

Colorado River Basin Salinity Control Program

Green River, Utah Unit

Executive Summary of Environmental Assessment

September 11, 2009

Pre-project Salt Loading				
Source	Units	Quantity	Annual Salt Load, Tons	Unit Load
Treated On-farm	acres	1,400	750	0.54
Untreated On-farm	acres	2,600	9,250	3.56
Off-farm canals and large laterals	miles	33	5,700	173
			15,700	

Recommended Alternative				
Source	Units	Quantity	Annual Salt Load, Tons	Unit Load
Treated On-farm	acres	3,450	1,499	0.43
Untreated On-farm	acres	550	1,957	3.56
Off-farm canals and large laterals	miles	33	5,700	173
			9,156	

The **Recommended Alternative** projects treatment of 80% of untreated acres or 2,080 acres at an estimated federal cost of \$2,500/acre, FA. Due to minimal topographic relief, pressurized pipelines are not practical and each system or small group of systems will require silt handling and pumping facilities. Canal treatments will not reduce on-farm treatment costs. The cost for canal treatment must therefore be based on salt load reduction due to seepage alone and is therefore prohibitively expensive. Furthermore, treating canals under EQIP rules is not practical and is not included in this alternative. The recommended alternative meets all four **NEPA tests, completeness, effectiveness, efficiency, and acceptability.**

Full Treatment Alternative				
Source	Units	Quantity	Annual Salt Load, Tons	Unit Load
Treated On-farm	acres	4,000	2,135	0.53
Untreated On-farm	acres	0	0	0.00
Off-farm canals and large laterals	miles	0	0	0
			2,135	

The **Full Treatment Alternative** would include treatment of all canals and untreated on-farm acres. Since participation is voluntary, this alternative does not meet the **NEPA efficiency or acceptability tests.**

No Action Alternative				
Source	Units	Quantity	Annual Salt Load, Tons	Unit Load
Treated On-farm	acres	2,450	1,307	0.53
Untreated On-farm	acres	1,550	5,514	3.56
Off-farm canals and large laterals	miles	33	5,700	173
			12,522	

The **No Action Alternative** might result in treatment of additional acres over a prolonged period of time. It is assumed that most participants would treat using normal EQIP funds at 50% participation. Participants would have to compete for funding from a statewide EQIP funding pool. This alternative does not meet the **NEPA completeness or effectiveness tests.**

Economic Comparison of Alternatives	Units	Recommended Alternative	Full Treatment Alternative	No Action Alternative
Estimated Time to Complete	years	4	10	15
Estimated Federal Cost, FA	2008 \$	5,200,000	29,500,000	1,750,000
Estimated Federal Cost, TA	2008 \$	3,466,667	19,666,667	1,166,667
Estimated Non-federal Cost	2008 \$	1,733,333	9,833,333	1,750,000
Estimated Total Cost	2008 \$	10,400,000	59,000,000	4,666,667
Estimated Salt Load Reduction	tons/year	6,544	13,565	3,178
Federal Cost/ton FA+TA	2008 \$	93	254	64
Total Cost/ton	2008 \$	111	305	103
NEPA Tests				
Completeness		Yes	Yes	No
Effectiveness		Yes	Yes	No
Efficiency		Yes	No	Yes
Acceptability		Yes	No	Yes