

## Appendix E: Benefit - risk assessment criteria

■ Table 85: Criteria used for assessment of benefit and risks of each management option

Theme	Benefit assessment criteria	Risk assessment criteria
<b>Economic</b>	<ul style="list-style-type: none"> <li>• Intervention will facilitate economic growth for regional industries and enterprises (e.g. agriculture, tourism)</li> <li>• Intervention will result in long-term savings by reducing or eliminating future maintenance or restoration costs</li> <li>• Intervention will result in the development of new business opportunities.</li> <li>• Intervention maintains or improves the economic value of environmental services provided by natural or agricultural landscapes.</li> </ul>	<ul style="list-style-type: none"> <li>• There will be an extended delay (&gt;10 years) before intervention will yield direct financial return.</li> <li>• Intervention will cost (works, incentives, enforcement, monitoring) more than the expected returns</li> <li>• Intervention substantially diminishes the volume of surface water and/or groundwater available for use</li> <li>• High investigation costs which may not result in a technically feasible solution</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>• Intervention will help to redress the social inequity of salinity (ie people being affected are not the people causing the problem)</li> <li>• Intervention meets community expectations</li> <li>• Intervention will have measureable results within human lifetime</li> <li>• Intervention will increase knowledge, skills and facilitate higher levels of participation in broader NRM programs</li> <li>• Intervention improves residential amenity</li> </ul>	<ul style="list-style-type: none"> <li>• Intervention will lead to conflict between NRM stakeholders</li> <li>• Intervention lacks support for change from NRM stakeholders</li> <li>• Intervention may not manage community resistance to change</li> <li>• Intervention leads to loss of amenity values from assets in or downstream of the zone of influence</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>• Intervention will maintain or enhance sustainable uses of land and water</li> <li>• Intervention will maintain, restore or enhance the health and function of natural ecosystems</li> <li>• Intervention will address the range of threatening processes impacting on asset condition</li> </ul>	<ul style="list-style-type: none"> <li>• Intervention implementation will not derive environmental change within human timescales</li> <li>• Intervention will not prevent further environmental degradation</li> <li>• Intervention will contribute to unintended adverse impact on ecosystems or environmental values of assets</li> </ul>
<b>General</b>	<ul style="list-style-type: none"> <li>• Intervention will avoid the serious consequences of doing nothing</li> <li>• Intervention results in a private benefit stream that will drive on-going investment in intervention.</li> <li>• Intervention will break down institutional barriers and foster cooperation amongst stakeholders</li> <li>• Financial risk associated with intervention is shared broadly</li> <li>• Intervention will result in the prevention/minimisation of future problems</li> <li>• Multi benefit to different NRM programs</li> </ul>	<ul style="list-style-type: none"> <li>• Intervention does not address the causes of salinity</li> <li>• Intervention lacks technical and professional resources to precipitate change</li> <li>• Intervention may not be technically feasible</li> <li>• Benefit to salinity but cost to other NRM programs/issues</li> <li>• Resources (human, finance, knowledge) likely to be available for intervention will be insufficient to prevent loss of condition in assets</li> </ul>

- Table 86: Benefit-risk matrix used to determine an overall “benefit-risk” score

		Risk of Intervention Failure																
		Lower															Higher	
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Lower	4	35	33	31	28	26	24	22	20	18	16	14	12	10	8	6	4	2
	5	37	35	33	31	28	26	24	22	20	18	16	14	12	10	8	6	4
	6	39	37	35	33	31	28	26	24	22	20	18	16	14	12	10	8	6
	7	41	39	37	35	33	31	28	26	24	22	20	18	16	14	12	10	8
	8	43	41	39	37	35	33	31	28	26	24	22	20	18	16	14	12	10
	9	45	43	41	39	37	35	33	31	28	26	24	22	20	18	16	14	12
	10	47	45	43	41	39	37	35	33	31	28	26	24	22	20	18	16	14
	11	49	47	45	43	41	39	37	35	33	31	28	26	24	22	20	18	16
	12	51	49	47	45	43	41	39	37	35	33	31	28	26	24	22	20	18
	13	53	51	49	47	45	43	41	39	37	35	33	31	28	26	24	22	20
Higher	14	55	53	51	49	47	45	43	41	39	37	35	33	31	28	26	24	22
	15	57	55	53	51	49	47	45	43	41	39	37	35	33	31	28	26	24
	16	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	28	26
	17	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31	28
	18	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33	31
	19	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35	33
	20	67	65	63	61	59	57	55	53	51	49	47	45	43	41	39	37	35