

APPENDIX K: Detailed Strategic Action Ranking

This appendix consists of two tables. Table K-1 provides the overall ranking and the components used to determine the **benefit** ranking.

Table K-2 provides the **cost** ranking and the components used to determine the **feasibility** ranking.

Table K-1: Overall rank, and benefit rank details for Grassland Plan strategic action ranking.

#	Strategic Actions	Overall Rank	Benefit Components					Benefit
			Threat Abatement Benefit	Viability Enhancement Rank	Contribution	Duration	Leverage	
1	Devise and implement IPM strategies (cattle and goat grazing, and biological, cultural, chemical, and mechanical control) to treat all RAM tracked invasive species in the entire planning area by 2011.	Very High	Very High	-	Very High	Very High	Medium	Very High
2	Enhance prescribed grazing program through improvements to fencing, livestock watering facilities, stocking rate and seasonal use adjustments, and the establishment of one or more "grass banks".	Very High	Very High	-	High	Very High	Medium	Very High
3	Establish or maintain closures to protect raptor nesting sites.	Very High	Very High	Medium	High	Very High	High	Very High
4	Extend seasonal visitor closures to include newly identified areas of high grassland bird nesting value.	Very High	Very High	-	High	Very High	Medium	Very High
5	Limit new trail development in the best opportunity habitat blocks to maintain their ecological function.	Very High	Very High	-	High	Very High	Medium	Very High

#	Strategic Actions	Overall Rank	Benefit Components					Benefit
			Threat Abatement Benefit	Viability Enhancement Rank	Contribution	Duration	Leverage	
6	Maintain or construct artificial hunting perches near reservoirs and prairie dog colonies to encourage use by raptors.	Very High	-	Medium	Medium	Very High	Medium	Medium
7	Manage all high threat, low occurrence invasive species throughout the planning area.	Very High	Very High	-	High	Very High	Medium	Very High
8	Build and maintain fish passage structures.	High	Very High	-	Very High	Very High	Medium	Very High
9	Close and restore undesignated trails and discourage their (re)establishment.	High	Very High	-	Very High	Very High	Medium	Very High
10	Continue IPM efforts to remove Eurasian watermilfoil.	High	High	-	Medium	Very High	Low	High
11	Coordinate external partners and community groups to implement aquatic habitat improvement projects on South Boulder Creek.	High	Very High	-	High	Very High	High	Very High
12	Create a large block of conserved grassland in the Northern Tier through acquisitions and management agreements.	High	Very High	-	High	Very High	High	Very High
13	Enact leash laws on those sections of trails that pass through prairie dog colonies within Grassland Preserves and Multiple Objective Areas.	High	Very High	-	Medium	Very High	High	Very High
14	Establish and follow relocation criteria for BTPD to ensure recovery of vegetation and minimize invasive plant species prior to repopulation of grassland preserves.	High	High	-	High	Very High	High	Very High

#	Strategic Actions	Overall Rank	Benefit Components					Benefit
			Threat Abatement Benefit	Viability Enhancement Rank	Contribution	Duration	Leverage	
15	Establish and maintain management areas with a gradient of support for sustaining multiple elements of biodiversity and support for the conservation of prairie dog populations.	High	Medium	High	High	Very High	High	Very High
16	Establish policy that Transition and Removal areas have first priority for available "receiving sites" on OSMP.	High	Medium	-	High	High	Very High	High
17	Evaluate dog restrictions on trails in selected riparian areas to protect sensitive species (e.g. leopard frogs, shrub-nesting birds).	High	Medium	-	High	Low	High	Medium
18	Identify and obtain water rights needed to support instream flow, wetland or agricultural operations.	High	Very High	-	High	High	High	Very High
19	Increase fire frequency by burning prescriptively to improve vegetation structure and composition.	High	Very High	-	High	Very High	Medium	Very High
20	Increase public awareness of ANS and work with other city and county agencies, public, and special interest groups to promote preventative methods and Early Detection and Rapid Response protocol.	High	Medium	-	High	High	High	Medium
21	Manage best opportunity ponds as northern leopard frog habitat (repairing infrastructure, seasonally draining, controlling non-native predators, etc.)	High	Very High	-	High	Very High	High	Very High
22	Prescriptively burn, graze, mechanically treat, or chemically	High	High	-	High	Very High	Medium	Very High

#	Strategic Actions	Overall Rank	Benefit Components					Benefit
			Threat Abatement Benefit	Viability Enhancement Rank	Contribution	Duration	Leverage	
	treat wetlands dominated by non-native or invasive species to improve wetland habitat.							
23	Use agricultural management practices (i.e. irrigation, tillage) to discourage prairie dog from establishing colonies in removal and transition areas.	High	Medium	-	High	Very High	High	High
24	Change the Visitor Master Plan management area designation in part of the Gunbarrel Hill area from Passive Recreation Area to Natural Area in to facilitate continued restoration and wildlife habitat protection.	Medium	High	-	Low	Very High	High	Medium
25	Clear or burn trees encroaching onto grasslands at 75% of best opportunity sites (TBD) by 2018.	Medium	Medium	-	Medium	High	Medium	Medium
26	Collaborate with other agencies (e.g.BCPOS, USFWS, other city Departments), and neighbors to establish consistent management objectives on land adjacent to best opportunity habitat blocks.	Medium	Very High	-	Medium	Medium	High	Medium
27	Continue NZMS closure of Boulder Creek between 55th Street and 75th Street.	Medium	Medium	-	Medium	Very High	Low	Medium
28	Continue to construct and maintain irrigation delivery structures.	Medium	Medium	-	High	Very High	Medium	High
29	Continue to construct and maintain water delivery measurement devices	Medium	Very High	-	Low	Very High	High	High

#	Strategic Actions	Overall Rank	Benefit Components					Benefit
			Threat Abatement Benefit	Viability Enhancement Rank	Contribution	Duration	Leverage	
30	Coordinate with university and agency personnel to conduct research on ANS.	Medium	High	-	Low	Medium	Medium	Low
31	Create four Bobolink Conservation Areas where mowing occurs after July 15th (or as directed by future monitoring).	Medium	Medium	-	High	Medium	Medium	Medium
32	Establish instream flows program in South Boulder Creek, and Coal Creek to sustain riparian functioning.	Medium	Very High	-	High	Very High	High	Very High
33	Evaluate re-routing Dry Creek Trail, South Boulder Creek Trail, and potentially other trails to improve riparian habitat.	Medium	High	-	Low	Low	Medium	Low
34	Evaluate the potential for Community Supported Agriculture projects on OSMP lands	Medium	-	-	Medium	Medium	Very High	Medium
35	Examine the removal of prairie dogs from grassland preserves when occupation exceeds 26% and vegetation conditions are rated "Poor".	Medium	High	-	High	High	High	High
36	Manage riparian areas to promote the establishment and growth of plains cottonwoods and diverse and abundant shrub communities.	Medium	Medium	-	High	Very High	Medium	High
37	Mimic the effects of periodic flooding events along creeks in the planning area to improve and sustain riparian functioning.	Medium	Very High	-	High	Very High	High	Very High
38	Create Bobolink multiple objective areas in irrigated hayfields, which	Low	Medium	-	Medium	Medium	Medium	Low

#	Strategic Actions	Overall Rank	Benefit Components					Benefit
			Threat Abatement Benefit	Viability Enhancement Rank	Contribution	Duration	Leverage	
	represent good opportunities to improve Bobolink breeding potential. See notes for management of these multiple objective areas.							
39	Over a 10-year timeframe, examine water rights portfolio and pursue opportunities to expand existing grassland preserves.	Low	-	-	High	Very High	High	Low
40	Construct and maintain alternate nesting structures for sensitive raptors in best opportunity sites.	-	-	-	High	High	Medium	-
41	Continue established agricultural best management practices to prevent soil erosion and protect soil fertility.	-	-	-	High	High	Medium	-
42	Coordinate with CDOW to reintroduce native fish to suitable aquatic habitat in the planning area.	-	-	-	Low	Low	Medium	-
43	Evaluate alternative agricultural practices	-	-	-	Low	Low	Medium	-
44	Work with airplane/glider pilots to reduce fly-by impacts to Bald Eagle nests.	-	-	-	Low	Medium	Low	-

Table K-2: Feasibility and cost ranking details for Grassland Plan strategic action ranking.

#	Strategic Actions	Feasibility Components			Feasibility	Cost
		Lead Individual/ Institution	Ease of Implementation	Ability to Motivate Key Constituencies		
1	Devise and implement IPM strategies (cattle and goat grazing, and biological, cultural, chemical, and mechanical control) to treat all RAM tracked invasive species in the entire planning area by 2011.	Very High	High	High	Very High	High
2	Enhance prescribed grazing program through improvements to fencing, livestock watering facilities, stocking rate and seasonal use adjustments, and the establishment of one or more "grass banks".	Very High	High	High	Very High	Very High
3	Establish or maintain closures to protect raptor nesting sites.	Medium	High	High	Medium	Low
4	Extend seasonal visitor closures to include newly identified areas of high grassland bird nesting value.	High	Very High	Medium	High	Medium
5	Limit new trail development in the best opportunity habitat blocks to maintain their ecological function.	Low	Very High	Medium	Low	Low
6	Maintain or construct artificial hunting perches near reservoirs and prairie dog colonies to encourage use by raptors.	High	Very High	Very High	Very High	Low
7	Manage all high threat, low occurrence invasive species throughout the planning area.	High	High	High	High	High
8	Build and maintain fish passage structures.	High	High	High	High	Very High

#	Strategic Actions	Feasibility Components			Feasibility	Cost
		Lead Individual/ Institution	Ease of Implementation	Ability to Motivate Key Constituencies		
9	Close and restore undesignated trails and discourage their (re)establishment.	High	High	Medium	Medium	Very High
10	Continue IPM efforts to remove Eurasian watermilfoil.	Very High	Medium	High	High	Medium
11	Coordinate external partners and community groups to implement aquatic habitat improvement projects on South Boulder Creek.	High	Medium	Low	Low	Medium
12	Create a large block of conserved grassland in the Northern Tier through acquisitions and management agreements.	Medium	Medium	Medium	Medium	Very High
13	Enact leash laws on those sections of trails that pass through prairie dog colonies within Grassland Preserves and Multiple Objective Areas.	Low	Very High	Low	Low	Medium
14	Establish and follow relocation criteria for BTPD to ensure recovery of vegetation and minimize invasive plant species prior to repopulation of grassland preserves.	Medium	Low	Medium	Low	Medium
15	Establish and maintain management areas with a gradient of support for sustaining multiple elements of biodiversity and support for the conservation of prairie dog populations.	Medium	Medium	Medium	Medium	Very High
16	Establish policy that Transition and Removal areas have first priority for available "receiving sites" on OSMP.	Medium	High	Medium	Medium	Low
17	Evaluate dog restrictions on trails in selected riparian areas to protect sensitive species (e.g. leopard frogs, shrub-nesting birds).	High	Very High	High	High	Low

#	Strategic Actions	Feasibility Components			Feasibility	Cost
		Lead Individual/ Institution	Ease of Implementation	Ability to Motivate Key Constituencies		
18	Identify and obtain water rights needed to support instream flow, wetland or agricultural operations.	Medium	Medium	High	Medium	Very High
19	Increase fire frequency by burning prescriptively to improve vegetation structure and composition.	Medium	Medium	High	Medium	Very High
20	Increase public awareness of ANS and work with other city and county agencies, public, and special interest groups to promote preventative methods and Early Detection and Rapid Response protocol.	High	Very High	Medium	High	Low
21	Manage best opportunity ponds as northern leopard frog habitat (repairing infrastructure, seasonally draining, controlling non-native predators, etc.)	Medium	Medium	Medium	Medium	Very High
22	Prescriptively burn, graze, mechanically treat, or chemically treat wetlands dominated by non-native or invasive species to improve wetland habitat.	Medium	Medium	Medium	Medium	High
23	Use agricultural management practices (i.e. irrigation, tillage) to discourage prairie dog from establishing colonies in removal and transition areas.	High	High	Medium	Medium	Low
24	Change the Visitor Master Plan management area designation in part of the Gunbarrel Hill area from Passive Recreation Area to Natural Area in to facilitate continued restoration and wildlife habitat protection.	Low	High	Medium	Low	Low
25	Clear or burn trees encroaching onto grasslands at 75% of best opportunity sites (TBD) by 2018.	High	Very High	High	High	High

#	Strategic Actions	Feasibility Components			Feasibility	Cost
		Lead Individual/ Institution	Ease of Implementation	Ability to Motivate Key Constituencies		
26	Collaborate with other agencies (e.g.BCPOS, USFWS, other city Departments), and neighbors to establish consistent management objectives on land adjacent to best opportunity habitat blocks.	Low	Medium	High	Low	Low
27	Continue NZMS closure of Boulder Creek between 55th Street and 75th Street.	Low	Very High	Medium	Low	Low
28	Continue to construct and maintain irrigation delivery structures.	Low	Very High	High	Medium	High
29	Continue to construct and maintain water delivery measurement devices	Low	High	High	Medium	High
30	Coordinate with university and agency personnel to conduct research on ANS.	High	Very High	High	High	Low
31	Create four Bobolink Conservation Areas where mowing occurs after July 15th (or as directed by future monitoring).	High	Medium	Medium	Medium	Medium
32	Establish instream flows program in South Boulder Creek, and Coal Creek to sustain riparian functioning.	Medium	Low	Medium	Low	Very High
33	Evaluate re-routing Dry Creek Trail, South Boulder Creek Trail, and potentially other trails to improve riparian habitat.	Medium	Very High	High	High	Low
34	Evaluate the potential for Community Supported Agriculture projects on OSMP lands	Medium	Very High	Very High	High	Medium
35	Examine the removal of prairie dogs from grassland preserves when occupation exceeds 26% and vegetation conditions are rated "Poor".	Medium	High	Medium	Medium	Very High

#	Strategic Actions	Feasibility Components			Feasibility	Cost
		Lead Individual/ Institution	Ease of Implementation	Ability to Motivate Key Constituencies		
36	Manage riparian areas to promote the establishment and growth of plains cottonwoods and diverse and abundant shrub communities.	High	High	High	High	Very High
37	Mimic the effects of periodic flooding events along creeks in the planning area to improve and sustain riparian functioning.	Low	Low	Low	Low	Very High
38	Create Bobolink multiple objective areas in irrigated hayfields, which represent good opportunities to improve Bobolink breeding potential. See notes for management of these multiple objective areas.	Medium	Medium	Medium	Medium	Low
39	Over a 10-year timeframe, examine water rights portfolio and pursue opportunities to expand existing grassland preserves.	Low	Medium	Low	Low	High
40	Construct and maintain alternate nesting structures for sensitive raptors in best opportunity sites.	High	Very High	Very High	Very High	Low
41	Continue established agricultural best management practices to prevent soil erosion and protect soil fertility.	Very High	High	High	Very High	Low
42	Coordinate with CDOW to reintroduce native fish to suitable aquatic habitat in the planning area.	High	High	High	High	Low
43	Evaluate alternative agricultural practices	Low	Very High	High	Medium	Low
44	Work with airplane/glider pilots to reduce fly-by impacts to Bald Eagle nests.	Medium	High	Medium	Medium	Low