverage of information for this indicator?
2. Were data collected in some areas but not others?
3. Was the data collected using remote sensing? If yes please specify the sensor, date and the resolution of the data.
4. If the data are derived from mapped information, what was the original map scale or resolution?

E. Data Processing and Analyses

1. What kinds of analyses have been performed on the data? Please explain.
2. Are the values used in the indicator raw data? Aggregated data? Calculated data? Inferred data? Last sentence deleted, redundant with 1.
3. Are these analyses standard methods? Please reference.
4. Were these results published? If yes please give reference or link.
5. Were these results peer reviewed? If yes by whom? Give references.
6. How were the values calculated or determined?

15. Which of the following was used to generalize or portray data beyond the specific sampling points?

- a) Defensible statistical survey analysis inference procedures used to generalize to entire United States. (e.g., current OW National Lake Fish tissue contaminant survey, FIA, FHM, NRI)
- b) Defensible statistical model inference procedures used to generalize to entire United States (e.g., generation of wet deposition maps for US or generation of air quality information using kriging).
- c) Semi-empirical environmental/ecological model predictions. (e.g., USGS use of SPARROW model to predict nutrients in rivers based on statistical relationships and simple hydrologic flow models)
- d) Generalization is restricted to sites visited and it is possible to give a well- defined, meaningful definition of the portion of the ecological resource covered.
- e) No generalization possible and no meaningful way to identify the subset of the ecological resource represented by the collection of sites.

F. Data Accessibility

1. Are the data readily available? If yes, please give reference, link or contact.

2. Are the summary reports available? If yes, please give reference, link or contact.

3. Have these results been published? If yes, please give reference.

G. Message or Interpretation

1. Are the messages or answers to the questions appropriate, sound, and understandable?