

# SJ-15 Study Matrix revised 11-01-13

1	Identify Risks & Concerns  <i>(June-Oct)</i>	Identify Desired Correction and/or Condition  <i>(Sept-Oct)</i>	Identify Barriers Currently Preventing Correction  <i>(Oct-Nov)</i>	Brainstorm & Explore Solutions  <i>(Nov-March)</i>	Develop Action Items  <i>(April-August)</i>	References
2	<b>INFRASTRUCTURE:</b> Excessive wildfire fuel loads due to insect, disease, and/or lack of active management place infrastructure on or near federally managed lands at risk - including electrical transmission lines, transportation facilities, communication towers, water systems, and other utilities.	Active, immediate vegetation management to protect transmission lines and other infrastructure from wildfire, wind, ice storms, post fire erosion.	Lack of Funding Obstructive Litigation Unfavorable Policy Rough Terrain, Limited Access			<p>Montana Legislature Fire Suppression Committee 2008 report: The Price of Flame <a href="http://leg.mt.gov/content/Committees/Interim/2007_2008/fire_suppression/FSC%20final%20report.pdf">http://leg.mt.gov/content/Committees/Interim/2007_2008/fire_suppression/FSC%20final%20report.pdf</a></p> <p>Government Accountability Office Reports on Wildland Fire Management <a href="http://www.gao.gov/key_issues/wildland_fire_management/issue_summary#t=0">http://www.gao.gov/key_issues/wildland_fire_management/issue_summary#t=0</a></p> <p>Administrative Appeals in the Bureau of Land Management and the Forest Service, Congressional Research Service 2013 <a href="http://nationalaglawcenter.org/wp-content/uploads/assets/crs/R40131.pdf">http://nationalaglawcenter.org/wp-content/uploads/assets/crs/R40131.pdf</a></p> <p>Relationships between moisture, chemistry, and ignition of Pinus contorta needles during the early stages of mountain pine beetle attack, Forest Ecology and Management, 2012 <a href="http://www.fs.fed.us/rm/pubs_other/rmrs_2012_jolly_w001.pdf">http://www.fs.fed.us/rm/pubs_other/rmrs_2012_jolly_w001.pdf</a></p> <p>Review of Fuel Treatment Effectiveness in Forests and Rangelands, USDA Rocky Mountain Research Station, 2011 <a href="http://www.fs.fed.us/rm/pubs/rmrs_gtr252.pdf">http://www.fs.fed.us/rm/pubs/rmrs_gtr252.pdf</a></p> <p>Limited Data Available on USDA and Interior Attorney Fee Claims and Payments, Government Accountability Office, 2012 <a href="http://www.gao.gov/products/GAO-12-417R">http://www.gao.gov/products/GAO-12-417R</a></p> <p>Information on Appeals, Objections, and Litigation Involving Fuel Reduction Activities, Fiscal Years 2006 through 2008, Government Accountability Office, 2010 <a href="http://www.gao.gov/products/GAO-10-337">http://www.gao.gov/products/GAO-10-337</a></p>

3	<p><b>NEIGHBORING COMMUNITIES:</b> Excessive wildfire fuel loads due to insect, disease, and/or lack of active management on federally managed lands in Wildland-Urban Interface (WUI) place neighboring public and private property, facilities, infrastructure and communities at risk.</p>					<p>Montana Legislature Fire Suppression Committee 2008 report: The Price of Flame <a href="http://leg.mt.gov/content/Committees/Interim/2007_2008/fire_suppression/FSC%20final%20report.pdf">http://leg.mt.gov/content/Committees/Interim/2007_2008/fire_suppression/FSC%20final%20report.pdf</a></p> <p>Residential Wildfire Exposure Estimates for Western United States <a href="http://www.corelogic.com/about-us/researchtrends/asset_upload_file283_16407.pdf">http://www.corelogic.com/about-us/researchtrends/asset_upload_file283_16407.pdf</a></p> <p>Government Accountability Office Reports on Wildland Fire Management <a href="http://www.gao.gov/key_issues/wildland_fire_management/issue_summary#t=0">http://www.gao.gov/key_issues/wildland_fire_management/issue_summary#t=0</a></p> <p>USDA Office of Inspector General Audit: Forest Service Large Fire Suppression Costs, 2006 <a href="http://www.usda.gov/oig/webdocs/08601-44-SF.pdf">http://www.usda.gov/oig/webdocs/08601-44-SF.pdf</a></p>
4	<p><b>WATER:</b> Excessive wildfire fuel loads and intense wildfires on federally managed lands threaten, poison, and/or physically impair municipal drinking water supplies as well as water supplies for residential, recreational, agricultural, and other uses outside municipal watersheds. Watersheds are not being managed to maximize water yield.</p>			<p>Sen. Greg Hinkle suggests looking at an Okanogan NF – Twisp logging project that significantly increased yields and stream flows Doyel Shamley – research on volume of water held by over-dense timber stands</p>		<p>Wildland fire in ecosystems: effects of fire on soils and water, USDA Rocky Mountain Research Station, 2005 <a href="http://www.fs.fed.us/rm/pubs/rmrs_gtr042_4.pdf">http://www.fs.fed.us/rm/pubs/rmrs_gtr042_4.pdf</a></p> <p>Cumulative Watershed Effects of Fuel Management in the Western United States, USDA Rocky Mountain Research Station, 2010 <a href="http://www.fs.fed.us/rm/pubs/rmrs_gtr231.pdf">http://www.fs.fed.us/rm/pubs/rmrs_gtr231.pdf</a></p> <p>Risk of Impaired Condition of Watersheds Containing National Forest Lands, USDA Rocky Mountain Research Station, 2010 <a href="http://www.fs.fed.us/rm/pubs/rmrs_gtr251.pdf">http://www.fs.fed.us/rm/pubs/rmrs_gtr251.pdf</a></p>
5	<p><b>FISH &amp; WILDLIFE:</b> Large, intense fires on federally managed lands kill fish &amp; wildlife,</p>					<p>Wildland fire in ecosystems: effects of fire on fauna, USDA Rocky Mountain Research Station, 2000 <a href="http://www.fs.fed.us/rm/pubs/rmrs_gtr042_1.pdf">http://www.fs.fed.us/rm/pubs/rmrs_gtr042_1.pdf</a></p>

	destroy habitat, poison water, and cause displacement which adversely impacts surviving populations of fish & wildlife beyond the burned area.					
6	AIR QUALITY: Significant health risks, premature death, and other adverse impacts to Montana citizens and visitors due to high volumes of smoke/toxic air pollution generated by large, intense fires on federally managed lands. In addition to health dangers, prolific and lingering smoke restricts activities, displaces people from their homes and communities, impedes scenic views, and disrupts tourism.			Prioritize fuel reduction treatments in areas most susceptible to severe adverse effect.		See notes. Wildland Fire in Ecosystems Effects of Fire on Air, USDA Rocky Mountain Research Station, 2002 <a href="http://www.fs.fed.us/rm/pubs/rmrs_gtr042_5.pdf">http://www.fs.fed.us/rm/pubs/rmrs_gtr042_5.pdf</a>  The relationship of respiratory and cardiovascular hospital admissions to the southern California wildfires of 2003 (Abstract only) <a href="http://www.ncbi.nlm.nih.gov/pubmed/19017694">http://www.ncbi.nlm.nih.gov/pubmed/19017694</a>  California Wildfires of 2008: Coarse and Fine Particulate Matter Toxicity <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2702402/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2702402/</a>  Estimated Global Mortality Attributable to Smoke from Landscape Fires <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3346787/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3346787/</a>  Particle size-dependent radical generation from wildland fire smoke (Abstract only) <a href="http://www.ncbi.nlm.nih.gov/pubmed/17482744">http://www.ncbi.nlm.nih.gov/pubmed/17482744</a>
7	MUTIPLE USE ACCESS REDUCTIONS: Decommissioning and closing roads and trails severely diminishes access for desirable multiple use activities					See notes.

	including resource management, sustenance and recreational uses, emergency ingress/egress, and commercial extraction of natural resources.					
8	INVASIVE PESTS, DISEASE, AND NOXIOUS WEEDS: Proliferation of invasive pests, disease, and noxious weeds is prevalent on federally managed lands.					<p>Testimony for Dr. K. George Beck, U.S. House Natural Resources Committee, 2013. Three percent of existing federal acres infested with invasive weeds were treated and restored in 2009. <a href="http://naturalresources.house.gov/uploadedfiles/becktestimony05-16-13.pdf">http://naturalresources.house.gov/uploadedfiles/becktestimony05-16-13.pdf</a></p> <p>Wildland Fire in Ecosystems: Fire and Nonnative Invasive Plants, USDA, Rocky Mountain Research Station, 2008 <a href="http://www.fs.fed.us/rm/pubs/rmrs_gtr042_6.pdf">http://www.fs.fed.us/rm/pubs/rmrs_gtr042_6.pdf</a></p> <p>Invasive Forest Pests: Recent Infestations and Continued Vulnerabilities at Ports of Entry Place U.S. Forests at Risk GAO reports, 2006 <a href="http://www.gao.gov/products/GAO-06-871T">http://www.gao.gov/products/GAO-06-871T</a></p> <p>Invasive Forest Pests: Lessons Learned from Three Recent Infestations May Aid in Managing Future Efforts, 2006 <a href="http://www.gao.gov/products/GAO-06-353">http://www.gao.gov/products/GAO-06-353</a></p> <p>USDA Office of Inspector General Audit of FS Invasive species program 2010 <a href="http://www.usda.gov/oig/webdocs/08601-7-AT.pdf">http://www.usda.gov/oig/webdocs/08601-7-AT.pdf</a></p>
9	PILT, SRS, ROYALTIES: The substitute funding sources counties rely upon are unreliable and unpredictable due to dependency on renewed congressional approval and the ability of the federal					<p>See notes.</p> <p>An analysis of PILT-related payments and likely property tax liability of Federal resource management lands, Rocky Mountain Research Station, 1999 <a href="http://www.treesearch.fs.fed.us/pubs/4550">http://www.treesearch.fs.fed.us/pubs/4550</a></p> <p>PILT (Payments in Lieu of Taxes): Somewhat Simplified, Congressional Research Service, 2012 <a href="http://www.fas.org/sgp/crs/misc/RL31392.pdf">http://www.fas.org/sgp/crs/misc/RL31392.pdf</a></p> <p>Forest Service Payments to Counties—Title I of the Federal Forests County Revenue,</p>

	government to pay. PILT & SRS equate to a very low percentage of actual taxable value & resource production capabilities. Fund restrictions.					<p>Schools, and Jobs Act of 2012: Issues for Congress, Congressional Research Service, 2012 <a href="http://nationalaglawcenter.org/wp-content/uploads/assets/crs/R42452.pdf">http://nationalaglawcenter.org/wp-content/uploads/assets/crs/R42452.pdf</a></p> <p>Keeping the Commitment to Rural Communities, 2013, Jay O’Laughlin, University of Idaho <a href="http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=e11ece08-c8a2-4726-a6c5-d848a2b6581c">http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=e11ece08-c8a2-4726-a6c5-d848a2b6581c</a></p> <p>Ideas for Reforming the Secure Rural Schools and Community Self-Determination Act (SRS) and Payments in Lieu of Taxes (PILT) , Headwaters Economics <a href="http://headwaterseconomics.org/land/county-payments-research">http://headwaterseconomics.org/land/county-payments-research</a></p>
10	INADEQUATE FUNDING: Inadequate federal funding and/or prioritization for proper resource management, wildfire fuel reduction, wildfire rehabilitation, maintenance and repair of infrastructure, multiple-use access, and fire suppression.					<p>Chief Thomas Tidwell testimony, June 2013 <a href="http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=e59df65c-09c6-4ffd-9a83-f61f2822a075">http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=e59df65c-09c6-4ffd-9a83-f61f2822a075</a></p> <p>Wildfire Management: Federal Funding and Related Statistics, Congressional Research Service, 2013 <a href="http://nationalaglawcenter.org/wp-content/uploads//assets/crs/R43077.pdf">http://nationalaglawcenter.org/wp-content/uploads//assets/crs/R43077.pdf</a></p> <p>Government Accountability Office Reports on Wildland Fire Management <a href="http://www.gao.gov/key_issues/wildland_fire_management/issue_summary#t=0">http://www.gao.gov/key_issues/wildland_fire_management/issue_summary#t=0</a></p>
11	SCIENTIFIC INTEGRITY: Inaccurate, selective, biased, and/or outdated science and technology is being used in resource management plans, reports, administrative rules, federal policies, decisions, and enforcement.					

12	<p><b>MISSION CONFLICT:</b>  Several federal laws, executive orders, and rules are in conflict with the original purpose and authority related to federal land acquisitions, federal reservations, and the mission of managing agencies. This has resulted in contradictory policies and management constraints that are sometimes adversarial to the environment, economy, as well as public health, safety, and welfare.</p>					
13	<p><b>HABITAT CAPACITY:</b>  USFWS does not consider range or carrying capacity of habitat on federal lands when determining target populations of predators and wildlife.</p>					
14	<p><b>YPN BISON</b>– populations expanding beyond Yellowstone National Park boundary into Montana, creating</p>		<p>Unknown who has title in cases of natural migration and human caused movement (consult</p>			<p>Interagency Plan and Agencies' Management Need Improvement to Better Address Bison-Cattle Brucellosis Controversy, Government Accountability Office, 2008 <a href="http://www.gao.gov/products/GAO-08-291">http://www.gao.gov/products/GAO-08-291</a></p>

	jurisdictional questions and management problems for the state of Montana.		w/Dept. of Livestock, A.G., FWP, Tribes, Federal agencies – DOI/NPS)			Interagency Bison Management Plan Library <a href="http://ibmp.info/index.php">http://ibmp.info/index.php</a>
15	USFSW is not considering adverse impact of predators on Sage Grouse populations. Comprehensive management considerations associated with multiple species seems lacking.					
16	TIMBER INDUSTRY VIABILITY: Although an over-abundance of timber exists in many national forests, the viability of timber and wood products industries and related jobs and infrastructure are threatened by bureaucratic impediments, declining forest health, and unpredictable supply due to federal policies, litigation and administrative costs, and management					<p>Forest Products Outlook 2013, Forest Products and Manufacturing, Bureau of Business and Economic Research  <a href="http://www.bber.umt.edu/pubs/Forest/Outlook/forestproducts2013.pdf">http://www.bber.umt.edu/pubs/Forest/Outlook/forestproducts2013.pdf</a></p> <p>Timber Use, Processing Capacity, and Capability to Utilize Small-Diameter Timber Within USDA Forest Service, Region One Timber-processing Area, 2013, Bureau of Business and Economic Research  <a href="http://www.bber.umt.edu/pubs/forest/capacity/R1_capacity_report_Final.pdf">http://www.bber.umt.edu/pubs/forest/capacity/R1_capacity_report_Final.pdf</a></p> <p>Trends in the Montana Forest Products Industry, 2013, Bureau of Business and Economic Research  <a href="http://www.bber.umt.edu/pubs/forest/fidacs/COFE%20SWH%20final.pdf">http://www.bber.umt.edu/pubs/forest/fidacs/COFE%20SWH%20final.pdf</a></p> <p>Montana Legislature Fire Suppression Committee 2008 report: The Price of Flame  <a href="http://leg.mt.gov/content/Committees/Interim/2007_2008/fire_suppression/FSC%20final%20report.pdf">http://leg.mt.gov/content/Committees/Interim/2007_2008/fire_suppression/FSC%20final%20report.pdf</a></p>

	constraints.					
17	OWNERSHIP: Federally managed public lands might be sold or collateralized to private parties or foreign nations without state legislature's consent.					
18	OWNERSHIP: Checkerboard pattern of federal lands makes management and public access difficult.					
19	UNFAVORABLE TIMBER MANGEMENT: Unmanaged, overpopulated timber stands contribute to insect infestations, declining timber health, drought, intense wildfire, reduced watershed yields, and adverse effects on wildlife habitat. Policies favoring weak, less useful timber like pine instead of stronger more useful fir and larch are bad for commercial supply. Not cutting in accordance with					

	sustained yield capabilities.					
20	ADVERSE IMPACTS OF ESA: Adverse impact on state, counties, private property, industry, lives, use permits, and livelihoods associated with protected species policies and the magnitude of unknown costs and consequences. Arbitrary listings. Slow-cumbersome delisting process.					<p>Endangered Species Act: The U.S. Fish and Wildlife Service Has Incomplete Information about Effects on Listed Species from Section 7 Consultations, GAO report, 2009 <a href="http://www.gao.gov/products/GAO-09-550">http://www.gao.gov/products/GAO-09-550</a></p> <p>Endangered Species Act: Many GAO Recommendations Have Been Implemented, but Some Issues Remain Unresolved, GAO report, 2008 <a href="http://www.gao.gov/products/GAO-09-225R">http://www.gao.gov/products/GAO-09-225R</a></p> <p>U.S. Fish and Wildlife Service: Endangered Species Act Decision Making, GAO report, 2008 <a href="http://www.gao.gov/products/GAO-08-688T">http://www.gao.gov/products/GAO-08-688T</a></p> <p>Endangered Species: Many Factors Affect the Length of Time to Recover Select Species, GAO report, 2006 <a href="http://www.gao.gov/products/GAO-06-730">http://www.gao.gov/products/GAO-06-730</a></p>
21	NON-ESSENTIAL CLASSIFICATION: Lands, resources, and personnel assigned to manage these resources that are so critical to Montana's economy and environment, and many Montanan's way of life and happiness, have been deemed non-essential and shut down by the federal government.					
22	UNSUSTAINABLE ECONOMICS: Revenues generated by BLM go to					

	DC Treasury. USFS no longer generates positive revenues.					
23	PUBLIC INVOLVEMENT: Notification and decisions, policies, meeting formats, length of documents, and technical procedures favor paid participation and disenfranchise average citizens leaving local residents, land owners, forest users, and small communities feeling overwhelmed and powerless.					
24	OWNERSHIP: Unconstitutional acquisitions and contradictory retention policy versus enabling act/statehood compact.					
25	SHUTDOWN: Another shutdown of the public lands and treasured places controlled by the federal government.	No shutdown  Contingency plan to protect MT interests		What worked in other states?		
26	JURISDICTION: Confusion over					

	jurisdiction.					
27	<p>PERMITS: Cabin sites leases, grazing AUMs outfitting, mineral extraction, oil &amp; gas. Expense and length of time to secure permits; vulnerability to subjective approval, denial, classification, and/or revocation of permits. Complications – Grazing ESA, fencing requirements, water,</p>	<p>GRAZING: size of cow should be considered in carrying capacity, AUM should be based on sustainability per science not politics.</p>		<p>Look at historic trends AUM's associated with various political entities.</p>		<p><a href="http://beefmagazine.com/genetics/0201-increased-beef-cows">http://beefmagazine.com/genetics/0201-increased-beef-cows</a> See notes</p> <p>Fact sheet on BLM grazing: <a href="http://www.blm.gov/wo/st/en/prog/grazing.html">http://www.blm.gov/wo/st/en/prog/grazing.html</a></p> <p>BLM Rangeland Reports, 1989-2012 <a href="http://www.blm.gov/wo/st/en/prog/more/rangeland_management/rangeland_inventory.html">http://www.blm.gov/wo/st/en/prog/more/rangeland_management/rangeland_inventory.html</a></p> <p>Criticism of BLM grazing program, Public Employees for Environmental Responsibility: <a href="http://www.peer.org/news/news-releases/2012/05/14/livestock%E2%80%99s-heavy-hooves-impair-one-third-of-blm-rangelands/">http://www.peer.org/news/news-releases/2012/05/14/livestock%E2%80%99s-heavy-hooves-impair-one-third-of-blm-rangelands/</a></p> <p>Federal Grazing Fee formula: <a href="http://www.archives.gov/federal-register/codification/executive-order/12548.html">http://www.archives.gov/federal-register/codification/executive-order/12548.html</a></p> <p>Grazing Fees: Overview and Issues, Congressional Research Service, 2012 <a href="http://nationalaglawcenter.org/wp-content/uploads/assets/crs/RS21232.pdf">http://nationalaglawcenter.org/wp-content/uploads/assets/crs/RS21232.pdf</a></p> <p>Livestock Grazing: Federal Expenditures and Receipts Vary, Depending on the Agency and the Purpose of the Fee Charged, U.S. Government Accountability Office, 2005 <a href="http://www.gao.gov/products/GAO-05-869">http://www.gao.gov/products/GAO-05-869</a></p> <p>Montana state land grazing rules and study, 2011 <a href="http://dnrc.mt.gov/trust/agm/GrazingRateStudy/Default.asp">http://dnrc.mt.gov/trust/agm/GrazingRateStudy/Default.asp</a></p>
28	<p>LACK OF PRODUCTION: – available resources not being utilized at an acceptable rate -- saw timber, small wood, oil, gas, and mineral resources not being utilized enough. Canadian subsidized</p>			<p>(Look at national economy year by year compare extraction to commodity prices)</p>		<p>US-Canada Softwood Lumber Agreement effective through 2015 <a href="http://www.uslumbercoalition.org/general.cfm?page=4">http://www.uslumbercoalition.org/general.cfm?page=4</a></p> <p>Softwood Lumber Imports from Canada: Issues and Events, Congressional Research Service 2006 <a href="http://research.policyarchive.org/3030.pdf">http://research.policyarchive.org/3030.pdf</a></p>

	timber effect on U.S.					
29	FACTS - PUBLIC PERCEPTION – Lack of education and awareness about the benefits of sustained yield active mngt, utilization of natural resources, and related impacts on economy, jobs, environment, communities.					
30	HESITANCY: Some citizens, employees, permit holders, elected officials, etc. may be hesitant to offer less than supportive and/or constructive criticism due to fear of offending federal decision makers, and/or suffering retribution via unfavorable funding and/or management outcomes.					
31	CONGRESS: Ineffectiveness, complicated and contradictory policies, lack of budget.					