

# Table of Contents

Acknowledgements.....	3
Purpose .....	4
Table of Contents.....	5
List of Acronyms and Abbreviations .....	8
Technical Reference Document - Table of Contents .....	9
List of Figures .....	10
List of Tables .....	11
Introduction .....	12
Significance of the Cypress Creek Watershed .....	13
Why the Community Wanted a Watershed Plan .....	13
Surface Water Strategies Chosen by the Community to Improve Water Quality.....	17
Groundwater Strategies Chosen by the Community to Improve Water Quality .....	18
The Importance of an Informed Community.....	18
Ensuring the Plan is Working .....	19
Indicators of Success.....	19
1. Watershed Management.....	23
Watershed Definition.....	23
Watersheds and Water Quality .....	23
Benefits of a Watershed Approach.....	24
Watershed Protection Planning.....	24
2. Cypress Creek Stakeholder Committee .....	26
2008-2010: Characterization of the Watershed.....	26
2011-2014: Development of a Watershed Protection Plan .....	27
2014-2015: Interim Committee .....	28
2015 and Beyond: Implementation of the Watershed Protection Plan.....	29
3. State of the Watershed.....	30
History of the Cypress Creek Watershed.....	30
Geography.....	30
Water Resources.....	32
Annual Water Flow - Water Yield .....	34



Land Use.....	36
4. General Causes and Sources of Pollution .....	40
Wildlife and Pets .....	40
Septic Tanks .....	41
Municipal Wastewater.....	42
Agriculture .....	43
Ground/Source Water .....	43
Summary of Water Quality Sources and Potential Causes.....	44
5. Pollutant Loads: Observed and Modeled .....	47
Methods of Analysis.....	49
Land Use Analysis.....	51
Pollution Loading by Source .....	52
EMC Method .....	53
Water Quality Analysis.....	54
Instream Pollution Concentration from SWAT Model.....	56
Nitrogen and TSS Loads from EMC Calculations by Land Use .....	57
Bacterial Loads .....	63
Parameters of Concern .....	68
Oil and Grease.....	68
Dissolved Oxygen .....	68
6. Management Measures.....	72
BMPs for Immediate Implementation (Year 1-3) .....	74
Description of Best Management Practices .....	78
Hays County .....	79
Wimberley.....	81
Woodcreek.....	83
Wimberley Valley Watershed Association.....	84
The Meadows Center for Water and the Environment.....	84
7. Ground/Source Water Protection Strategy – Preserving Flows.....	86
Prioritized Goals for Spring Flow and Ground Water Quality Protection.....	87
8. Education and Outreach Strategy.....	88
Components.....	90



Events.....	90
Contests .....	91
Stewardship Workshops .....	91
Industry Workshops.....	92
WPP Workshops.....	92
Print Materials and Website .....	93
Physical Outreach Tools.....	95
Evaluating Effectiveness of Education & Outreach Component .....	96
9. Monitoring for BMP Effectiveness and Adaptive Management.....	97
Selected Targets for Reduction in Pollution .....	98
Load Reduction Modeling.....	99
Plan to Measure Effectiveness of Management Measures in Load Reductions .....	99
Coordinating Existing and Future Monitoring Efforts.....	100
10. Adaptive Management Plan .....	107
Adaptive Management BMP Toolbox.....	107
11. Milestones and Measures of Success .....	109
Milestones.....	109
Water Quality Targets Measures of Success .....	115
Nitrogen Targets and BMP Effectiveness .....	116
Parameters of Concern .....	116
12. Technical and Financial Assistance .....	117
Financial Assistance by Program (Potential Funding Sources for Implementation) .....	119
Bibliographic Sources.....	122

