

APPENDIX C – RANKED LIST OF POTENTIAL PRIORITY RESEARCH PROJECTS

Title	Category	Funding category	Rank	Estimated Budget
Understanding the role of environmental buffers in surface water indirect potable reuse projects	Indirect potable reuse: transport and fate in natural systems	T	1	\$200,000
Effectiveness of treatment wetlands in improving reclaimed water quality	Indirect potable reuse: transport and fate in natural systems	T	2	\$400,000
Use of managed aquifer recharge systems to facilitate water reclamation in Texas	Indirect potable reuse: natural treatment systems (riverbank filtration and soil aquifer treatment)	T	3	\$150,000
Understanding the effectiveness of nutrient removal processes in reduction of constituents of concern relative to indirect potable reuse	Indirect potable reuse: treatment optimization	T	4	\$250,000
Understanding the potential for utilizing nanofiltration as a beneficial treatment process relative to reclaimed water in Texas	Indirect potable reuse: treatment optimization	T	5	\$250,000
Organizational, institutional, and public awareness framework to advance water reuse in Texas	Direct and indirect reuse: organizational and institutional issues; public awareness	T	6	\$250,000
Development of integrated water quality models for the Trinity River System	Indirect potable reuse: transport and fate in natural systems	T	7	\$350,000
Subtotal Projects Texas Interest				\$1,850,000
Comparative and relative human health risk assessment of indirect potable reuse in Texas	Indirect potable reuse: risk assessment	N	1	\$200,000
Selection of appropriate chemical indicators and surrogates for indirect potable reuse projects in Texas	Indirect potable reuse: monitoring	N	2	\$150,000
Environmental quality of water reuse projects in Texas	Indirect potable reuse: aquatic life impacts/monitoring	N	3	\$300,000
Development and validation of real-time monitoring methodology	Indirect potable reuse: monitoring	N	4	\$300,000
Development of quantitative molecular methods for evaluating the viability and concentration of microorganisms	Direct and indirect reuse: monitoring	N	5	\$250,000
Safety of reclaimed water used for irrigation of public lands and residential areas in Texas	Direct reuse: risk assessment	N	6	\$350,000
Tools to evaluate the environmental, financial and social benefits of water reuse in Texas	Direct reuse: environmental, financial and social benefits	N	7	\$350,000
Subtotal Projects National Interest				\$1,900,000
Total				\$3,750,000

T – Specific Texas interest

N – National interest with application to Texas