

## TABLE OF CONTENTS (continued)

|  | <u>Page<br/>Number</u> |
|--|------------------------|
| 3.7.4 Effects on Aquatic Macroinvertebrates                                    | 3-107                  |
| 3.7.5 Effects on Bacteria and Fungi  | 3-108                  |
| 3.7.6 Effects on Amphibians  | 3-109                  |
| 3.7.7 Effects of Low pH on Fish  | 3-112                  |
| 3.7.8 Effects of Aluminum and Other Metals on Fish                             | 3-115                  |
| 3.7.9 Accumulation of Metals in Fish   | 3-123                  |
| 3.7.9.1 Mercury  | 3-123                  |
| 3.7.9.2 Lead   | 3-123                  |
| 3.7.9.3 Cadmium  | 3-126                  |
| 3.7.9.4 Aluminum and Manganese   | 3-126                  |
| 3.7.10 Effects on Fisheries in Canada and the<br>United States                 | 3-126                  |
| 3.7.10.1 Adirondack Region of New York   | 3-126                  |
| 3.7.10.2 Ontario   | 3-129                  |
| 3.7.10.3 Quebec  | 3-132                  |
| 3.7.10.4 Nova Scotia   | 3-133                  |
| 3.7.10.5 Scandinavia   | 3-138                  |
| 3.7.11 Response to Artificial Acidification                                    | 3-139                  |
| 3.7.12 Effects of Acidic Deposition on Birds<br>and Mammals                    | 3-141                  |
| 3.8 CONCERN FOR IRREVERSIBLE EFFECTS   | 3-144                  |
| 3.8.1 Loss of Genetically Unique Fish Stocks                                   | 3-144                  |
| 3.8.2 Depletion of Acid Neutralizing Capacity                                  | 3-146                  |
| 3.8.3 Soil Cation and Nutrient Depletion                                       | 3-146                  |
| 3.9 ATMOSPHERIC SULPHATE LOADS AND THEIR RELATIONSHIP<br>TO AQUATIC ECOSYSTEMS | 3-146                  |