November 30, 2011

Office of the Executive Secretariat and Regulatory Affairs U.S. Department of Interior 1849 C Street, NW Washington, DC 20240

Complaint of Scientific and Scholarly Misconduct

Intentional Exclusion of Livestock Grazing as a Disturbance Factor from the Rapid Ecoregional Assessments by the Bureau of Land Management

Complainant: Filed by Public Employees for Environmental Responsibility (PEER), a nonprofit service organization representing public employees, including scientists working within the Department of Interior (DOI), generally, and within the U.S. Bureau of Land Management (BLM), specifically.

Complaint Summary: BLM is conducting a series of Rapid Ecoregional Assessments (REAs) to establish a baseline condition and future vulnerability of resources of conservation concern vis-à-vis regionally important ecological and environmental disturbance factors. The Bureau intends to conduct REAs for all ecoregions which contain lands and resources under their administration.

The REAs are intended to understand ecological conditions and trends of resources of conservation concern, such as fish and wildlife habitats, species of concern, soils, and water at the regional level as affected by natural and human disturbance factors such as wildfire, invasive species, development (including energy development activities), climate change, and other factors of regional importance. These REAs are intended to establish both baseline ecological condition data and predict future vulnerabilities, providing science-based information for use in future resource planning and decision making within an adaptive management framework.

<u>Livestock grazing as a causal agent was excluded from further consideration in all six ecoregions and management questions relevant to condition assessments were stricken from the record.</u>

The intentional exclusion of livestock grazing as a causal factor from the REAs will slant the resultant findings and interpretations of the causes responsible for the status and vulnerability of resources of conservation concern and ecological processes, including watershed function, nutrient cycling and energy flow, water quality, habitat quality for endangered, threatened, proposed, candidate, and other special status species, and the habitat quality for native plant and animal populations and communities (43 CFR 4180.2). The implications are important, for BLM plans to use these REAs to inform resource management from the field office to the Ecoregional level, aid in the development of broad-level resource management strategies for public lands, and for land-use planning and environmental analyses at the field office level.

The REAs are supposed to be science-based information platforms to aid in multi-agency planning to face future challenges to resources of concern from the spread of invasive species, changes in fire regimes, impacts of anthropogenic disturbance factors (such as livestock grazing), and climate change.

BLM's actions represent a serious compromise to the REA process integrity, scientific integrity and credibility of the REAs. The interference of, or the appearance of interference of, BLM in the scientific and scholarly activities of the REAs has had consequences, potentially influencing their future adaptive management resource planning and decision making agency-wide.

As detailed below, this exclusion also is a clear violation of the DOI Policy for the Integrity of Scientific and Scholarly Activities (Part 305; Chapter 3 DOI Manual), specifically:

- §3.5 M "(a) intentional circumventing policy that ensures the integrity of science and scholarship, and (b) actions that compromise scientific and scholarly integrity
- § 3.4 Policy "The Department... will not tolerate loss of integrity in the performance of scientific and scholarly activities or in the application of science and scholarship in decision making..."
- § 3.4.C "Document the scientific and scholarly findings considered in decision making and ensure public access to that information and supporting data through established Departmental and Bureau procedures..."

Subjects of Complaint: PEER contends that the interference in the scientific process by the Washington Office and responsible REA program personnel named below in this complaint was *intentional* and represents both a violation of the public trust and the Department of Interior's policies regarding the integrity of scientific and scholarly activities:

- 1. Karl Ford (BLM REA Project Manager)
- 2. All BLM Assessment Management Team Leaders who acquiesced to the removal of livestock grazing as a change agent;
- 3. BLM Washington Office officials who gave directions or orders implementing the subject matter of this complaint; and

4. BLM National Operations Center (NOC) officials who gave directions or orders implementing the land health standards assessment data availability subject matter of this complaint.

Requested Relief: We are seeking the following relief to satisfy this complaint:

- (1) DOI should enforce its own policy regarding integrity of science and scholarly activities by recommending appropriate disciplinary action against responsible parties, including persons at the National Operations Center and the BLM Washington Office;
- (2) Compel BLM to reinstate the management questions pertaining to livestock grazing as a change agent, rerun the analyses of the REA data after including livestock grazing data to evaluate resource condition or relative vulnerability to livestock grazing impacts, and impartially amend the results and published output products (data and reports) to restore the integrity of the science, scholarship and the process;
- (3) Require BLM to provide the agency-wide land health standards assessment data in digital form on their public data portal and obligate the agency to maintain annual updates to these data so as to ensure free access to these data for public and private research and oversight by others outside the agency;
- (4) Post or link to regulations and policy pertaining to BLM's statutory requirements to assess the impact of livestock grazing and other disturbance factors in allotment Land Health Standards Assessments; and
- (5) Post the DOI policy regarding scientific integrity and scholarly activities on the BLM State and National agency home pages and public data portals.

Background: The Secretary of the Interior has been responsible since the passage of the Federal Land Policy and Management Act (FLPMA) of 1976 for ensuring that public lands are managed under the principles of multiple-use and sustained yield and "shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands" (Public Law 94-579, Sec 302). Furthermore, BLM is mandated to monitor livestock impacts to rangeland health (land health standards assessments) at the grazing allotment-level following the requirements defined in 43 CFR 4180.2 in 1995.

Since 1997, BLM has been mandated to monitor land health based on defined standards, and to determine whether livestock grazing practices have been linked to a failure to meet those standards (43 CFR 4180.1; appendix 4). When land health standards have not been met, and livestock are identified as the causal factor, BLM managers are required to modify the grazing practices in their allotment management plans to rectify these impacts.

At the present time, BLM is conducting a series of science-based regional ecosystem and environmental assessments referred to by the Agency as Rapid Ecoregional Assessments. BLM shifting to a multi-scale ecosystem adaptive management approach of which the science-based and peer reviewed Rapid Ecoregional Assessments are part.

REAs are intended to identify important regional factors influencing the current and future resources of conservation concern, and to predict trends in conditions based on a series of risk assessments. The assessments were designed to be actual condition assessments where data was available. Where data was not available, management questions were to be based on approved model output. Assessments of near- and long-term vulnerability or risk to resources of conservation concern from certain disturbance factors, BLM required or expected contractor scientists to use modeled output. These factors included vulnerability to disturbance by invasive plant species, wildfire, groundwater draw downs, development, including energy development, and climate change.

In February, 2010, BLM released an RFP for an American Recovery and Reinvestment Act (ARRA)-funded project to assess the status of resources ("conservation elements") in all lands within their jurisdiction and forecast their future vulnerability to disturbance agents ("change agents"). These science based and peer reviewed resource assessments were termed Rapid Ecoregional Assessments (REAs). In June, 2010, contracts were awarded to four contractors, NatureServe, Dynamac Corporation, SAIC, and BioWest. Their work is subject to peer review by the U.S. Geological Survey (USGS).

Livestock grazing was identified by contractor ecologists as an important disturbance factor in six Ecoregional assessments currently under way.

Livestock grazing is clearly a regional disturbance or change agent. Livestock grazing is permitted on almost 65% of the lands it administers. BLM administers more than 21,000 livestock grazing allotments totaling 157 million acres of the 245 million acres of public lands under their administration. The authorized grazing in 2010 permitted 12.4 animal unit months (AUMs).

Moreover, BLM in many policy and scientific pronouncements acknowledges the importance of grazing in shaping ecological conditions on the ground.

The Record: At the present time, BLM is conducting a series of science-based regional ecosystem and environmental assessments referred to by the Agency as Rapid Ecoregional Assessments (REAs). BLM shifting to a multi-scale ecosystem adaptive management approach of which the science-based and peer reviewed Rapid Ecoregional Assessments are part. Assessments are planned for all ecoregions containing lands in which the Agency has some jurisdiction. However, the assessments are to be carried out regardless of land ownership.

REAs represent collaborative efforts between scientists and managers to assemble and synthesize regionally important spatial information. The 18-month assessments characterize the ecological values across landscapes and identify areas of high ecological value, and areas highly susceptible to ecological change. The assessments will synthesize "... information needed to develop and prioritize regional conservation, restoration, and adaptation strategies and actions, and to enable landscape-scale collaboration, partnerships, and well-informed decision-making....[and ... for carrying out the BLM's mission to sustain health, diversity, and productivity of public lands for the use and enjoyment of present and future generations."

A major focus of the REAs is "...the gathering, synthesizing, and interpreting *currently available information* from literature or using existing data from inventories and monitoring." There was an expectation that some data might not be available, but that readily derived or modeled information might be used. The spatial data sought was needed to help describe the current condition, health, extent, trends of resources of conservation concern, and describe the principle threats, risks, and other factors affecting these resources. The REA output products are intended to function as a guide to BLM managers during the development and prioritization of management strategies, but are themselves not subject to National Environmental Policy Act (NEPA). (BLM Rapid Ecoregional Assessment Statement of Work, available online at http://input.com/corp/library/details.cfm?ItemID=13574)

The statement of work for the contract identified several project goals and objectives. In addition to climate change, several other disturbance factors of importance were highlighted:

"... 1) to provide broad-scale information needed in developing habitat conservation strategies for native plants, wildlife, and fish and aquatic species populations on public lands; and 2) to inform subsequent land use planning, trade-off evaluation, environmental analysis, and decision-making for other interconnected public land uses and values, including energy development, recreation, **livestock grazing**, and wild horse and burro management. Specific objectives of BLM rapid ecoregional assessment are to assemble, organize, and synthesize targeted information ..." (BLM Rapid Ecoregional Assessment Statement of Work, available online at http://input.com/corp/library/details.cfm?ItemID=13574)

Statements of Work provided for each ecoregion Task Order identified a preliminary set of "conservation elements" (resources of conservation concern), "change agents" (disturbance factors), and management questions. The primary change agents identified in the Task Order Statements of Work included *development* (including energy development & infrastructure), spread of *invasive species*, *wildfire*, and *climate change*. Resource uses were not defined as a category, but were reflected in management questions. Although livestock grazing was cited as a significant public land use, no reference to livestock grazing as a change agent was present in the list of change agents or explicitly reflected in any of the management questions. BLM defines change agents as "... environmental phenomena or human activities that can influence the future

progression and condition of resource values. ... The majority of change agents are the result of direct human actions or influence. Others (like climate change) may involve natural phenomena, or be partially or indirectly related to human activities."

Each REA was to be overseen by a BLM REA Program Manager from the National Operations Center, and an Assessment Management Team (AMT), comprised of BLM State Office personnel. The Program Managers oversaw multiple REAs. The analyses themselves were conducted by contracted teams of scientists. Independent oversight of the REA process and products was the responsibility of USGS.

The assessments themselves were broken down into a series of stages or tasks. During Task I-1, contractors were responsible for identifying resources of conservation concern, or conservation elements, as well as change agents, conceptual models linking conservation elements and change agents, and to review & suggest management questions. Task I-2 was devoted to identifying data required to address all management questions pertaining to conservation elements and change agents to assess current condition and future trends. During Task I-3, contractors were to prepare detailed conceptual and analytical methods and spatial models, and prepare work plans during Task I-4. Task II was devoted to actually conducting the assessments, evaluating the findings, and preparing reports, maps, and databases. Workshops were convened following the completion of each Task, consisting of the REA Program Manager, the AMT members, other agency personnel, and staff from other Federal and State resource management agencies. At that time, contractor scientists were to review the material developed during each task with workshop participants.

In February, 2010, BLM released an RFP for an American Recovery and Reinvestment Act (ARRA)-funded project to assess the status of resources ("conservation elements") in all lands within their jurisdiction and forecast their future vulnerability to disturbance agents ("change agents"), Rapid Ecoregional Assessments. In June, 2010, \$10,000,000 IDIQ contracts were awarded to four contractors, NatureServe, Dynamac Corporation, SAIC, and BioWest. Their work is subject to peer review by the U.S. Geological Survey (USGS). Six Ecoregional assessments are underway in regions where livestock grazing is relevant, the Colorado Plateau, Central Basin and Range, Mojave Basin and Range, Sonoran Desert, Northern Plains, and the Central Rockies. These six ecoregions cover portions of southern California, Arizona, Nevada, Utah, New Mexico, Colorado, Wyoming, South Dakota, North Dakota, and Montana.

During Task I-1, contracted scientists in all six ecoregions identified livestock grazing as a significant change agent or disturbance factor, although not identified in the Task Order Statements of Work (see Task I-c reports for all six ecoregions).

This should certainly have come as no surprise to the agency. Livestock grazing is clearly a regional disturbance or change agent, permitted on almost 65% of the lands the Agency administers. BLM manages more than 21,000 livestock grazing allotments totaling 157 million acres of the 245 million acres of public lands under their administration. The authorized grazing in 2010 permitted 12.4 million animal unit months (AUMs). Clearly,

livestock grazing is a change agent or disturbance factor of primary concern to the agency. Moreover, BLM in many policy and scientific pronouncements acknowledges the importance of grazing in shaping ecological conditions on the ground.

BLM is subject to the Secretary of the Interior's responsibility following the passage of the Federal Land Policy and Management Act (FLPMA) of 1976, for ensuring that public lands are managed under the principles of multiple-use and sustained yield and "shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands" (Public Law 94-579, Sec 302). BLM is mandated to monitor livestock impacts to rangeland health (land health standards assessments) at the grazing allotment-level following the requirements defined in 43 CFR 4180.2 in 1995.

Since 1997, BLM has been mandated to monitor land health based on defined standards, and to determine whether livestock grazing practices have been linked to a failure to meet those standards (43 CFR 4180.1; appendix 4). When land health standards have not been met, and livestock are identified as the causal factor, BLM managers are required to modify the grazing practices in their allotment management plans to rectify these impacts. Livestock grazing represent not only a change agent of concern, but *one of the few change agents under direct agency control*. Other important change agents, such as the spread of invasive species, wildfire, and climate change are not.

See Attachment III for a Summary of Salient Facts.

The Core Issue: The Task I-1 Colorado Plateau REA Workshop was held in Lakewood Colorado, August 10, 2010 (See Workshop Minutes in Attachment I). During the section on change agents, livestock was singled out by the BLM REA Program Manager Karl Ford as a contentious topic, who decided to deal with the issue out of planned workshop order. Mr. Ford then stated to the workshop participants who included both BLM staff and staff from other federal and state agencies that the prospect of the potential inclusion of livestock grazing had been of considerable concern by both the Washington Office and stakeholders, citing litigation worries. Verlin Smith, the Colorado Plateau REA AMT manager confirmed that indeed, the possible inclusion of livestock grazing had been a frequent topic of discussion at prior stakeholder meetings (but supported the contention that livestock grazing is a change agent).

Mr. Ford further stated that BLM worried that the inclusion of livestock grazing might put a stop to future REAs. There was some discussion regarding how the Land Health Standards Assessment data might be used. Mr. Ford stated that grazing could not be included in the REAs because the required Land Health Standards Assessment data was not in a formalized database. (This later proved to be a very significant misrepresentation. BLM was indeed in possession of, and had distributed a comprehensive Land Health Standards Assessment database on more than one occasion.)

The suggestion that livestock grazing might be excluded from the REAs was immediately challenged by the workshop participants, both inside and outside the Agency, including

USGS peer reviewers. Workshop minutes recorded comments from various participants which included:

- "We run the risk of not having a legitimate assessment if grazing is not considered";
- "It would be intellectually dishonest to ignore grazing";
- "We will be laughed out of the room if we don't use grazing. If you have the other range of disturbances, you have to include grazing. We are evaluating all of it";
- "BLM is challenged by everyone on either side of the issue. But the REA is not a decision document, so there will be nothing to litigate."

As a result, the general agreement among workshop participants was that grazing should be included as a change agent, at least through the data identification stage of the REA. Mr. Ford and the AMT stated though, that the grazing issue required further discussion by the AMT and the Washington office; and that they would specify how livestock grazing should be addressed. The grazing-related management questions proposed by the contractor were dismissed without discussion, and Mr. Ford relayed that the AMT would compile the set of grazing management questions (See Attachment III).

A few weeks later, the inclusion of livestock grazing was provisionally approved but with a major politically-motivated proviso. BLM remained concerned about singling out livestock grazing as a disturbance factor, and required contractors to address grazing in general, mixing resource impacts by livestock with those of other non-native and native ungulates (deer, elk, antelope, wild horses, burros). The attempt to obfuscate livestock impacts or vulnerability to impacts was transparent.

The merging of livestock with other causal factors of failure to meet Land Health Standards inherently conflicts with the approach of BLM's own Land Health Standards Assessment process. The Land Health Standards Assessment has an *evaluation* phase, a *determination* phase, and an *implementation* phase. During the Assessment, the status of ecosystem structures, functions, or processes, within a specified geographic area and time are made relative to land health standards. The assessment data are then evaluated to determine whether they meet or do not meet land health standards. In cases where the assessment fails to meet standards, this is followed by a determination phase to determine the significant causal factor. A determination is made whether the principal causal factor responsible for failure to meet Standards *is or is not livestock grazing*. Failure attributable to other nonnative or native ungulates would fall into the "not livestock grazing" category. (BLM Manual H-4180-1 Rangeland Health Standards (1/19/2001))

Although livestock grazing was identified as an important change agent ("principal causal factor" in Land Health Standards Assessment language) in the first six Ecoregional assessments, livestock grazing as a change agent was ultimately eliminated from the assessments. In the Northern Plains and Central Rockies assessments, the contractor dropped management questions pertaining to livestock grazing citing lack of data and BLM AMT direction during Task I-1, prior to the data identification and review stage (Task I-2). During Task I-2 in the Central Basin and Range and Mojave Basin and Range assessments, BLM AMT made the decision to "defer" the assessment of livestock

grazing despite its acknowledged importance, and despite USGS peer reviewer recommendations to the contrary.

In the Colorado Plateau and Sonoran Desert assessments, livestock grazing continued to be considered until Task I-3 (Models, Methods, & Tools). The contractor had left the opportunity open to addressing vulnerability of resource impacts to livestock grazing (and other ungulates, each separately), based on derived or modeled information, if the existing Land Health Standards Assessment data proved unavailable (Colorado Plateau REA Memorandum I-2-c; Sonoran Desert REA Memorandum I-2-c), This approach would have been consistent with that proposed to address other change agents, as well as habitats of species of conservation concern. All management questions pertaining to grazing as a change agent were dropped during Task I-3, however, with no explanation (Colorado Plateau REA Memorandum I-3-c; Sonoran Desert REA Memorandum I-3-c).

Although livestock grazing was eliminated as a change agent from the subsequent analyses, forage was retained as a resource in some cases. The elimination of livestock grazing from the Rapid Ecoregional Assessments has resulted in an elimination of one of the principal causal factors responsible for failure of BLM's Land Health Standards Assessments. As a consequence, the worst fears of the Colorado Plateau Workshop 1 participants have come to pass. The exclusion of the potential influences of livestock grazing on ecological conditions of these six ecoregions results from intellectual dishonesty, so unfortunately, the legitimacy of their findings must be called into question.

The Missing Database: On September 29, 2011, USGS released a report (Veblen, K.E., Pyke, D.A., Aldridge, C.L., Casazza, M.L., Assal, T.J., and Farinha, M.A., 2011, Rangewide assessment of livestock grazing across the sagebrush biome: U.S. Geological Survey Open-File Report 2011-1263, 72 p.). This report revealed that BLM had in fact withheld the Land Health Standards Assessment database from all contractor scientists working on six REAs, and gave them the false impression that no such formalized database existed. Since this database had been the subject of a FOIA request in 2008, it is inconceivable that the principles involved were unaware of its existence. The authors stated: "In 2008, LHS data for in all regions were compiled by BLM in response to a Freedom of Information Act (FOIA) request made by a private organization. The BLM provided us with a copy of these data." This strange and seemingly unnecessary detail in the USGS report suggests that the authors wanted this piece of information to go public.

It is all the more inconceivable that the BLM principals would have been unaware of the database existence since the research involved the evaluation of the quality of BLM's LHS data and the landscape-level influence of livestock grazing on public land health. The centrality of the relevance and import to the REAs of these data cannot be overstated. That Karl Ford clearly stated that such a database did not exist implies that he had specific knowledge as to whether it did or did not exist. To provide context, Mr. Ford's insistence that the database did not exist was made at the inception of the data identification, collection, and evaluation phase of the REAs, a time when the contractors and all those involved were helping to identify any potentially relevant data source. All of the workshop participants in all REAs were encouraged to identify potential data

sources for use in addressing the wide range of management questions. In addition, BLM required that contractors to plan to use databases under development by other agencies concurrent with the REAs, such as those by the Bureau of Reclamation. During the workshop, no one came forward to contradict Mr. Ford's statement that the Land Health Standards Assessment data were not in a formalized database. Two individuals present at the Colorado Plateau REA Workshop I were, however, listed in the acknowledgment section of the USGS report examining this database.

The U.S.G.S report revealed that they had constructed GIS data layers using BLM's LHS database: (1) depicting the LHS status by allotment for all allotments in the sagebrush biome; (2) a probability surface that depicted the risk of failing to meet BLM's land health standards; (3) and a probability surface that depicted the risk of failing to BLM's land health standards where livestock were identified as the causal agent. These GIS data layers would have represented a key dataset for the REAs for all four contractors, for the centrality of the subject matter, as well as the transparency, completeness, and provenance of their development. These GIS layers would have provided in the first instance current resource status or condition based on survey data, in the second, a seamless modeling of resource status, and lastly, a seamless modeling of status vis-à-vis one of the important "change agents" in the region.

The discovery that the data availability rationale was fallacious strongly implies that the real reason for the exclusion of livestock grazing was the admitted pressure from the Washington Office and stakeholders. (See Attachment II for a detailed refutation of rationales BLM has offered for excluding grazing as a change agent.)

The Implications: The findings of the first set of REAs are being drafted at the time of the preparation of this complaint. As a consequence of BLM's efforts to inhibit the inclusion of livestock grazing as a change agent in the REAs, any potential influence of livestock as a factor to explain the condition and vulnerability of resources will be absent from REA findings. These findings are intended to help guide to BLM managers during the development and prioritization of management strategies, to characterize the ecological values across landscapes and identify areas of high ecological value, and identify areas highly susceptible to ecological change.

The deliberate exclusion of livestock grazing impacts will influence how BLM develops and prioritizes regional conservation, restoration, and adaptation strategies decision-making, and actions. In short, this intentional exclusion will influence how the agency carries out its mission to sustain health, diversity, and productivity of public lands for the use and enjoyment of present and future generations.

Specified Violations of DOI Scientific Integrity Rules: Section 3.5.M "Scientific and Scholarly Misconduct" defines the term to include

"(a) intentional circumventing policy that ensures the integrity of science and scholarship, and (b) actions that compromise scientific and scholarly integrity.

Scientific and scholarly misconduct does not include honest error or differences of opinion."

BLM committed scientific and scholarly misconduct by intentionally circumventing policy that ensures the scientific integrity of the REAs, hence potentially influencing the resultant information upon which future resource management decisions will be based. The actions clearly compromise the scientific and scholarly integrity of the REAs.

In addition, the actions by BLM appear to clearly violate these two key DOI scientific integrity policies:

Section 3.4 Policy "The Department is dedicated to preserving the integrity of the scientific and scholarly activities it conducts, and activities that are conducted on its behalf. It will not tolerate loss of integrity in the performance of scientific and scholarly activities or in the application of science and scholarship in decision making..."

The zero tolerance of loss of scientific integrity has been violated, in this case through the decision making to exclude grazing from consideration after its recommendation by contracted scientists. The rationale provided by the BLM REA Project Manager Karl Ford was that the Washington Office warned that its inclusion might jeopardize continued funding for the REAs (see Attachment I) due to potential litigation.

Section 3.4.C "Document the scientific and scholarly findings considered in decision making and ensure public access to that information and supporting data through established Departmental and Bureau procedures..."

As stated earlier in this document, Mr. Ford relayed to contractor scientists and Colorado Plateau Workshop I participants that BLM's Land Health Assessment data would not be available to the contractors because "they are not in a formalized database". In fact, a formal database containing Land Health Standards Assessment records has existed since 2008 or earlier.

This database is reported to contain all BLM LHS data between the years 1997 and 2007 (Veblen, K.E., Pyke, D.A., Aldridge, C.L., Casazza, M.L., Assal, T.J., and Farinha, M.A., 2011, Range-wide assessment of livestock grazing across the sagebrush biome: U.S. Geological Survey Open-File Report 2011-1263, 72 p.). This database has no doubt been updated in recent years. The agency has provided the database to at least two parties in the past, including USGS, but withheld knowledge of its existence from REA contractor scientists. The withholding of these supporting data altered the decision-making and assessment approaches taken during the REAs. This, in turn, will ultimately affect the nature of the findings.

During the Colorado Plateau REA Workshop I (Attachment I), the contractor identified livestock grazing as an anthropogenic change agent and proposed a set of management questions for consideration (Attachment III). These questions were comparable to others

that the BLM had drafted for other change agents. BLM rejected the contractor's proposed management questions, and substituted others following consultation with the Washington Office and the AMTs. As a result of this substitution, the emphasis shifted away from livestock as a causal factor, and intentionally merged the effects of livestock with those of native wildlife (elk, deer, antelope) and other non-native ungulates (wild horses and burros) (Colorado Plateau REA Memorandum I-1-c).

This intentional obfuscation in the revised management questions would have diluted any potential impacts on resource condition attributable to livestock in the findings - had the management questions not been subsequently dropped by the AMTs.

Conclusion: In the six ecoregional assessments (Colorado Plateau, Sonoran Desert, Central Basin & Range, Mojave Basin & Range, Northern Plains, and the Middle Rockies, livestock grazing was identified as a change agent by staff scientists. Although in several assessments, grazing as a resource is still treated as a conservation element (livestock watering tanks, forage availability), all questions pertaining to livestock grazing as a disturbance factor, or "change agent" have been excluded from the analyses.

The exclusion of livestock grazing as a disturbance factor or change agent represents a significant departure from accepted practices of the relevant scientific and scholarly community, including those of the official and unofficial assessment peer reviewers; that this represents misconduct committed intentionally and knowingly; and that this allegation is clearly supported by a preponderance of the evidence. This exclusion represents a significant and unacceptable betrayal of the public trust. These BLM actions clearly compromise scientific and scholarly integrity of the Rapid Ecoregional Assessments, and hence will compromise the scientific integrity of resultant conclusions upon which future resource management decisions will be based over a large portion of BLM administered lands.

There is no shortage of witnesses to the events described above and I will send you that list under separate cover. Should you desire any clarification of the above or additional information, please do not hesitate to contact me.

Respectfully submitted,

Jeff Ruch Executive Director