

Appendix C: Cumulative effects matrix for the Cache-Game Trails Project.

PROJECT	EXTRAORDINARY CIRCUMSTANCE	ANALYSIS SUMMARY
2014 Snowmaking CE	<p>Federally listed Threatened or Endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species</p>	<p>The snowmaking project has already been implemented and occurred on previously disturbed pipelines, road corridors, and ski runs and did not require tree removal. Most of the improvements are located below ground. Though the project increased the area covered by snow making, it also reduced the time needed to make snow. No adverse impacts to T& E species were predicted or have been observed, thus there is no potential for cumulative impacts with the Cache-Game Trails Project and other foreseeable projects listed in this document.</p>
	<p>Floodplains, wetlands, or municipal watersheds</p>	<p>The snowmaking project was not located in a floodplain, wetland, or municipal watershed. BMPs were implemented to prevent impacts to soil and water quality. Since the Cache-Game Trails Project does not impact floodplains, wetlands, or municipal watersheds and other foreseeable projects are not expected to adversely impact these resources either, there is no potential for cumulative impacts.</p>
	<p>Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas</p>	<p>No congressionally designated areas were near or directly or indirectly affected by the snowmaking project so there is no potential for cumulative impacts to these resources.</p>
	<p>Inventoried Roadless Areas or potential Wilderness Areas</p>	<p>No inventoried roadless areas or potential Wilderness areas were near or directly or indirectly affected by the snowmaking project so there is no potential for cumulative impacts to these resources.</p>
	<p>Research Natural Areas (RNA)</p>	<p>No Research Natural Areas were near or directly or indirectly affected by the snowmaking project so there is no potential for cumulative impacts to these resources.</p>
	<p>American Indians and Alaska Native religious or cultural sites and archaeological sites, or historic properties or areas</p>	<p>No cultural or historic sites were directly or indirectly affected by the snowmaking project so there is no potential for cumulative impacts to these resources.</p>

Appendix C: Cumulative effects matrix for the Cache-Game Trails Project.

PROJECT	EXTRAORDINARY CIRCUMSTANCE	ANALYSIS SUMMARY
<p>Cache – Game Trails Project (Greater Snow King Area Trail Projects)</p>	<p>Federally listed Threatened or Endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species</p>	<p>The projects associated with the Cache and Game Creek areas are being designed to manage the growth in non-motorized use in a way that would minimize impacts to wildlife by preventing sprawl of recreational use into backcountry wildlands and by reducing the presence of unmaintained non-system trails. Though the project will increase maintained trail, the overall number of trails will be reduced by consolidating use to system trails. Although the new system trails will have potential effects on habitat effectiveness for some Threatened or Endangered or Sensitive species, due to the minimal amount of habitat disturbed, no extraordinary circumstances will exist when these projects are considered cumulatively. BMPs are identified to minimize potential for any other effects.</p>
	<p>Floodplains, wetlands, or municipal watersheds</p>	<p>Portions of the existing and planned trails are located near floodplains and wetlands, but are not located within a municipal watershed. The planned relocations of existing trails will make the trails more sustainable with reduced environmental impacts. Standard design features such as rolling trail grades, relocating trails away from water and wetlands and sensitive soils, and Best Management Practices will be employed for the new trail construction. Thus the trails projects and other foreseeable projects will not adversely impact these resources so no potential adverse cumulative impacts are anticipated.</p>
	<p>Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas</p>	<p>No congressionally designated areas are near or directly or indirectly affected by this project so there is no potential for cumulative impacts to these resources.</p>
	<p>Inventoried Roadless Areas or potential Wilderness Areas</p>	<p>No inventoried roadless areas or potential Wilderness areas are near or directly or indirectly affected by this project so there is no potential for cumulative impacts to these resources.</p>
	<p>Research Natural Areas (RNA)</p>	<p>No Research Natural Areas are near or directly or indirectly affected by this project so there is no potential for cumulative impacts to these resources.</p>
	<p>American Indians and Alaska Native religious or cultural sites and archaeological sites, or historic properties or areas</p>	<p>No cultural or historic sites were directly or indirectly affected by this project so there is no potential for cumulative impacts to these resources.</p>

Appendix C: Cumulative effects matrix for the Cache-Game Trails Project.

PROJECT	EXTRAORDINARY CIRCUMSTANCE	ANALYSIS SUMMARY
Rafferty Lift and Trails	Federally listed Threatened or Endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species	Although additional human presence in the area will have potential effects on habitat effectiveness for some Threatened or Endangered or Sensitive species, due to the minimal amount of habitat disturbed, no extraordinary circumstances will exist when these projects are considered cumulatively. Best Management Practices have been identified to minimize potential for any other effects. (See project file for BA, USFWS Letter of concurrence and BE for the Rafferty Lift and Trails project)
	Floodplains, wetlands, or municipal watersheds	The Rafferty Lift and Trails project is not located within floodplains, wetlands, or municipal watersheds and other foreseeable projects will not adversely impact these resources either, so there is no potential for cumulative impacts to these resources.
	Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas	No congressionally designated areas are near or directly or indirectly affected by the Rafferty Lift and Trails project so there is no potential for cumulative impacts to these resources.
	Inventoried Roadless Areas or potential Wilderness Areas	No inventoried roadless areas or potential Wilderness areas are near or directly or indirectly affected by the Rafferty Lift and Trails project so there is no potential for cumulative impacts to these resources.
	Research Natural Areas (RNA)	No Research Natural Areas are near or directly or indirectly affected by the Rafferty Lift and Trails project so there is no potential for cumulative impacts to these resources.
	American Indians and Alaska Native religious or cultural sites and archaeological sites, or historic properties or areas	No cultural or historic sites are directly or indirectly affected by the Rafferty Lift and Trails project so there is no potential for cumulative impacts to these resources.
SKMR Coaster on Private Lands	Federally listed Threatened or Endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species	The coaster project will occur on previously disturbed ski runs. Although the project incrementally increased developed structures on private lands at SKMR, no adverse impacts to T& E species are anticipated, thus there is no potential for cumulative impacts with the Cache-Game Trails Project and other foreseeable projects listed in this document.
	Floodplains, wetlands, or municipal watersheds	The coaster project is not located within floodplains, wetlands, or municipal watersheds and other foreseeable projects and will not adversely impact these resources either, so there is no potential for cumulative impacts.
	Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas	No congressionally designated areas are near or directly or indirectly affected by the coaster project so there is no potential for cumulative impacts to these resources.

Appendix C: Cumulative effects matrix for the Cache-Game Trails Project.

PROJECT	EXTRAORDINARY CIRCUMSTANCE	ANALYSIS SUMMARY
	Inventoried Roadless Areas or potential Wilderness Areas	No inventoried roadless areas or potential Wilderness areas are near or directly or indirectly affected by the coaster project so there is no potential for cumulative impacts to these resources.
	Research Natural Areas (RNA)	No Research Natural Areas sites are directly or indirectly affected by the coaster project so there is no potential for cumulative impacts to these resources.
	American Indians and Alaska Native religious or cultural sites and archaeological sites, or historic properties or areas	No cultural or historic sites are directly or indirectly affected by the coaster project so there is no potential for cumulative impacts to these resources.
SKMR AAC 2015CE	Federally listed Threatened or Endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species	Based on the analyses in the Biological Assessment and Biological Evaluation and the concurrence of the USFWS and the District Biologist, implementation of the AAC project will have no effect on most of the species assessed or evaluated. AAC project will have a “may affect but not likely to adversely affect” impact on grizzly bears, Canada lynx, and Canada lynx Critical Habitat. Overall the AAC project will not pose any extraordinary circumstances for Threatened, Endangered, or FS Sensitive species because of the very small (0.7 acres) area affected, implementation of the Best Management Practices, consolidation of this project within an existing 9B Forest prescription, and scheduling of implementation of the AAC project. The other projects evaluated in this matrix are similarly benign; consequently, the AAC project will not cumulatively contribute or exacerbate an extraordinary adverse condition for any of the noted wildlife species or habitats.
	Floodplains, wetlands, or municipal watersheds	The AAC project is not located within floodplains, wetlands, or municipal watersheds and other foreseeable projects are not expected to adversely impact these resources either, so there is no potential for cumulative impacts to these resources.
	Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas	No congressionally designated areas are near or directly or indirectly affected by the AAC project so there is no potential for cumulative impacts to these resources.
	Inventoried Roadless Areas or potential Wilderness Areas	No inventoried roadless areas or potential Wilderness areas are near or directly or indirectly affected by the AAC project so there is no potential for cumulative impacts to these resources.

Appendix C: Cumulative effects matrix for the Cache-Game Trails Project.

PROJECT	EXTRAORDINARY CIRCUMSTANCE	ANALYSIS SUMMARY
	Research Natural Areas (RNA)	No Research Natural Areas are near or directly or indirectly affected by the AAC project so there is no potential for cumulative impacts to these resources.
	American Indians and Alaska Native religious or cultural sites and archaeological sites, or historic properties or areas	No cultural or historic sites are directly or indirectly affected by the AAC project so there is no potential for cumulative impacts to these resources.
2014 SKMR Master Plan (MDP)	Federally listed Threatened or Endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species	At this time, it is uncertain which if any additional projects will be selected from the accepted 2014 MDP for implementation over the next 2 to 5 years. The potential projects in the MDP have gone through an initial conceptual screening for consistency with the Forest Plan, but site specific effects analysis in an Environmental Assessment or Environmental Impact Statement cannot be conducted until a detailed proposal is received. As described above, the Cache-Game Trails Project and the other projects listed in this matrix are not expected to create cumulative impacts for Threatened, Endangered or Sensitive species. The bottom line for any of the remaining 2014 MDP projects brought forth as proposals is that they will not be authorized or implemented if they create adverse effects that could trend a species towards listing or extinction. Therefore, cumulative impacts are not expected.
	Floodplains, wetlands, or municipal watersheds	The remaining MDP projects are not located within floodplains, wetlands, or municipal watersheds and other foreseeable projects are not expected to adversely impact these resources either, so there is no potential for cumulative impacts.
	Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas	No congressionally designated areas are adjacent to or directly or indirectly affected by the remaining MDP projects, so there is no potential for cumulative impacts to these resources.
	Inventoried Roadless Areas or potential Wilderness Areas	No inventoried roadless areas or potential Wilderness areas are near or directly or indirectly affected by the remaining SKMR MDP projects, so there is no potential for cumulative impacts to these resources.
	Research Natural Areas (RNA)	No Research Natural Areas are near or directly or indirectly affected by the remaining MDP projects, so there is no potential for cumulative impacts to these resources.

Appendix C: Cumulative effects matrix for the Cache-Game Trails Project.

PROJECT	EXTRAORDINARY CIRCUMSTANCE	ANALYSIS SUMMARY
	American Indians and Alaska Native religious or cultural sites and archaeological sites, or historic properties or areas	Based on previous cultural surveys and information, no cultural or historic sites are directly or indirectly affected by the known MDP projects; therefore, there is no potential for cumulative impacts to these resources.