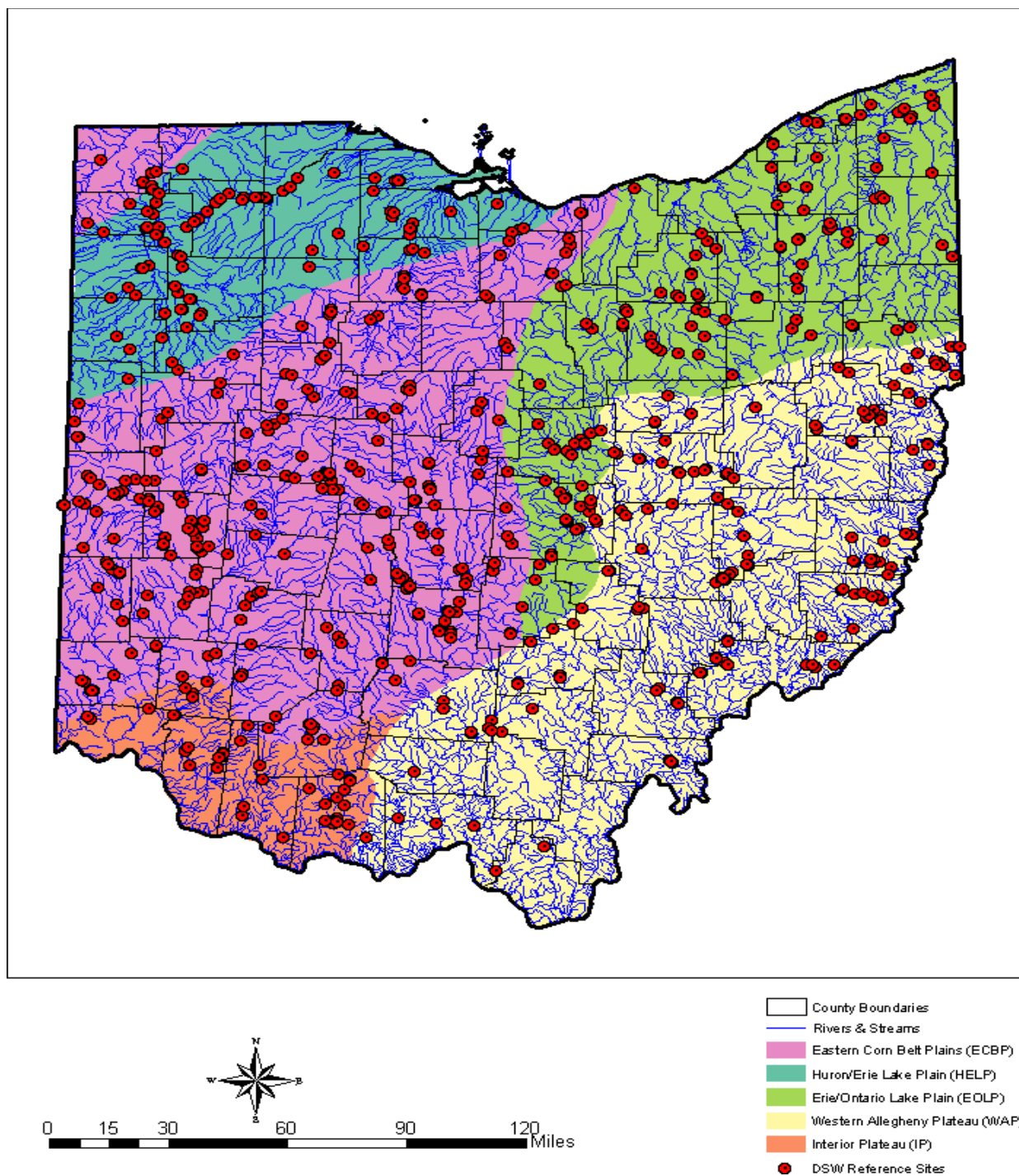


[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this appendix, see rule 3745-300-15 of the Administrative Code titled "Incorporation by reference - voluntary action program."]

In this appendix, mg/kg means milligrams per kilogram, NA means not applicable, and µg/kg means micrograms per kilogram.

**Table I: Statewide and regional sediment reference values (mg/kg)**

| Table I<br><br>Chemical of Concern | Chemical Abstract Service Number (CAS #) | Statewide | Ecoregions (a)                  |                                                                           |                                                                           |                       |                                 |
|------------------------------------|------------------------------------------|-----------|---------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------|---------------------------------|
|                                    |                                          |           | Eastern Corn Belt Plains (ECBP) | <del>Huron-Erie Lake Plain (HELP)</del><br>Erie-Ontario Lake Plain (EOLP) | <del>Erie-Ontario Lake Plain (EOLP)</del><br>Huron-Erie Lake Plain (HELP) | Interior Plateau (IP) | Western Allegheny Plateau (WAP) |
| Antimony                           | 7440-36-0                                | NA        | 0.92                            | 1.3                                                                       | 0.84                                                                      | NA                    | NA                              |
| Arsenic                            | 7440-38-2                                | NA        | 18                              | 25                                                                        | 11                                                                        | 11                    | 19                              |
| Barium                             | 7440-39-3                                | NA        | 240                             | 190                                                                       | 210                                                                       | 170                   | 360                             |
| Beryllium                          | 7440-41-7                                | 0.8       | NA                              | NA                                                                        | NA                                                                        | NA                    | NA                              |
| Cadmium                            | 7440-43-9                                | NA        | 0.90                            | 0.79                                                                      | 0.96                                                                      | 0.30                  | 0.80                            |
| Chromium, Total                    | 7440-47-3                                | NA        | 40                              | 29                                                                        | 51                                                                        | 30                    | 53                              |
| Cobalt                             | 7440-48-4                                | 12        | NA                              | NA                                                                        | NA                                                                        | NA                    | NA                              |
| Copper                             | 7440-50-8                                | NA        | 34                              | 32                                                                        | 42                                                                        | 25                    | 33                              |
| Lead                               | 7439-92-1                                | 47        | NA                              | NA                                                                        | NA                                                                        | NA                    | NA                              |
| Manganese                          | 7439-96-5                                | NA        | 780                             | 1,500                                                                     | 1,000                                                                     | 1,400                 | 3,000                           |
| Mercury                            | 7439-97-6                                | 0.12      | NA                              | NA                                                                        | NA                                                                        | NA                    | NA                              |
| Nickel                             | 7440-02-0                                | NA        | 42                              | 33                                                                        | 36                                                                        | 33                    | 61                              |
| Selenium                           | 7782-49-2                                | NA        | 2.3                             | 1.7                                                                       | 1.4                                                                       | 1.6                   | 2.6                             |
| Silver                             | 7440-22-4                                | 0.43      | NA                              | NA                                                                        | NA                                                                        | NA                    | NA                              |
| Thallium                           | 7440-28-0                                | 4.7       | NA                              | NA                                                                        | NA                                                                        | NA                    | NA                              |
| Vanadium                           | 7440-62-2                                | 40        | NA                              | NA                                                                        | NA                                                                        | NA                    | NA                              |
| Zinc                               | 7440-66-6                                | NA        | 160                             | 160                                                                       | 190                                                                       | 100                   | 170                             |



(a) Figure 1: Ohio Ecoregions including Division of Surface Water (DSW) Sampling Locations

**Table II: Consensus-based threshold effect concentrations<sup>1</sup>**

| Chemical of Concern                                        | Chemical Abstract Service Number (CAS #) | Consensus-Based Threshold Effect Concentration |
|------------------------------------------------------------|------------------------------------------|------------------------------------------------|
| <b>Metals (mg/kg dry weight)</b>                           |                                          |                                                |
| Arsenic                                                    | 7440-38-2                                | 9.8                                            |
| Cadmium                                                    | 7440-43-9                                | 0.99                                           |
| Chromium                                                   | 7440-47-3                                | 43                                             |
| Copper                                                     | 7440-50-8                                | 32                                             |
| Lead                                                       | 7439-92-1                                | 36                                             |
| Mercury                                                    | 7439-97-6                                | 0.18                                           |
| Nickel                                                     | 7440-02-0                                | 23                                             |
| Zinc                                                       | 7440-66-6                                | 121                                            |
| <b>Polycyclic Aromatic Hydrocarbons (µg/kg dry weight)</b> |                                          |                                                |
| Anthracene                                                 | 120-12-7                                 | 57                                             |
| Benz[a]anthracene                                          | 56-55-3                                  | 110                                            |
| Benzo[a]pyrene                                             | 50-32-8                                  | 150                                            |
| Chrysene                                                   | 218-01-9                                 | 170                                            |
| Dibenz[a,h]anthracene                                      | 53-70-3                                  | 33                                             |
| Fluoranthene                                               | 206-44-0                                 | 420                                            |
| Fluorene                                                   | 86-73-7                                  | 77                                             |
| Naphthalene                                                | 91-20-3                                  | 180                                            |
| Phenanthrene                                               | 85-01-8                                  | 200                                            |
| Pyrene                                                     | 129-00-0                                 | 200                                            |
| Total PAHs                                                 | NA                                       | 1,600                                          |
| <b>Polychlorinated Biphenyls (µg/kg dry weight)</b>        |                                          |                                                |
| Polychlorinated Biphenyls, Total                           | 1336-36-3                                | 60                                             |
| <b>Pesticides (µg/kg dry weight)</b>                       |                                          |                                                |
| Chlordane                                                  | 57-74-9                                  | 3.2                                            |
| DDD                                                        | 72-54-8                                  | 4.9                                            |
| DDE, p,p'-                                                 | 72-55-9                                  | 3.2                                            |
| DDT                                                        | 50-29-3                                  | 4.2                                            |
| DDTs, Total                                                | NA                                       | 5.3                                            |
| Dieldrin                                                   | 60-57-1                                  | 1.9                                            |
| Endrin                                                     | 72-20-8                                  | 2.2                                            |
| Heptachlor Epoxide                                         | 1024-57-3                                | 2.5                                            |
| Hexachlorocyclohexane, Gamma- (Lindane)                    | 58-89-9                                  | 2.4                                            |

<sup>1</sup> Consensus-based threshold concentrations from MacDonald, Ingersoll and Berger's "Development and Evaluation of Consensus-based Sediment Quality Guidelines for Freshwater Ecosystems" are rounded to two significant digits.