Table 2. Summary of how each alternative addresses the issues identified by the Montana Wolf Management Advisory Council and by the general public in spring, 2002.

Issues	Alternative 1 No Action	Alternative 2 Updated Council	Alternative 3 Additional Wolf	Alternative 4 Minimum Wolf	Alternative 5 Contingency
Wolf Management **Numbers** **Distribution**	Existing program; emphasizes species recovery and resolution of conflicts with livestock and protection of human safety; pack definition is the same as a breeding pair -- "a male and a female with at least 2 pups on December 31"; little emphasis on proactive management of numbers and distribution outside context of conflict resolution	Adaptive; management like other large carnivores; trigger is 15 breeding pairs; no cap; no zone; regulated harvest possible in the future; packs managed according to provisions of the Planning Document and the 2003 updates when within Montana state boundaries and in with coordination the adjacent authority; Montana will count packs that den within the state border towards adaptive management tally; all boundary packs are counted toward tri-state recovery requirement, but shall not be counted by more than one state	Same as Alternative 2; adaptive management trigger increased to 20 breeding pairs according to the federal recovery definition	Not adaptive; cap at minimum number of breeding pairs and social groups above delisting level; zoned out of eastern Montana and off private property; packs defined according to the federal definition of breeding pair; boundary packs managed conservatively; more management and control carried out by landowners	Same as Alternative 2; no regulated harvest; federal rules and regulations guide harassment and take
Social Factors	Conservative management, as per ESA; protectionist	Moderate; balanced; integrated into wildlife program; program goal is "biologically possible, socially acceptable, and economically feasible"	Same as Alternative 2	Aggressive management; low tolerance; treated separately as a "cost"; not integrated into wildlife program; exploitative	Same as Alternative 2, but responds to public concerns over potential delisting delays by implementing the Alternative 2 as an interim step (to the extent allowed by federal law) prior to gaining full authority

Table 2. Continued.

Issues	Alternative 1 No Action	Alternative 2 Updated Council	Alternative 3 Additional Wolf	Alternative 4 Minimum Wolf	Alternative 5 Contingency
Administration Delisting	USFWS, WS; listed under ESA; federal laws apply	FWP, FWP Commission, MDOL, WS; no longer listed as endangered/threatened under federal law or endangered under state law; state laws, administrative rules apply	Same as Alternative 2	Same as Alternative 2	Same as Alternative 2, but wolf still listed under state and federal law; some federal laws and regulations apply
Prey Populations	Wolf impacts to big game populations not addressed without an approved state plan; since no state plan would be prepared, no management could occur to address prey concerns; monitoring and research at current levels	wolf/prey management integrated, ecological; increase monitoring where wolf packs establish; research; increase/decrease hunter opportunity for predators and prey currently and as appropriate to meet goals	Same as Alternative 2	Aggressive wolf management to benefit prey; no enhanced ungulate monitoring	Same as Alternative 2 but wolf management tools limited to relocation
Funding	Federal	Combination of federal, state, private sources; federal share required for implementation	Same as Alternative 2	Federal	Federal 90%, state 10%; state's share is license revenue and private
Livestock	Existing rules/regulations (experimental area rules and pending reclassification proposal)	WS MOU with FWP; FWP special kill permits for landowners; defense of life/property if wolf is "attacking, killing, or threatening to kill"	Same as Alternative 2; greater emphasis and more resources dedicated to preventative measures and proactive approaches to minimize risk	WS liberal, landowner special kill permits liberal	Same as Alternative 2, federal law and regulations guide owner harassment and take of wolves with or without a permit, on public or private lands
Wolf Habitat, Connectivity, Land Management	Provided by legal protections, achieving adequate population numbers; public education	Same as Alternative 1; FWP technical participation and coordination with land management agencies and transportation planners	Same as Alternative 2	Same as Alternative 2; connectivity through periodic trap/relocation	Same as Alternative 2

Table 2. Continued.

Issues	Alternative 1 No Action	Alternative 2 Updated Council	Alternative 3 Additional Wolf	Alternative 4 Minimum Wolf	Alternative 5 Contingency
Compensation	Voluntarily provided by Defenders of Wildlife as long as wolf still listed under ESA	Yes; State of Montana intends to find or create an entity to administer a compensation program; no FWP funds (state or matching federal monies) and no Montana general fund monies; may still be voluntarily provided by Defenders of Wildlife or	No; State of Montana would not find or create an entity to administer a compensation program; may be available voluntarily by Defenders of Wildlife	No; wolf management aggressive by landowners, WS, and FWP to minimize livestock losses	Same as Alternative 2
Economics, Livelihoods	Avoid disrupting land management activities that may be harmful to local economies and livelihoods; resolve wolf-livestock conflicts; compensation for livestock losses made by independent entity; wolf recovery benefits other economic sectors and commercial activity	Economic costs and benefits of wolf restoration in Montana accrue to individuals or economic sectors differently; integrate and sustain a wolf population within the complex biological, social, and economic landscape; acknowledge the benefits to other economic sectors associated with recovered population; compensation for confirmed and probable livestock losses; provisions to minimize wolf effects on ungulate populations through integrated management	Same as Alternative 2, but FWP would more proactively address and minimize risk of economic losses for livestock producers and private landowners to the extent possible	Aggressive and liberal management to favor the economic interests of livestock producers and others who may be economically impacted by higher wolf numbers; does not capture full economic benefits associated with tourism	Same as Alternative 2, but federal regulations guide resolution of wolf-livestock conflicts
Information, Education, Public Outreach	Existing effort	Increased effort through Conservation Education Division; technical assistance to landowners	Same as Alternative 2	Limited effort by Conservation Education Division; high degree of interaction with landowners to notify when wolves in the area	Same as Alternative 2

Table 2. Continued.

Issues	Alternative 1 No Action	Alternative 2 Updated Council	Alternative 3 Additional Wolf	Alternative 4 Minimum Wolf	Alternative 5 Contingency
Human Safety	Lethal take to defend human life if immediate threat to person and by agencies to protect human safety; citizen must report incident in 24 hours	Discourage habituation; FWP removes habituated animals; lethal take to defend human life if imminent danger; citizen must report in 72 hours; FWP or agent may take wolf to protect human safety in proactive context	Same as Alternative 2	Same as Alternative 2	Same as Alternative 2, but reporting requirement is 24 hours according to federal regulations
Monitoring	Done by USFWS to document progress towards recovery goals	Yes; effort commensurate with other wildlife using standard protocols; balance cost effectiveness with precision; document breeding pairs for adaptive management framework; validate more general definition of at least four wolves traveling in winter	Same as Alternative 2	Yes; intense telemetry effort required	Same as Alternative 2
Other Wildlife	No special provisions; FWP responds to special needs where/when they develop; ecosystem processes; impacts to other listed species not significant	Taken into account by integrating wolf within wildlife program; ecological context so some species benefit but others may not; FWP responds to special needs where/when they develop	Same as Alternative 2	May benefit because of low wolf numbers; scavengers benefit less	Same as Alternative 2

Table 2. Continued.

Issues	Alternative 1 No Action	Alternative 2 Updated Council	Alternative 3 Additional Wolf	Alternative 4 Minimum Wolf	Alternative 5 Contingency
Private Property	Wolves may be present on private property similar to other publicly-owned wildlife; landowner response to wolf use guided by federal laws and regulations; no federally-imposed takings or restrictions on private property	Wolves may be present on private property similar to other publicly-owned wildlife; landowner response to wolf use guided by state laws and regulations; minimize potential for conflicts to the extent possible; resolve conflicts in a timely manner; owners able to grant or deny access to their property; no government-imposed restrictions	Same as Alternative 2	Wolves may be present, but there is greater deference to owners' preferences; landowners granted greater latitude to resolve conflicts and may discourage wolf use	Same as Alternative 2; federal laws and regulations guide response to wolf conflicts in context of livestock as private property; no government restrictions
Hybrids	Do not contribute to wild population; management removal possible; state laws for possession, marking, and, liability; local authorities respond	FWP/state response like USFWS response in Alternative 1	Same as Alternative 2	Same as Alternative 2	Same as Alternative 2
Wildlife Management Areas	Wolf use possible; limited input from FWP	Wolf use possible; FWP balances wolf and prey use; wolf-livestock conflicts resolved as per *Livestock / Compensation* section	Same as Alternative 2	Limited tolerance for wolf use, discouraged	Same as Alternative 2; federal laws and regulations guide response to conflicts with livestock

Table 3. Summary of environmental consequences for each alternative.

Issue	1. No Action	2. Updated Council	3. Additional Wolf	4. Minimum Wolf	5. Contingency
Wolf Management	Recovery emphasis; increase population size and distribution; address conflicts	Adaptive; responsive; balanced; FWP has flexibility; gray wolf integrated into wildlife program; resolve conflicts	Same as Alternative 2; more management flexibility because more wolves	Not adaptive; aggressive; liberal; more control done by landowners; FWP has limited flexibility	Same as Alternative 2 but not all tools available while gray wolf still listed (no regulated harvest)
Number of Wolves in 2015	854 wolves or 70 breeding pairs	LOW: 328 wolves or 27 breeding pairs; liberal tools start in 2006 HIGH: 657 wolves or 54 breeding pairs; liberal tools start in 2004	LOW: 365 or 30 breeding pairs; liberal tools start in 2008 HIGH: 807 or 66 breeding pairs; liberal tools start in 2006	CAP: 154 or 13 breeding pairs; aggressive management upon delisting until population reduced to cap	LOW: 421 or 35 breeding pairs; liberal tools start in 2006; no regulated harvest HIGH: 1,167 or 95 breeding pairs; liberal tools start in 2004; no regulated harvest
Wolf Distribution in 2015	Statewide is possible, but will ultimately be determined by prey abundance and conflicts with people in practical terms; expected to be western, west-central, and southwestern Montana	Statewide is possible, but will probably be primarily western, west central and southwestern Montana; no administrative zone, but encouraged on remote public lands and integrated in mixed landowner-ships; localized distribution will be determined by prey abundance and conflicts with people	Same as Alternative 2	Public lands in western Montana; administrative zone defined by FWP regional boundaries; no wolves east of FWP Region's 4 and 5 boundaries; management to restrict wolf use of private lands; localized distribution will be determined by prey abundance and conflicts	Same as Alternative 2
Wolf Habitat, Connectivity, Land Management	Connectivity assured through legal protection and adequate prey and wolf numbers	Connectivity assured through legal protection and adequate prey and wolf numbers	Connectivity slightly increased over Alternative 2	Connectivity not assured without periodic wolf trap/relocation efforts	Same as Alternative 2
Monitoring	Moderate, declining intensity; done by USFWS	Moderate cost and intensity; done by FWP	Same as Alternative 2	High cost and intensity; done by FWP; strong reliance on telemetry	Same as Alternative 2

Table 3. Continued.

Issue	1. No Action	2. Updated Council	3. Additional Wolf	4. Minimum Wolf	5. Contingency
Prey Populations	Management not fully integrated with wolves; numbers fluctuate through time because of predation (all species), natural mortality, human hunting, habitat conditions, weather events; fluctuation similar to historical patterns; local ungulate populations may decrease in presence of wolves; local populations may take longer to recover from environmental events in the presence of wolves	Management integrated with wolves and managed ecologically; local populations may decrease in presence of wolves or take longer to recover from environmental events; local impacts expected to be less than Alternative 1; impacts across broad geographic areas not expected; numbers will fluctuate through time due to predation (all causes), natural mortality, human hunting, habitat conditions, weather events; fluctuation similar to historical patterns	Same as Alternative 2	Same as Alternative 2, but no impacts to localized ungulate populations expected	Same as Alternative 2; no regulated wolf harvest to help balance wolf-prey relationships; wolf management tools primarily relocation
Other Wildlife	Some species may be impacted; other species benefit	Same as Alternative 1; FWP better able to address needs of other wildlife species	Same as Alternative 2	Same as Alternative 2	Same as Alternative 2
Social	Variable	Variable	Variable	Variable	Variable
Public Outreach	Less effort than Alternatives 2, 3 and 5	Increased from Alternative 1; statewide effort (general ecology, safety, landowner contacts, etc.); many types	Same as Alternative 2	Emphasizes landowner contacts	Same as Alternative 2
Human Safety	Defense of human life under ESA acceptable; report within 24 hours; USFWS management to remove threats to public safety	Defense of human life acceptable under Montana law; FWP management to remove threats to public safety	Same as Alternative 2	Same as Alternative 2	Same as Alternative 1; FWP implements federal regulations
Private Property	No restrictions by USFWS	No restrictions by State of Montana	Same as Alternative 2	Wolf use discouraged; same as Alternative 2	Same as Alternative 2

Table 3. Continued.

Issue	1. No Action	2. Updated Council	3. Additional Wolf	4. Minimum Wolf	5. Contingency
Livestock Depredation	Confirmed Cattle: 132 Confirmed Sheep: 150 Probable Cattle: 79 Probable Sheep: 13	Confirmed Cattle: 25-51 Confirmed Sheep: 29-58 Probable Cattle: 16-31 Probable Sheep: 3-5	Confirmed Cattle: 28-62 Confirmed Sheep: 32-71 Probable Cattle: 17-38 Probable Sheep: 3-6	Confirmed Cattle: 6 Confirmed Sheep: 7 Probable Cattle: 4 Probable Sheep: 1	Confirmed Cattle: 49-135 Confirmed Sheep: 55-153 Probable Cattle: 29-81 Probable Sheep: 5-13
Compensation	Privately funded, voluntary; Defenders of Wildlife possible Confirmed: $126,300 Probable: $68,372 Other Domestic: $15,827	State of Montana with FWP in leadership role establishes an independent entity; no state or matching dollars are used; mitigation through management possible Confirmed: $23,976-$48,802 Probable: $13,882-$26,820 Other Domestic: $3,077-$6,148	No effort by FWP to establish program; private and voluntary OK; no state or matching federal dollars; mitigation possible Confirmed: $26,808-$59,374 Probable: $14,732-$32,864 Other Domestic: $3,377-$7,498	None Confirmed: $5,758 Probable: $3,494 Other Domestic: $752	Same as Alternative 2 Confirmed: $48,820-$129,132 Probable: $25,120-$70,072 Other Domestic: $5,849-$16,195
Big Game Hunting	No impact for non-residents; resident opportunity variable through time; changes not expected to be greater than observed historically; impacts localized; decreases or increases possible due to wolf presence or other management objectives; no mitigation	No impact to non-residents; resident opportunity variable through time; changes not expected to be greater than observed historically; impacts localized, but less severe than Alternative 1 because ungulate management is integrated with wolf management; increases possible due to wolf presence or other management objectives; mitigation possible	Same as Alternative 2	Same as Alternative 2	Same as Alternative 2
Regional Economy	No regional or statewide impact; localized possible	Same as Alternative 1; localized changes expected to be less than Alternative 1	Same as Alternative 2	Same as Alternative 2	Same as Alternative 2
Outfitting Industry	No impact statewide or regionally; impacts to certain outfitters possible where wolves affect local prey populations; no mitigation	Same as Alternative 1; localized impacts expected to be less than Alternative1	Same as Alternative 2	Same as Alternative 2	Same as Alternative 2

Table 3. Continued.

Issue	1. No Action	2. Updated Council	3. Additional Wolf	4. Minimum Wolf	5. Contingency
Recreational Values (Hunting and Wildlife Viewing)	Variable	Variable	Variable	Variable	Variable
FWP Fiscal	Minor impact due to historic changes in license revenue FWP: up to $5,000 for coordination; costs absorbed in existing budget USFWS $1,111,000 -- total for Montana, Idaho, and Wyoming combined WS: all federal appropriation	Minor impact due to historic changes in license revenue; funding shared by federal, state, and private sources; some revenue generated if implement regulated wolf harvest FWP: $913,000-$954,000; combination of FWP, federal, and private; extra $50,000 for preventative work, $100,000 for WS, and compensation included; overhead and inflation not included	Same as Alternative 2 FWP: $897,000; combination of FWP, federal, private; extra $50,000 for preventative work included; $100,000 for WS included; compensation not included	Same as Alternative 1; funding by federal sources; inconsistent revenue from wolf license sales FWP: $952,000 all federal; no extra $$ for preventative work; $75,000 for WS included; no compensation included	Minor impact due to historic changes in license revenue; 90% funding federal; state share out of existing budget; no new revenue generated by wolf license sales FWP: $924,739 – $1,062,399; cost share 90% federal: 10% state until wolf delisted and authority transferred completely; upon delisting, combination of FWP, federal, and private; extra $50,000 for preventative work included; $50,000 for WS shown in budget, but is separate federal appropriation; compensation included
Administration, Funding, and Legal Status	Still listed as "threatened" and "experimental / non-essential"; USFWS and partners; federal laws	Delisted; state laws; "species in need of management"; FWP and WS;	Same as Alternative 2	Delisted; state laws; "species in need of management" but managed aggressively as if it was a "predator"; FWP and WS	Still listed; "threatened" and "experimental / non-essential"; state laws for most things but federal regulations for activities resulting in wolf harassment, injury or death; FWP and WS with USFWS oversight
Physical Environment	No Impact	Same as Alternative 1	Same as Alternative 1	Same as Alternative 1	Same as Alternative 1