

I. INTRODUCTION

Bainbridge Island is located within the central Puget Sound Basin, east of the Kitsap Peninsula and west of the City of Seattle and in the year 2000 had a population of 20,308 (US Census). The Island is approximately five miles wide and ten miles long, encompassing approximately 17,778 acres, or 28 square miles, and is one of the largest Islands in Puget Sound. The Island is characterized by an irregular coastline of approximately 53 miles, with numerous bays and inlets and a significant diversity of other coastal land forms (i.e. spits, bluffs, dunes, lagoons, cusped forelands, tombolos, tide flats, stream and tidal deltas, islands, and rocky outcrops).

A. BEST AVAILABLE SCIENCE

This summary of the best available science (BAS) is the foundation of the Nearshore Assessment. The goal of this document is to summarize the existing nearshore scientific literature as it relates to the environment of Bainbridge Island. Topics include nearshore species, habitats, functions, and processes, as well as how human activities might affect nearshore systems. Because this project will provide a management basis for City regulations, this document meets the legal requirement established under the Growth Management Act (WAC 365-195-900 through 365-195-925) to use BAS when revising comprehensive plans and development regulations. The requirement includes definitive standards as to what constitutes BAS and who qualifies as an expert. The material presented here, as well as the consultants and technical advisors working on this project, meet these standards.

It should be noted that best available science is just that, best available, and includes only the scientific knowledge and resource information available at this time. By its nature, this summary document is not independently exhaustive. It was intended that this document rely and build upon other recent and more extensive BAS projects, in addition to available local scientific information, to focus on the environment and human activities specific to Bainbridge Island. It should also be noted that the Nearshore Assessment is expected to produce more detailed and updated information than is presented in this BAS document. Forthcoming documents from the Nearshore Assessment project will be based upon the information presented here, but will also depart from this document with new knowledge, data, and professional analysis.

B. ORGANIZATION OF THE REPORT

This report is organized to assist the reader in understanding the nearshore ecosystem and the associated effects of human modifications. Chapter II provides a brief overview of nearshore ecological concepts, defines key terms, and provides a conceptual model that establishes a framework for understanding the impacts of human shoreline alterations to nearshore ecosystems. Subsequent chapters are organized on the basis of this conceptual model. Chapter III discusses nearshore physical characteristics and dynamics, Chapter IV discusses nearshore habitats, and Chapter V discusses nearshore biological resources. Chapter VI discusses the effects of nearshore modifications, while Chapter VII provides summary conclusions and recommendations. Because this document is intended to be a summary, the reader is encouraged to refer to the bibliographic references for additional information (Chapter VIII). This

document, although written for a broad audience, includes many technical terms and concepts. The reader is encouraged to refer to the extensive glossary (Chapter IX) and list of acronyms and abbreviations (Appendix C). .