AFW Policy Option #	Policy Option Name	AFW Catalog Option No.	AFW Catalog GHG Reduction Policy Option	Votes	Additional Notes for Balloting
AFW-1	Agricultural Crop Management	3.1	Conservation Tillage/No-Till (carbon sequestration and reduced energy use)	13	WS - I agree with the option to lump a number of crop practices, particularly tillage and fertilizer use, under an Agricultural Crop management strategy
		3.2	Reduce Summer Fallow (increase soil C content, reduce N2O emissions)	1	KP - Goes together with 3.2 for dryland crop systems
		3.6	Application of Biochar to Soils	1	TF - I'm unopposed to considering as a general option and then lumping
		3.3	Increase Winter Cover Crops (increase soil C content, increase soil N content)	1	
		2.1	Crop Management (improve efficiency of fertilizer use; education/technical service for organic farming)	3	
		5.2	Organic Farming *(S)	4	
AFW-2	Forestry Programs to Enhance GHG Benefits	6.7	Thinning and Density Management of Managed Stands *(S,L,Fed)	9	WS - As AZ and NM did, I would suggest we create a category for "Forest restoration and community wildfire protection projects." This would in my opinion lump this option with 6.12, 6.13, 6.16. and 6.17
		6.5	Increased Stocking of Poorly Stocked Lands	1	If we don't lump, then we should be clear in doing the analysis what we mean by managed stands. Few forests in Colorado will be managed just for the timber value.

		6.11	Modified Biomass Removal Practices (reduced decay and energy use)	1	It is about managing for other objectives that may produce timber. TF - With caveat that this does NOT apply unilaterally across forest types and that subsequent analysis must reflect larger forest ecologies
		6.12	Fire Management and Risk Reduction Programs *(S,L,Fed)	2	
		6.13	Ecosystem Health Risk Reduction Programs (pest/disease, invasive species) *(S,L,Fed)	1	
		7.2	Improved Logging and Other Residue Recovery (e.g., removal of insect damaged wood from roadless areas)	1	
AFW-3	Manure Management and Energy Utilization	1.1	Manure Digesters/Other Waste Energy Utilization *(L)	7	TF - Considered in conjunction with manure mgmt (2.2)
		2.2	Manure Management (handling and storage, and improve application methods) *(S)	5	
		2.3	Manure Composting	3	
AFW-4	Preserve Lands with Carbon Storage Value	4.2	Preserve Open Space/Agricultural Land *(S,L)	8	WS - I would propose lumping this with 4.3 and 6.1 as a general category of "preventing conversion of land with carbon storage value." The policy option is in essence the same, and it could target lands with highest potential/lowest cost. I would not include all agricultural lands in a blanket policy option here, as some crop lands may not be functioning as carbon
		6.1	Forest Protection – Reduced Clearing And Conversion to Nonforest Cover	5	

		4.3	Prevent conversion of grassland to croplands (includes opportunities to keep CRP lands in permanent cover)	2	sinks, and we shouldn't protect them without considering their actual contribution. If you choose to keep the forest conversion as a separate category, I would cast an extra vote there. TF - I see this as properly lumped with 4.3 (and perhaps 6.1) as preventing land
AFW-5	Prevent Landfilling of Unprocessed Organic Material	9.6	Prevent Landfilling of Unprocessed Organic Material	8	
AFW-6	Landfill Methane Energy Programs	10.3 8.5 10.2	Landfill Methane Energy Programs *(L) Expanded Landfill Methane Recapture (wood products waste) Methane & Biogas Energy Programs	7 3 2	WS - I would agree with any lumping that others more knowledgeable about this topic propose TF - Agreed that includes 8.5 S. Roe - TWG will need to decide whether inclusion of 10.2 means that methane recovery programs should be extended to sources other than landfills.
AFW-7	Biodiesel Production	1.2	Biodiesel Production (incentives for feedstocks and production plants)	7	
AFW-8	Reductions in On-Farm Energy Use	5.4	Reductions in on-farm energy use (includes installation of solar or wind power, or hydro-powered generators for irrigation)	7	
AFW-9	Biomass Feedstocks for Energy Production	1.3	Biomass Feedstocks for Electricity or Steam Production Expanded Use of Forest Biomass Feedstocks for Residential,	5	WS- I would combine this with options 8.1 and 8.2 to examine generally use of waste biomass feedstocks from ag or forestry options. If you don't agree with this lumping, I would cast one of my additional

		8.2 8.1	Commercial/Institutional, or Industrial Heating Expanded Use of Forest Biomass Feedstocks for Electricity (fuel switching)	5 3	votes for a lumped 8.1 and 8.2.
		2.2	Manure Management (handling and storage, and improve application methods) *(S)	5	WS - I would agree with the proposal to lump this with 1.1, 2.1 and 2.3 TF - Considered in conjunction with 1.1
		8.2	Expanded Use of Forest Biomass Feedstocks for Residential, Commercial/Institutional, or Industrial Heating	5	
AFW-10	Ethanol Production	1.4	Ethanol Production (includes agriculture, forestry, and waste feedstocks)*	5	
		5.2	Organic Farming *(S)	4	
		6.1	Forest Protection – Reduced Clearing And Conversion to Nonforest Cover	5	TF - With the caveat that I understand this to be development conversion and not natural process conversion (not an argument to unilaterally suppress fires)
		2.1	Crop Management (improve efficiency of fertilizer use; education/technical service for organic farming)	3	KP -This goes together with 3.4, integrated fertilizer and water use to reduce N2O and net CO2 emissions
		2.3	Manure Composting	3	
		3.5	Rotational Grazing/Improve Grazing Crops and/or	3	WS - This option would be better worded as something like "Grazing lands management" and make it parallel to the

			Management		general crop management option above. It could include grazing practices, as well as some manure management options for livestock. I question the ranking of low for potential benefit, as I think the contribution here could be significant if all grazing lands in the state are considered. I also hope we don't just consider rotational grazing, as some options related to reduced stocking levels could have the same or better benefits.
		5.3	Programs to Support Local Farming/Buy Local *(S)	3	
		8.5	Expanded Landfill Methane Recapture (wood products waste)	3	
		2.5	Reduce Non-Farm (Residential and Commercial) Fertilizer Use	2	
		8.1	Expanded Use of Forest Biomass Feedstocks for Electricity (fuel switching)	3	
		9.4	Resource Management Contracting	2	
		9.1	Advanced Recycling and Composting *(L)	2	
		10.2	Methane & Biogas Energy Programs	2	
		3.2	Reduce Summer Fallow (increase soil C content, reduce N_2O emissions)	1	
		3.3	Increase Winter Cover Crops (increase soil C content, increase soil N content)	1	

		3.6	Application of Biochar to Soils	1	
		6.5	Increased Stocking of Poorly Stocked Lands	1	
		6.11	Modified Biomass Removal Practices (reduced decay and energy use)	1	
		6.12	Fire Management and Risk Reduction Programs *(S,L,Fed)	2	KP - Goes with 6.13, reducing fire and pest outbreaks are intimately linked – thinning of overstocked stands esp. in housing impacted areas (6.7) will be included
		6.13	Ecosystem Health Risk Reduction Programs (pest/disease, invasive species) *(S,L,Fed)	1	
		7.2	Improved Logging and Other Residue Recovery (e.g., removal of insect damaged wood from roadless areas)	1	
		7.3	Expanded Use of Wood Products for Building Materials	1	
		9.2	Promotion of Bioreactor Technology	1	
		4.3	Prevent conversion of grassland to croplands (includes opportunities to keep CRP lands in permanent cover)	2	
		8.6	Improved Commercialization of Biomass Gasification and Combined Cycle	1	
		2.4	Changes in Animal Feed (optimize nitrogen for N_2O reduction)	0	

		3.4	Improve Water and Nutrient Use (to minimize soil C loss) *(S)	0	
		4.1	Convert Cropland to Grassland or Forest	0	
		5.1	Convert Diesel Farm Equipment to LNG/CNG or Hybrid Technology	0	
		5.5	Strategic Agricultural Land Use Management	0	
		6.2	Increase Maintenance of Urban and Residential Trees *(L)	0	
		6.3	Afforestation and/or Restoration of Nonforested Lands	0	
		6.4	Reforestation/Restoration of Managed Stands *(S,L,Fed)	0	
		6.6	Age Extension of Managed Stands	0	
		6.8	Fertilization and Waste Recycling	0	
		6.9	Expand Short Rotation Woody Crops (for fiber and energy)	0	
		6.10	Expanded Use of Genetically Preferred Species	0	
		6.14	Drought Management Programs (tree selection, placement, protection) *(S,L)	0	
		6.15	Flood and Riparian Management Programs (tree selection, placement, protection) *(S,L)	0	
		6.16	Watershed Management Programs (stand retention,	0	

			enhancement and management) *(S,L,Fed)		
		6.17	Habitat Management Programs (stand retention, enhancement and management) *(S,L, Fed)	0	
		7.1	Improved Mill Waste Recovery	0	
		7.4	Expanded Use of State and Locally-Grown Wood Products	0	
		8.3	Improved Efficiency of Wood Burning Stoves and Direct Heat *(S)	0	
		8.4	Improved Energy Capture from Wood Waste Combustion *(L)	0	
		9.3	Source Reduction Strategies *(S,L)	0	
		9.5	Waste Coal Recapture	0	
		10.1	Flare Landfill Methane at non-NSPS (smaller) Sites	0	
		11.1	Energy Efficiency Improvements	0	
		11.2	Lower Waste Processing Needs (lower water consumption, waste production) *(L)	0	
		11.3	Install Digesters and Turbines or Fuel Cells	0	