

**Identification of OCS
Renewable Energy Space-Use
Conflicts and Analysis of
Potential Mitigation Measures**

LITERATURE REVIEW

Project MO9PS00065

Michael Harte
Holly V. Campbell
Janet Webster

Oregon State University
31 March 2010

TABLE OF CONTENTS

1.0 INTRODUCTION AND BACKGROUND	1
1.1 OBJECTIVES AND DELIVERABLES	1
1.2 LITERATURE REVIEW METHOD	2
1.3 LITERATURE CHARACTERIZATION	3
2.0 AN OVERVIEW OF MARINE RENEWABLE ENERGY TECHNOLOGIES	6
3.0 IDENTIFICATION AND CHARACTERIZATION OF CONFLICTS	8
3.1 CHARACTERIZING CONFLICTS	9
3.2 SPACE USE CONFLICTS: AN OVERVIEW	10
3.3 MAJOR CONFLICTS NOTED IN THE LITERATURE	11
3.3.1 NAVIGATION	12
3.3.2 COMMERCIAL FISHERIES	12
3.3.3 CULTURAL HERITAGE	13
3.3.4 RECREATION AND TOURISM	13
3.4 UNDERLYING LEGAL, INSTITUTIONAL AND ECONOMIC CAUSES OF CONFLICT	14
3.4.1. LEGAL	14
3.4.2 INSTITUTIONAL	15
3.4.3 ECONOMIC	15
4. MECHANISMS FOR RESOLVING MARINE SPATIAL CONFLICT	18
4.1 MITIGATION OF OCEAN SPACE CONFLICTS: AN OVERVIEW	18
4.2 MITIGATING IMPACTS OF MARINE RENEWABLE ENERGY ON COMMERCIAL FISHING AND NAVIGATION	20
4.3 CROSS CUTTING INNOVATIVE APPROACHES FOR RESOLVING MARINE SPACE USE CONFLICTS	24
4.3.1 COASTAL AND MARINE SPATIAL PLANNING	24
4.3.2 STAKEHOLDER ENGAGEMENT IN CONFLICT IDENTIFICATION, AVOIDANCE AND MEDIATION	26
5.0 SUMMARY	31
APPENDICES	32