# 5.0 CUMULATIVE IMPACTS

## 5.1 INTRODUCTION

Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time, when adding the incremental impact of a Proposed Project to other past, present, and reasonably foreseeable future actions (Future Actions), regardless of what agency (federal or nonfederal) or person undertakes such actions (40 C.F.R. 1508.7). Chapter 3, Affected Environment, presents information about past and present environmental conditions, including past trends that are expected to continue into the future. Chapter 4, Environmental Consequences, presents the environmental and socioeconomic consequences of implementing Alternative 1 (Proposed Project) and the alternatives. This chapter addresses the cumulative impacts of the Navy Base ICTF when combined with other past, present, and Future Actions.

The cumulative impact assessment provides a broader assessment of potential impacts associated with implementing Alternative 1 (Proposed Project) and the alternatives by considering a wide array of other activities, new and ongoing projects, and programs in the study area. The potential interactions between the Navy Base ICTF and Future Actions and programs are identified in order to assess potential adverse or beneficial cumulative impacts. Each of the resource areas evaluated in this EIS was screened to determine the potential for cumulative impacts, as described below. Those resources with the potential for cumulative impacts were carried forward for further analysis.

The key to a cumulative impact analysis is the identification of Future Actions within a clearly defined geographic and temporal scope. These elements are defined below:

- **Geographic Scope** – The geographic area over which past, present, and Future Actions are identified and evaluated. The geographic scope is related to specific environmental resources. For example, the geographic area over which impacts on air resources (related to the airshed) are considered is different than the area considered for transportation (the county road system). The geographic scope of a cumulative impacts analysis is influenced by both direct and indirect impacts.
- **Temporal Scope** – The time span over which past, present, and Future Actions are identified and cumulative impacts are evaluated. The time span for this analysis is through 2038.

- **Reasonably Foreseeable Future Actions** – Potential federal or nonfederal actions identified within the geographic and temporal scopes of the Proposed Project and alternatives. The predicted impacts of the Future Actions are combined with the potential direct and indirect impacts of the Proposed Project to determine potential future cumulative impacts on a given resource. The term "reasonably foreseeable" is not defined in the regulations. For this analysis, Future Actions are those for which information available suggests that they are likely to occur.

The identification of past, present, and Future Actions and trends involves some uncertainty, as does the assessment of the magnitude of impacts now and in the future. The cumulative impacts analysis is designed to explore the range of potential cumulative impacts while recognizing that uncertainty. Cumulative effects are identified to allow decision makers to be informed that changes may be necessary in existing programs or that future regulatory initiatives may be required.

## 5.2 GEOGRAPHIC AND TEMPORAL SCOPE

A cumulative impacts analysis requires expanding the geographic area of the study beyond that of the Proposed Project and expanding the temporal limits to consider past, present, and future actions that may affect the resources of concern. Individual geographic boundaries (study areas) were established in Chapter 3 for each resource area evaluated in this EIS. These study areas were used in the cumulative impacts analysis.

The Navy Base ICTF would have impacts during construction and operation. At project inception the Navy Base ICTF was expected to have a construction period that would last approximately five years, with an opening year of 2018; however, the actual opening year has not been determined at this time. The time frame for the cumulative impacts assessment extends to the year 2038, which includes the construction period and approximately 20 years of operation, and is consistent with the time frame for other impact analyses presented in this EIS. This period extends beyond the practical limits of predictability for some topics, such as air quality and water quality issues, but is a reasonable time period for which to assess potential cumulative impacts. The timeframe used for historical examination of cumulative impacts for specific resources varies depending upon the availability and applicability of information.