TABLE OF CONTENTS

1. Introduction iii

2. Laboratory Background
History 1
Organizational Structure 2
Mission 2
Laboratory Management 3
Laboratory Support Services (facilities and staff) 4
Outreach Program 7
Safety 9
Students at USWCL 10

3. Irrigation & Water Quality (I&WQ) Management Unit
Organization 11
Mission 11
Research Staff 12
Irrigated Farm Management Laboratory 14
Irrigated Farm Management 15
Water Project Management 32

4. Environmental & Plant Dynamics (E&PD) Management Unit
Organization 53
Mission 53
Research Staff 54
Plant Growth and Water Use as Affected by Elevated CO_2 and Other Environmental Variables 56
Quantitative Remote Sensing Approaches for Monitoring and Managing Agricultural Resources 95
Germplasm Improvement and Agronomic Development of New Alternative Industrial Crops 122

5. Publications 138

6. Technology Transfer 146

7. Weekly Reports 149

8. Personnel 155

9. Cooperators 158