

APPENDIX A

This appendix contains the detailed management direction found within each alternative. Consistent with discussions in Chapter 2, the direction is broken down into 7 sections; this Appendix contains direction pertaining to the first six categories. Category 7, monitoring requirements, is described in detail in Appendix B.

Category 1: Native Processes.

Category 2: Forest Composition.

Category 3: Forest Structure.

Category 4: Nest and Post-fledgling areas only.

Category 5: Other miscellaneous areas of concern.

Category 6: Treatment prioritization.

The direction is provided in table format in each of the sections stated. The first two left hand columns provide a management direction identification code (ID). The first column is ID's for goals (G- #) and objectives (O- #). The second column is ID's for standards (s- #) or guidelines (g- #) that pertain to the goal immediately preceding. The one variance from this is under Alternative F where the only goal and objectives relate to treatment prioritization (Section 6); the standards and guidelines identified as part of Alternative F relate to achievement of the stated goal and objectives under Section 6. These ID's have been used in different parts of the Environmental Assessment to help facilitate discussions.

The last 6 columns in each table state whether the management direction stated (i.e., goal, objective, standard or guideline) was included in a specific alternative. If it was included an "X" is in the column; if it is NOT included "-" is in the column.

CATEGORY 1: Native Processes

G/O ID	s/g ID	MANAGEMENT DIRECTION	ALTERNATIVES					
			A	B	C	D	E	F
G- 1		GOAL: Restore or emulate natural disturbance regimes and other ecological processes to maintain or restore ecosystem integrity within landscapes important to sustaining habitat for the northern goshawk and its prey.	-	X	X	X	X	-
	g- 1	<i>(Guideline)</i> Management actions should be designed to encourage conditions that are within the historic range of variation (HRV); this is the full range of HRV, including extreme events. Actions should remain within the variability of size, intensity, and frequency of native disturbance regimes characteristic of the subject landscape and ecological processes.	-	X	-	-	X	-
	g- 2	<i>(Guideline)</i> Management actions should be designed to encourage conditions that are within the historic range of variation (HRV) as defined by Regional or local properly functioning condition (PFC) assessments. PFC operates within the range of HRV where extreme events are not desired. Actions should remain within the variability of size, intensity, and frequency of native disturbance regimes characteristic of the subject landscape and ecological processes.	-	-	X	X	-	X
	g- 3	<i>(Guideline)</i> Within disturbed ecosystems, management actions should be designed to be consistent with restoration objectives .	-	X	X	X	X	X

CATEGORY 2: Forest Composition

G/O ID	s/g ID	MANAGEMENT DIRECTION	ALTERNATIVES					
			A	B	C	D	E	F
G- 2		GOAL: Maintain or restore native characteristics of ecosystem composition important to sustaining habitat for the northern goshawk and its prey.	-	X	X	X	X	-
	g- 4	<i>(Guideline)</i> Utilize native plant species from locally adapted seed sources in management activities when and where practical. Non-native plant species have the potential to cause systems to move outside of historic range of variation (HRV), therefore the use of non-native species should be justified to indicate how their use is important to maintain or restore a cover type to functioning conditions.	-	X	X	X	-	X
	s- 1	<i>(STANDARD)</i> Native plant species from locally adapted seed sources must be used in all management activities.	-	-	-	-	X	-
	g- 5	<i>(Guideline)</i> When initiating vegetative management treatments in forested cover types, provide for a full range of seral stages, by forested cover type, that achieve a mosaic of habitat conditions and diversity. Each seral stage should contain a strong representation of early seral tree species. Recruitment and sustainability of early seral tree species in the landscape is needed to maintain ecosystem resilience to perturbations.	-	X	X	X	X	X

CATEGORY 3: Forest Structure

G/O ID	g/s ID	MANAGEMENT DIRECTION	ALTERNATIVES					
			A	B	C	D	E	F
G- 3		GOAL: Maintain or restore the mix of forest vegetative structural stages (VSS) needed to sustain the desired mature and old forest stages (VSS 5 and 6) in a landscape. The desired amount of mature and old is 40% in the portion of the landscape covered by conifers and 30% in the portion covered by aspen, well distributed. This is necessary to sustain habitat within landscapes and connectivity of habitat among landscapes important to supporting goshawk and its prey.	-	X	-	-	X	-
G- 4		GOAL: Maintain or restore the mix of forest vegetative structural stages (VSS) needed to sustain the desired mature and old forest stages (VSS 5 and 6) in a landscape. Group size and distribution of VSS classes should be consistent with historic disturbance patterns that are within PFC. The desired amount of mature and old is 40% in the portion of the landscape covered by conifers and 30% in the portion covered by aspen. This is necessary to sustain habitat within landscapes and connectivity of habitat among landscapes important to supporting goshawk and its prey.	-	-	X	X	-	-
	g- 6	<i>(Guideline)</i> Assess landscapes at the 5th-6th order Hydrologic Unit Code (HUC) or equivalent ecological scale (tens to hundreds of thousands of acres), to determine distribution of forest vegetative structural classes. Use the best existing available information to complete this assessment. These assessments should be used to describe the existing structural conditions and then determine opportunities to move the existing conditions toward the desired structural habitat conditions.	-	X	-	-	-	-
	g- 7	<i>(Guideline)</i> Planned vegetative management treatments (excluding unplanned and unwanted wildland fire) in the mature and/or old structural groups in a landscape that is at or below the desired percentage of land area in mature and old structural stages (40% conifer, 30% aspen), should be designed to maintain or enhance the characteristics of these structural stages. Within these landscapes the percentage of land area in mature and old structural stages treated should not move out of the mature and old structural stage. Planned treatments may vary from this guideline if the action was assessed through the biological evaluation (BE) process, and the BE concluded that the action is consistent with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah.	-	X	X	X	-	X

CATEGORY 3: Forest Structure (Continued)

G/O ID	g/s ID	MANAGEMENT DIRECTION	ALTERNATIVES																				
			A	B	C	D	E	F															
	s- 2	(<i>STANDARD</i>) Vegetative management treatments are prohibited in all forested groups dominated by mature and old forest structures (VSS 5 and 6) for the remainder of the current planning period. This does not include unplanned and unwanted wildland fire.	-	-	-	-	X	-															
	g- 8	(<i>Guideline</i>) When it is desirable to obtain or promote the VSS 1 structural class through mechanical vegetative treatments within the foraging area, create small to medium openings. Openings should be irregular in shape and scattered throughout the foraging area to develop the desired interspersion of structural stages. These openings are important because several goshawk prey species require these openings for feeding and breeding. Use the following guideline for opening size, by cover type: <table border="1" data-bbox="361 526 1551 686"> <thead> <tr> <th>COVER TYPE</th> <th>Maximum individual opening size</th> <th>Maximum width of an individual opening</th> </tr> </thead> <tbody> <tr> <td>Ponderosa Pine and mixed conifer</td> <td>4 acres</td> <td>200 feet</td> </tr> <tr> <td>Spruce/fir</td> <td>1 acre</td> <td>125 feet</td> </tr> <tr> <td>Aspen and Lodgepole Pine</td> <td>current management direction</td> <td>N/A</td> </tr> </tbody> </table>	COVER TYPE	Maximum individual opening size	Maximum width of an individual opening	Ponderosa Pine and mixed conifer	4 acres	200 feet	Spruce/fir	1 acre	125 feet	Aspen and Lodgepole Pine	current management direction	N/A	-	-	-	X	X	-			
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G- 5		GOAL: Manage forested cover types within landscapes to retain, and sustain over time, standing dead trees (snags) and their distribution important to the habitat needs of goshawk prey species and characteristic of healthy, functioning ecosystems.	-	X	X	X	X	-															
	g-9	(<i>Guideline</i>) When initiating vegetative management treatments in forested cover types, leave the following minimum number and size of snags. If the minimum number of snags is unavailable, green trees should be substituted. If the minimum size is unavailable, then use largest trees available on site. It is desirable to have snags represented in all size classes above the minimum available on the site. The number of snags should be present at the stand level on average and, where they are available, distributed over each treated 100 acres. This distribution is needed to meet the needs of prey species that utilize this habitat. <table border="1" data-bbox="338 966 1551 1154"> <thead> <tr> <th>COVER TYPE</th> <th>Minimum snags (per 100 acres)</th> <th>Minimum Preferred Size</th> </tr> </thead> <tbody> <tr> <td>Ponderosa Pine</td> <td>200</td> <td>18 inch dbh <--> 30 feet tall</td> </tr> <tr> <td>Mixed Conifer and Spruce/fir</td> <td>300</td> <td>18 inch dbh <--> 30 feet tall</td> </tr> <tr> <td>Aspen</td> <td>200</td> <td>8 inch dbh <--> 15 feet tall</td> </tr> <tr> <td>Lodgepole and Aspen/Lodgepole</td> <td>300</td> <td>8 inch dbh <--> 15 feet tall</td> </tr> </tbody> </table>	COVER TYPE	Minimum snags (per 100 acres)	Minimum Preferred Size	Ponderosa Pine	200	18 inch dbh <--> 30 feet tall	Mixed Conifer and Spruce/fir	300	18 inch dbh <--> 30 feet tall	Aspen	200	8 inch dbh <--> 15 feet tall	Lodgepole and Aspen/Lodgepole	300	8 inch dbh <--> 15 feet tall	-	X	X	X	X	X
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	g-10	(<i>Guideline</i>) When initiating vegetative management treatments, other than regeneration treatments, in forested cover types, leave the following minimum number of mature and old trees (live trees) in groups or stringers with interlocking crowns. If mature and old trees are not available, retain the largest found on the site. In the spruce/fir cover type, in red squirrel habitat, center the intact tree groups around known food cache locations. These groups of mature and old live trees will produce snags, supply perch and roost trees, and goshawk hunting perches. <table border="1" data-bbox="338 1307 1551 1463"> <thead> <tr> <th>COVER TYPE</th> <th>Minimum numbers of trees per group</th> <th>Minimum number of groups per 10 acres</th> </tr> </thead> <tbody> <tr> <td>Ponderosa Pine</td> <td>3</td> <td>10</td> </tr> <tr> <td>Spruce/fir</td> <td>6</td> <td>20</td> </tr> <tr> <td>Mixed conifer, Aspen and Lodgepole</td> <td>6</td> <td>10</td> </tr> </tbody> </table>	COVER TYPE	Minimum numbers of trees per group	Minimum number of groups per 10 acres	Ponderosa Pine	3	10	Spruce/fir	6	20	Mixed conifer, Aspen and Lodgepole	6	10	-	-	-	X	X	-			
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CATEGORY 3: Forest Structure (Continued)

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	s- 3	(<i>STANDARD</i>) When initiating regeneration treatments in ponderosa pine cover type, if the regeneration opening is greater than one acre, identify and retain at least six mature and old trees (live reserve trees when available) in groups with interlocking crowns per acre. If six mature and old trees are not available, then leave six of the largest trees available on site.	-	-	-	X	X	-																				
	s- 4	(<i>STANDARD</i>) When initiating regeneration treatments in spruce-fir and mixed conifer cover types, if the regeneration opening is greater than one half acre, identify and retain at least six mature and old trees (live reserve trees when available) in groups with interlocking crowns per one half acre. If six mature and old trees are not available, then leave six of the largest trees available on site. Tree cutting within these groups is prohibited.	-	-	-	X	X	-																				
G- 6		GOAL: Manage cover types within landscapes to retain down logs and woody debris and their distribution, characteristic of healthy, functioning ecosystems. These habitat components are important to the habitat needs of goshawk prey species.	-	X	X	X	X	-																				
	g-11	<p>(<i>Guideline</i>) When initiating vegetative management treatments, prescriptions should be designed to retain the following minimum amount and size of down logs and woody debris. These habitat components should be present at the stand level on average and, where they are available, distributed over each treated 10 acres. This distribution is needed to meet the needs of prey species that utilize this habitat.</p> <table border="1"> <thead> <tr> <th>COVER TYPE</th> <th>Minimum Down Logs (per 10 acres) (Down logs take precedence over tons of coarse woody debris)</th> <th>Minimum Log Size (Diameter <--> Length) (Mid-point diameter; or if minimum size not available, largest available on the site)</th> <th>Minimum Coarse Woody Debris, ≥3 inch diameter (Tons per 10 acres, inclusive of down logs)</th> </tr> </thead> <tbody> <tr> <td>Ponderosa Pine</td> <td>30</td> <td>12 inch <--> 8 feet</td> <td>50</td> </tr> <tr> <td>Mixed Conifer and Spruce/fir</td> <td>50</td> <td>12 inch <--> 8 feet</td> <td>100</td> </tr> <tr> <td>Aspen</td> <td>50</td> <td>6 inch <--> 8 feet</td> <td>30</td> </tr> <tr> <td>Lodgepole and Aspen/Lodgepole</td> <td>50</td> <td>8 inch <--> 8 feet</td> <td>50</td> </tr> </tbody> </table>	COVER TYPE	Minimum Down Logs (per 10 acres) (Down logs take precedence over tons of coarse woody debris)	Minimum Log Size (Diameter <--> Length) (Mid-point diameter; or if minimum size not available, largest available on the site)	Minimum Coarse Woody Debris, ≥3 inch diameter (Tons per 10 acres, inclusive of down logs)	Ponderosa Pine	30	12 inch <--> 8 feet	50	Mixed Conifer and Spruce/fir	50	12 inch <--> 8 feet	100	Aspen	50	6 inch <--> 8 feet	30	Lodgepole and Aspen/Lodgepole	50	8 inch <--> 8 feet	50	-	X	X	X	X	X
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	g-12	<p>(<i>Guideline</i>) To achieve the desired amount of woody debris and down logs following mechanical treatments, use the following order of priority for treatments:</p> <ol style="list-style-type: none"> 1. Use periodic prescribed fires to regenerate where needed and to develop desired stand conditions, recycle organic mater, and decrease hazard fuels in all cover types except spruce/fir. 2. Lopping and scattering of logging debris is preferred if prescribed fire can not be used. Some scarification may be necessary for regeneration. 3. Piling of debris should be limited. When necessary, hand or grapple piling should be used to minimize compaction within piles and to minimize forest floor and herbaceous layer displacement and destruction. 4. Dozer use is not recommended for piling or scattering of logging debris. Improper dozer use can displace and destroy the forest floor and herbaceous layer. 	-	-	-	X	X	-																				

CATEGORY 3: Forest Structure (Continued)

G/O ID	g/s ID	MANAGEMENT DIRECTION	ALTERNATIVES					
			A	B	C	D	E	F
G- 7		GOAL: In land areas to be managed for mid-aged, mature, and old structural stages (VSS 4,5,6) within a landscape, maintain or restore canopy closure to provide habitat for the goshawk and its prey.	-	X	-	-	X	-
G- 8		GOAL: Within forested groups in landscapes, where it is desired to maintain or promote the VSS 4, 5 and/or 6 structural classes, maintain or restore clumps of trees with interlocking crowns. Clumps of trees with interlocking crowns provide canopy closures in habitat important to supporting goshawk and its prey.	-	-	X	X	-	-
	g- 13	<i>(Guideline)</i> - When initiating vegetative management treatments to maintain or promote clumps of trees dominated by mid-aged, mature, and old structural stages (VSS 4,5,6) within a stand, treatments should be designed to maintain or restore $\geq 40\%$ canopy closure in foraging areas and $\geq 50\%$ canopy closure in post-fledgling and nest areas. If this canopy closure is not within the historic range of variation (HRV), manage for canopy closures that are consistent with HRV.	-	X	-	-	-	-
	g- 14	<i>(Guideline)</i> -When initiating vegetative management treatments to maintain or promote clumps of trees dominated by mid-aged, mature, and old structural stages (VSS 4,5,6) within a landscape, treatments should be designed to maintain or restore $\geq 60\%$ canopy closure in foraging areas and $\geq 75\%$ canopy closure in post-fledgling and nest areas. If this canopy closure is not within the historic range of variation (HRV), manage for canopy closures that are consistent with HRV.	-	-	-	-	X	-
	g- 15	<i>(Guideline)</i> - Vegetative treatments designed to maintain or promote a VSS 4, 5 and/or 6 group, the percent of the group acreage covered by clumps of trees with interlocking crowns should typically range from 40-70% in post-fledgling and foraging areas, and 50-70% in nest areas. To manage outside this range, it should either be shown that the range is not within PFC for the site and the biological evaluation process determines that managing outside the range will be consistent with landscape needs of the goshawk and its prey. Use the best information available and deemed most reliable to make determinations. Groups are made up of multiple clumps of trees. Groups should be of a size and distribution in a landscape that is consistent with disturbance patterns defined in Regional or local proper functioning condition assessments (PFC). Clumps typically have 2 to 9 trees in the VSS 4, 5 or 6 size class with interlocking crowns.	-	-	X	-	-	X

CATEGORY 3: Forest Structure (Continued)

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	g- 16	<p>(<i>Guideline</i>) -In vegetative treatments designed to maintain or promote a VSS 4, 5 or 6 group, treatments should be designed to retain clumps of trees with interlocking crowns in sufficient numbers and distribution to maintain minimum canopy closures across the group, as indicated below.</p> <table border="1"> <thead> <tr> <th colspan="4">Minimum Canopy Closures across a VSS 4,5 or 6 Group</th> </tr> <tr> <th>Cover Type</th> <th>Nest Area %CC</th> <th>Post-Fledgling Area %CC</th> <th>Foraging Area %CC</th> </tr> </thead> <tbody> <tr> <td colspan="4">Ponderosa Pine</td> </tr> <tr> <td>VSS 4 ----></td> <td>N/A</td> <td>50%</td> <td>40%</td> </tr> <tr> <td>VSS 5/6 --></td> <td>50%</td> <td>50%</td> <td>40%</td> </tr> <tr> <td colspan="4">Mixed Conifer</td> </tr> <tr> <td>VSS 4 ----></td> <td>N/A</td> <td>60%</td> <td>1/3 area -->60%, 2/3 area-->40%</td> </tr> <tr> <td>VSS 5 --></td> <td>60%</td> <td>60%</td> <td>50%</td> </tr> <tr> <td>VSS 6 --></td> <td>60%</td> <td>60%</td> <td>60%</td> </tr> <tr> <td colspan="4">Spruce/fir</td> </tr> <tr> <td>VSS 4 ----></td> <td>N/A</td> <td>60%</td> <td>1/3 area -->60%, 2/3 area -->40%</td> </tr> <tr> <td>VSS 5/6 --></td> <td>70%</td> <td>70%</td> <td>60%</td> </tr> <tr> <td colspan="4">Aspen</td> </tr> <tr> <td>VSS 4 ----></td> <td>N/A</td> <td>60%</td> <td>60%</td> </tr> <tr> <td>VSS 5/6 --></td> <td>60%</td> <td>60%</td> <td>60%</td> </tr> <tr> <td colspan="4">Lodgepole Pine</td> </tr> <tr> <td>VSS 4 ----></td> <td>N/A</td> <td>50%</td> <td>50%</td> </tr> <tr> <td>VSS 5/6 --></td> <td>50%</td> <td>50%</td> <td>50%</td> </tr> </tbody> </table> <p>To manage an area outside these canopy closures, it should either be shown that the canopy closure is not within PFC for the site or the biological evaluation process determines that managing at a different canopy closure will be consistent with landscape habitat needs of the goshawk and its prey. Use locally developed information where available and deemed the most reliable.</p>	Minimum Canopy Closures across a VSS 4,5 or 6 Group				Cover Type	Nest Area %CC	Post-Fledgling Area %CC	Foraging Area %CC	Ponderosa Pine				VSS 4 ---->	N/A	50%	40%	VSS 5/6 -->	50%	50%	40%	Mixed Conifer				VSS 4 ---->	N/A	60%	1/3 area -->60%, 2/3 area-->40%	VSS 5 -->	60%	60%	50%	VSS 6 -->	60%	60%	60%	Spruce/fir				VSS 4 ---->	N/A	60%	1/3 area -->60%, 2/3 area -->40%	VSS 5/6 -->	70%	70%	60%	Aspen				VSS 4 ---->	N/A	60%	60%	VSS 5/6 -->	60%	60%	60%	Lodgepole Pine				VSS 4 ---->	N/A	50%	50%	VSS 5/6 -->	50%	50%	50%	-	-	-	X	-	-
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CATEGORY 4: Goshawk Nest and Post-Fledgling Areas Only

ID	ID	MANAGEMENT DIRECTION	ALTERNATIVES					
			A	B	C	D	E	F
G- 9		GOAL: Provide well distributed habitat for successful goshawk nesting and brood rearing (post-fledgling area) within and across landscapes (5th-6th order HUC or equivalent ecological scale). This will provide for habitat connectivity across the state and continuous recruitment of individuals into the population, both of which are important to sustaining viable populations of goshawks.	-	X	X	X	X	-
	s- 5	(<i>STANDARD</i>) Use the latest Regionally accepted Biological Prefield Research form (USFS Region 4) to determine the level of goshawk field survey(s) needed to complete the Biological Evaluation. Completion of this form is required to document where surveys are not required.	-	X	X	X	X	X
	s- 6	(<i>STANDARD</i>) Where goshawk field surveys are required, complete surveys for territory occupancy within suitable habitat. Surveys will be completed during the nesting and/or post-fledgling period, and must be conducted at least one year prior to implementation of management actions.	-	X	X	-	-	X
	s- 7	(<i>STANDARD</i>) Where goshawk field surveys are required, complete surveys for territory occupancy within suitable habitat. Surveys will be completed during the nesting and/or post-fledgling period, and must be conducted at least two consecutive years prior to implementation of management actions.	-	-	-	X	X	-
	g- 17	(<i>Guideline</i>) Where goshawk field surveys are required and when project planning permits, two consecutive years of surveys for territory occupancy prior to implementation of management actions is preferred.	-	X	X	-	-	X
	g- 18	(<i>Guideline</i>) If a historic nest is not associated with an active nest area, management direction for home range habitat should be applied.	-	X	X	X	X	X
	s- 8	(<i>STANDARD</i>) When an active nest area has been identified, identify 2 alternate nest areas and 3 replacement nest areas. The next two guidelines provide recommended direction for implementation of this standard.	-	X	X	X	X	X
	g- 19	(<i>Guideline</i>) Each nest area (active, alternate and replacement) should be approximately 30 acres (total of approximately 180 acres) in size when sufficient suitable habitat exists. If sufficient amounts of suitable habitat are not present, use existing suitable habitat that is available.	-	X	X	X	X	X
	g- 20	(<i>Guideline</i>) Alternate nest areas should be identified in suitable habitat with similar vegetative structures as the active nest areas. Replacement nest areas should be identified in habitat which will develop similar vegetative structures as the active nest area at the time the active and alternate nest areas are projected to no longer provide adequate nesting habitat.	-	X	X	X	X	X
	s- 9	(<i>STANDARD</i>) Prohibit forest vegetative manipulation within active nest areas (approximately 30 acres; i.e. g-19) during the active nesting period. The active nesting period will normally occur between March 1st and September 30th.	-	X	X	X	X	X
	g- 21	(<i>Guideline</i>) In active nest areas (approximately 30 acres; i.e. g-19), restrict Forest Service management activities and human uses for which Forests issue permits during the active nesting period (does not include livestock permits) unless it is determined that the disturbance is not likely to result in nest abandonment. If the disturbance is likely to result in abandonment, a biological evaluation (BE) must be completed. To implement the action the BE must conclude that the action is consistent with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah.	-	X	X	X	-	X
	s- 10	(<i>STANDARD</i>) In active nest areas (approximately 30 acres; i.e. g-19), prohibit Forest Service management activities and human uses for which the Forest Service issues permits during the active nesting period (does not include livestock grazing).	-	-	-	-	X	-
	g- 22	(<i>Guideline</i>) Forest vegetative manipulation within active, alternate and replacement nest areas should be designed to maintain or improve desired nest area habitat. Use the active nest area habitat characteristics as an indicator of the desired nest area habitat, and as the best available information for nest area habitat for that cover type.	-	X	X	X	-	X
	g- 23	(<i>Guideline</i>) Forest vegetative manipulation within alternate and replacement nest areas should be designed to promote the mature and old structural stages.	-	-	-	-	X	-

CATEGORY 4: Goshawk Nest and Post-Fledgling Areas Only (Continued)

g- 24	<p><i>(Guideline)</i> Identify a Post-Fledgling Area (PFA) which encompasses the active, alternate and replacement nest areas and additional habitat needed to raise fledglings. A PFA should be approximately 420 acres in size (exclusive of nest area acres) when sufficient suitable habitat exists. If sufficient amounts of suitable habitat are not present, use existing suitable habitat that is available.</p>	-	X	X	X	X	X															
g- 25	<p><i>(Guideline)</i> Forest vegetative manipulation within the PFAs should be designed to maintain or improve the same habitat features as discussed for the goshawk home range (i.e., stand structure, snags, down logs, nest trees important in the life histories of the goshawk and its prey species common to the geographic location), except:</p> <p>a) Openings, as defined in glossary and Reynolds et al., created as a result of mechanical vegetative treatments (does not include wildland fire) should not exceed the following by cover type:</p> <table border="1" data-bbox="363 521 1346 639"> <thead> <tr> <th>Cover Type</th> <th>Maximum Created Opening Size</th> </tr> </thead> <tbody> <tr> <td>Ponderosa Pine and Mixed Conifer</td> <td>2 acres</td> </tr> <tr> <td>Spruce/fir</td> <td>1 acre</td> </tr> <tr> <td>Aspen and Lodgepole pine</td> <td>Follow current management direction</td> </tr> </tbody> </table> <p>b) Management activities should be restricted during the active nesting period. The active nesting period will normally occur between March 1st and September 30th.</p> <p>c) Where timber harvest is prescribed to achieve desired forest conditions, plan the transportation system to minimize disturbance to the PFAs. For example, small, permanent skid trails should be used in lieu of roads to minimize disturbance in goshawk PFAs. Variance may occur if it is determined that a combination of new permanent or temporary roads and permanent skid trails would result in less overall disturbance to PFA habitat.</p>	Cover Type	Maximum Created Opening Size	Ponderosa Pine and Mixed Conifer	2 acres	Spruce/fir	1 acre	Aspen and Lodgepole pine	Follow current management direction	-	X	X	-	-	X							
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CATEGORY 5: Other Miscellaneous Areas of Concern

		MANAGEMENT DIRECTION	ALTERNATIVES					
ID	ID		A	B	C	D	E	F
	g- 27	<i>(Guideline)</i> Wildlife and livestock utilization of grasses and forbs should average 20% by weight, and not exceed 40% by weight, in any forested group within a pasture or allotment. Shrub utilization should average 40% by weight, and not exceed 60%, in any forested group within a pasture or allotment. This level of utilization should maintain adequate seed, mast, and foliage needed to support goshawk prey species. Variance from these utilization ranges may occur when it can be shown that utilization levels in combination with grazing system being applied, season of use, and the health trend of the vegetative community, will restore or maintain the desired production of seed, mast and foliage identified through the landscape assessment. This guideline does not apply to non-forest patches.	-	-	-	X	-	-
	g- 28	<i>(Guideline)</i> Through the landscape assessment process identify plant communities important to goshawk prey species that contain seed, mast, and foliage components that are important to these prey species.	-	-	-	-	-	X
	g- 29	<i>(Guideline)</i> Where it is determined through the landscape assessment process that ungulate grazing is contributing to an identified functioning-at-risk condition relative to habitat needed to support goshawk and its prey, modify grazing practices to maintain or restore the desired seed, mast, and foliage production defined in the landscape assessment process. Review success of modifications annually. If modifications are not providing for the desired progression toward production objectives defined in the landscape assessment, modify practices through the next annual operating plan. This guideline does not apply to non-forest patches.	-	-	-	-	-	X
	g- 30	<i>(Guideline)</i> Do not mechanically treat lands classified as unsuitable timber lands for the sole purpose of promoting goshawk habitat. Treatments of these lands is allowed when the treatment is in a manner compatible with the reason for the classification and will maintain and protect wildlife values such as forested stringers, fringe habitat and ecotones. In these cases appropriate wildland fire use is the preferred treatment method.	-	-	-	-	X	-
	g- 31	<i>(Guideline)</i> Manage road densities needed to meet resource objectives while minimizing disturbance to goshawk territories. Unacceptable disturbance occurs when road densities may likely result in territory abandonment.	-	-	-	X	X	-
	g- 32	<i>(Guideline)</i> Where timber harvest is prescribed to achieve desired habitat conditions, small, permanent skid trails should be used in lieu of roads to minimize disturbance in goshawk territories. Variance may occur if it is determined that a combination of new permanent or temporary roads and permanent skid trails would result in less overall disturbance to habitat.	-	-	-	X	X	-

CATEGORY 5: Other Miscellaneous Areas of Concern (Continued)

g- 33	<p><i>(Guideline)</i> To help determine opportunities for habitat maintenance or enhancement for goshawk and its prey, conduct landscape analyses at the 5th to 6th order HUC or equivalent ecological scale (10's to 100's of thousands of acres). These assessments provide information concerning resource conditions, risks, and opportunities in a systematic way, thereby enhancing the agency's ability to estimate direct, indirect, and cumulative effects of management actions that may affect habitat for the goshawk and its prey. With this information in hand, managers have a better opportunity to balance the needs of resources and humans and are less likely to negatively impact far-ranging species such as the northern goshawk or other species of concern. Essentially, actions are proposed within the context provided by the landscape assessment. As a minimum, landscape assessments should describe current status of resources, risks and opportunities (as discussed below) using the best information available locally at the time of the assessment.</p> <ul style="list-style-type: none"> · <i>Status</i> is the condition of the resources relative to the historical condition. The historical condition should be depicted through the identification of the historic range of variation (HRV) for the resource attribute of interest (i.e., forest structure, composition, canopy closure), as defined in Regional or local properly functioning condition (PFC) assessments. · <i>Risk</i> should include both short- and long-term risks of adversely affecting the current condition of these resources (i.e., insect, disease, wildfire, human related development). · <i>Opportunities</i> are situations where either improvements in resource condition or a reduction in risk can be achieved in a landscape through some form of subsequent management decisions. These decisions will be made either through site-specific project decisions or future adjustments in land use plans, both of which include additional analysis and public involvement. <p>Landscape assessments are not necessary where the Forest or project interdisciplinary team determine that the intent of the assessment has been met through other analytical processes. Meeting the intent means that sufficient information exists concerning resource conditions and risks to understand the effects (direct, indirect, and cumulative) of a proposed site-specific project on goshawk habitat relative to the broader landscape context.</p>	-	-	X	X	X	X
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CATEGORY 6: Treatment Prioritization

		MANAGEMENT DIRECTION	ALTERNATIVES					
ID	ID		A	B	C	D	E	F
G-10		GOAL: Restore or maintain forested landscapes in a properly functioning condition (PFC). Functioning forested landscapes provide habitat for the northern goshawk and its prey to support a viable population of goshawks in Utah.	-	-	-	-	-	X
O-1		Objective: For the remainder of the current planning period, prioritize treatment on at least 1000 acres where goshawk habitat areas are rated as high or optimum quality (per the process in Graham et al. 1999), and that are functioning-at-risk. Implement treatments that will provide reasonable assurance that areas will not drop to low to moderate value.	-	-	-	-	-	X
s- 11		(STANDARD) - When non-vegetative management activities (for example: land exchanges, recreation facility development, ski resort construction, utility corridors, etc.) are proposed that would result in loss of suitable goshawk habitat, sufficient mitigation measures will be employed to insure an offset of the loss. The biological evaluation (BE) process will be used to document findings, recommend mitigation measures, and evaluate consistency with the intent of the Conservation Strategy and Agreement for Management of the Northern Goshawk in Utah.	-	-	-	-	-	X

CATEGORY 6: Treatment Prioritization

		MANAGEMENT DIRECTION	ALTERNATIVES					
ID	ID		A	B	C	D	E	F
	g-34	<i>(Guideline)</i> To provide the greatest reduction in risk to loss of habitat needed to support goshawk populations across Utah, treat those acres rated as high or optimum value to goshawks and its prey that are at risk to dropping into the low or moderate value. Variance in this prioritization may occur when management objectives for goshawk habitat in concert with other resource needs, necessitate. In these cases, changes to the quality of goshawk habitat across a landscape should not impact meeting landscape habitat objectives for goshawk habitat quality, quantity and connectivity identified in the landscape assessment.	-	-	-	-	-	X