

SECTION ISUMMARY

## 1.1 INTRODUCTION

Wet and dry deposition of acidic substances and other pollutants in long-range atmospheric transport are currently being observed in most of eastern North America. The Impact Assessment Work Group was charged with identifying and making an assessment of the physical and biological consequences related to these transboundary air pollutants.

During Phase II, the overall efforts of the Impact Assessment Work Group were dedicated to updating and reviewing the research results presented in the Phase I report for all sections of the working paper. While there are areas which have remained unchanged, most of the working paper has been rewritten to reflect the inclusion of new information.

The Work Group has stressed the following six areas in phase two:

- (1) Identification of efforts to broaden our understanding concerning the dose/response relationship relating acidic deposition with specific reference to sulphate loadings in determining effects on aquatic ecosystems.
- (2) Integration of information on soil characteristics and geology into an ecosystem approach to mapping areas sensitive to acid deposition for eastern North America.
- (3) Consideration of the adverse effects due to corrosion processes on structures by both sulphur dioxide ( $\text{SO}_2$ ) and sulphates ( $\text{SO}_4^{2-}$ ).
- (4) Broadening the discussion on health effects to ascertain impacts due to ozone acting either alone or in combination with sulphur compounds.
- (5) Undertaking a review of the feasibility of determining the economic benefits of controlling transboundary air pollution.
- (6) Completion of an initial external peer review of the phase two working paper - (see list of reviewers preceding this section).
- (7) Inclusion of an extensive review of additional research needs required to provide further understanding of the impacts associated with transboundary air pollution - (see listing of research needs at the conclusion of each Section of the report).