



ENVIRONMENTAL QUALITY
COUNCIL. 2015-16

June 3, 2015

Exhibit 2

A JOINT RESOLUTION OF THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA REQUESTING AN INTERIM STUDY OF ROADS ON FEDERAL LAND, FEDERAL LAND PARCELS THAT ARE SURROUNDED BY PRIVATE LAND, AND THE EFFECTS OF DIMINISHED ACCESS ON RECREATIONAL OPPORTUNITIES.

WHEREAS, the federal government has eliminated or reduced access to a number of roads on federal land in Montana, resulting in a significant loss of access; and

WHEREAS, diminished access on federal land has reduced hunting and fishing opportunities for Montanans and has shifted hunting pressure to private land; and

WHEREAS, diminished access on federal land has reduced outdoor recreational opportunities other than hunting and fishing, such as motorized trail riding, snowmobiling, mountain biking, camping, bird watching, and hiking, among others; and

WHEREAS, outdoor recreation is a major source of tourist interest in Montana and significantly contributes to the Montana tourism economy; and

WHEREAS, the trend is toward further reductions in access on federal land; and

WHEREAS, some parcels of federal land in Montana are "landlocked", meaning they are surrounded entirely by private land and accessible by surface transportation only by gaining the permission of a neighboring landowner to cross the landowner's land; and

WHEREAS, it is possible that some landlocked federal land is not accessible by surface transportation because no neighboring landowner will grant permission to cross the landowner's land, which limits the recreational opportunities of the numerous outdoor recreational interests listed above; and

WHEREAS, providing a high level of hunting opportunity is important for Montana's economy, for keeping Montana wildlife populations at healthy, manageable levels, and for preserving Montana's outdoor heritage for future generations.

NOW, THEREFORE, BE IT RESOLVED BY THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE

STATE OF MONTANA:

That the Legislative Council be requested to designate an appropriate interim committee, pursuant to section 5-5-217, MCA, or direct sufficient staff resources to:

(1) conduct an assessment of road access on federal land in Montana over a 35-year period to determine which roads have been closed and which roads have had some limitation placed on access. The assessment should include:

- (a) the location of each road, including all gated roads;
- (b) the approximate mileage of each road; and
- (c) identification of the federal agency to which the road belongs.

(2) conduct an assessment of landlocked public parcels in Montana including:

- (a) the size and location of each landlocked parcel;
- (b) the number of landowners that own property adjacent to each parcel; and

(c) whether any of the adjacent landowners permit outdoor recreationists to cross their property to reach each parcel;

(3) conduct an assessment of trends in permits and licenses being issued by the Department of Fish, Wildlife, and Parks in each area for elk and deer hunting over a 15-year period, with a specific emphasis on identifying reduced hunter opportunity in areas where roads have been closed on federal land or where there are large landlocked areas.

BE IT FURTHER RESOLVED, that if the study is assigned to staff, any findings or conclusions be presented to and reviewed by an appropriate committee designated by the Legislative Council.

BE IT FURTHER RESOLVED, that all aspects of the study, including presentation and review requirements, be concluded prior to September 15, 2016.

BE IT FURTHER RESOLVED, that the final results of the study, including any findings, conclusions, comments, or recommendations of the appropriate committee, be reported to the 65th Legislature.

- END -

I hereby certify that the within joint resolution,
HJ 0013, originated in the House.

Chief Clerk of the House

Speaker of the House

Signed this _____ day
of _____, 2015.

President of the Senate

Signed this _____ day
of _____, 2015.

HOUSE JOINT RESOLUTION NO. 13

INTRODUCED BY K. WHITE, G. BENNETT, R. BRODEHL, B. BROWN, J. ESSMANN, F. GARNER,
B. HARRIS, S. HESS, T. JACOBSON, D. JONES, D. LAMM, F. MANDEVILLE, T. MANZELLA,
D. MORTENSEN, M. NOLAND, G. PIERSON, A. REDFIELD, B. SMITH, J. WELBORN, D. ZOLNIKOV

A JOINT RESOLUTION OF THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA REQUESTING AN INTERIM STUDY OF ROADS ON FEDERAL LAND, FEDERAL LAND PARCELS THAT ARE SURROUNDED BY PRIVATE LAND, AND THE EFFECTS OF DIMINISHED ACCESS ON RECREATIONAL OPPORTUNITIES.

1. Rep. Lieser– Study status of sharp-tailed grouse .

Background: The sharp-tailed grouse is an upland game bird in Montana, generally hunted from September to January. According to the Montana Field Guide, their habitat is primarily grasslands interspersed with shrub and brush-filled coulees. They prefer stands of inter-mixed tree and shrub grasslands. With high population, they spread into islands of native grassland, usually along drainages surrounded by grain fields. Sharp-tailed Grouse persist only on native bunchgrass-shrub stands.

Until recently, sharp-tailed grouse in Montana were found west of the Continental Divide in larger mountain valleys with extensive native bunchgrass-shrub stands. However, they have now apparently been extirpated, or nearly extirpated, from this historic range. In western Montana, housing developments and agriculture have eliminated large portions of habitat required for shelter, protection from predators, night roosting and spring nesting; dense trees and shrubs are needed for food, rest, escape, cover, and winter survival.

East of the divide, the field guide lists the population as apparently secure and not a Species of Concern.

Member objective: The EQC should study the status of the sharp-tailed grouse, including the effects of oil and gas development on habitat. A study at the University of North Dakota is evaluating the impacts of gas and oil development on the sharp-tailed grouse by monitoring grouse nests with miniature cameras to determine nest success, identify changes in predators responsible for destroying nests, and quantify grouse nesting behaviors inside and outside of areas associated with gas and oil development in the 2012 and 2013 breeding seasons.

The EQC should also study the effect of power lines on bird populations.

Study Approach: Staff would compile basic background about the sharp-tailed grouse. Meeting presentations could include the DFWP, North Dakota researchers and other scientists, and stakeholders. Follow up research may include options for state level action.

Estimated Staff Time: The range could be from .02 FTE (60 hours) to .1 FTE (272 hours).

Estimated EQC meeting time: This could possibly be accomplished as an agenda item at one to three meetings.

1. Sen. Phillips – Options to protect Smith River Corridor.

Background: The Smith River State Park is a 59-mile stretch of river managed by the DFWP in central Montana. It is known for its scenery and fishing in a remote setting. Permits are required to float the river. In 2015, Montana State Parks received 8,096 applications to float the Smith River. A total of 1,175 permits were awarded.

Tintina Resources is in the exploration and proposal phases of the Black Butte Copper project about 20 miles north White Sulphur Springs. The area is in the Sheep Creek watershed, a tributary to the Smith River, which is in turn is a tributary of the Missouri River. The Black Butte Copper property consists of approximately 12,000 acres of both long-term mining leases on private ranch lands and 100%-owned federal mining claims. The copper-cobalt-silver deposits at Black Butte Copper occur in extensive shale-hosted bedded sulphide zones.

Member objective: The EQC should study the relationship between the recreational use of the Smith River State Park and the proposed mine, and options to protect the river corridor.

One option for study would designate the river as an “outstanding resource water” under state law. The legislature recognized that some state waters “are of such environmental, ecological, or economic value that the state should, upon a showing of necessity, prohibit, to the greatest extent practicable, changes to the existing water quality of those waters. Outstanding resource waters must be afforded the greatest protection feasible under state law, after thorough examination.”

Another option to explore is federal designation of the river as part of the National Wild and Scenic Rivers System. The act, created by Congress in 1968 is intended to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The act aims to safeguard the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection. Rivers may be designated by Congress or, if certain requirements are met, the Secretary of the Interior. Each river is administered by either a federal or state agency. Designated segments need not include the entire river and may include tributaries.

The EQC should also examine designation of the Smith River as a National Monument. The Antiquities Act of 1906 authorizes the President to create national monuments on federal lands that contain historic landmarks, historic and prehistoric structures, or other objects of historic or scientific interest. The President is to reserve “the smallest area compatible with the proper care and management of the objects to be protected.” The act was designed to protect federal lands and resources quickly. Presidents have proclaimed about 130 monuments. Congress also has created monuments under its own authority.

Study Approach: Staff would provide background on the Smith River State Park, the mine proposal, and possible options for river protection as directed by the EQC.

Estimated Staff Time: For a one-meeting agenda item, it is estimated to take about .02 FTE (60 hours). For a more in-depth topic, time could approach .1 FTE (272 hours).

Estimated EQC meeting time: This could possibly be accomplished as an agenda item at two to four meetings.

Draft Environmental Quality Council Work Plan Decision Matrix 2015-2016						
Topic	Why is this a topic?	Option A	Option B	Option C	Option D	Resources Allocated
The following topics are either legislative study resolution requests assigned by the Legislative Council to the EQC or member suggested issues.						
HJ 13	Study Resolution	<p>.25 FTE</p> <ul style="list-style-type: none"> Option B intensified Possible work group or subcommittee Meetings with federal officials Legal analysis <p>Deliverables:</p> <ul style="list-style-type: none"> Interim report Legislation 	<p>.1 FTE</p> <ul style="list-style-type: none"> Option C Analyze data, briefing papers on findings Briefing papers on various issues Panels on various issues <p>Deliverables:</p> <ul style="list-style-type: none"> White paper Legislation 	<p>.05 FTE</p> <ul style="list-style-type: none"> Gather data Organize panel discussion <p>Deliverables:</p> <ul style="list-style-type: none"> Summary Recommendations Legislation (if any) 	No Action	
EPA Rulemaking Subcommittee	Request from 2013-14 EQC, ETIC		<p>Minimal FTE (ETIC)</p> <ul style="list-style-type: none"> Option C Council discussion of EPA proposals and legislation in other states Update and overview from DEQ <p>Deliverables:</p> <ul style="list-style-type: none"> White paper Legislation (if any) 	<p>Minimal FTE (ETIC)</p> <ul style="list-style-type: none"> Receive updates at each meeting from subcommittee members Summary of findings & recommendations <p>Deliverables:</p> <ul style="list-style-type: none"> Summary Recommendations Legislation (if any) 	No Action	
Study financial aid programs within DNRC Conservation and Resource Development Division	Member Issue	<p>.2 FTE</p> <ul style="list-style-type: none"> Option B intensified Multiple staff reports, site visits Field trip Additional research Possible work group or subcommittee <p>Deliverables:</p> <ul style="list-style-type: none"> Interim report Legislation (if any) 	<p>.1 FTE</p> <ul style="list-style-type: none"> Option C Research history, laws, and rules Timely program issues summary Multiple Agency & Regulated Community panels Summaries of audits, fiscal analysis Possible legal review Possible field trip <p>Deliverables:</p> <ul style="list-style-type: none"> White paper Legislation (if any) 	<p>.04 FTE</p> <ul style="list-style-type: none"> Research for summary of programs Program interviews Agency & Regulated Community panel <p>Deliverables:</p> <ul style="list-style-type: none"> Staff summary Recommendations Legislation (if any) 	No Action	
Review the Nongame and Endangered Species Conservation Program	Member Issue	<p>.1 FTE</p> <ul style="list-style-type: none"> Option B intensified Possible work group or subcommittee <p>Deliverables:</p> <ul style="list-style-type: none"> Interim report Legislation (if any) 	<p>.05 FTE</p> <ul style="list-style-type: none"> Option C Research history, laws, and rules Timely program issues summary Agency & Regulated Community panels Summaries of audits, fiscal analysis Possible legal review <p>Deliverables:</p> <ul style="list-style-type: none"> White paper Legislation (if any) 	<p>.02 FTE</p> <ul style="list-style-type: none"> Research for summary of program Program interviews Agency & Regulated Community panel <p>Deliverables:</p> <ul style="list-style-type: none"> Staff summary Recommendations Legislation (if any) 		

Draft Environmental Quality Council Work Plan Decision Matrix 2015-2016

Topic	Why is this a topic?	Option A	Option B	Option C	Option D	Resources Allocated
Study status of whitebark pine as candidate for listing as an endangered species and its role in Montana issues	Member issue	<p>.1 FTE</p> <ul style="list-style-type: none"> Option B intensified Possible work group or subcommittee <p>Deliverables:</p> <ul style="list-style-type: none"> Interim report Legislation (if any) 	<p>.05 FTE</p> <ul style="list-style-type: none"> Option C Additional panels Possible field trip <p>Deliverables:</p> <ul style="list-style-type: none"> White paper Legislation (if any) 	<p>.02 FTE</p> <ul style="list-style-type: none"> Compile relevant scientific and policy research and summarize for EQC Presentations from state, federal officials, stakeholders, others <p>Deliverables:</p> <ul style="list-style-type: none"> Staff summary Recommendations Legislation (if any) 		
Study the creation of a report on the status of Montana's Natural Resources	Member Issue	<p>.5 FTE or more</p> <ul style="list-style-type: none"> Option B intensified Possible work group or subcommittee <p>Deliverables:</p> <ul style="list-style-type: none"> Report Legislation (if any) 	<p>.3 FTE</p> <ul style="list-style-type: none"> Option C More research by staff More coordination with work group or writing of report More panels <p>Deliverables:</p> <ul style="list-style-type: none"> Report Legislation (if any) 	<p>.1 FTE</p> <ul style="list-style-type: none"> Compile existing reports, and summarize for EQC Coordinate with research group or groups Presentations from research group, state and federal officials, stakeholders, others <p>Deliverables:</p> <ul style="list-style-type: none"> Report Recommendations Legislation (if any) 		
Review recreational use of state lands	Member Issue	<p>.1 FTE</p> <ul style="list-style-type: none"> Option B intensified Possible work group or subcommittee <p>Deliverables:</p> <ul style="list-style-type: none"> Interim report Legislation (if any) 	<p>.05 FTE</p> <ul style="list-style-type: none"> Option C Research history, laws, and rules Timely program issues summary Agency & Regulated Community panels Summaries of audits, fiscal analysis Possible legal review <p>Deliverables:</p> <ul style="list-style-type: none"> White paper Legislation (if any) 	<p>.02 FTE</p> <ul style="list-style-type: none"> Research for summary of program Program interviews Agency & Regulated Community panel <p>Deliverables:</p> <ul style="list-style-type: none"> Staff summary Recommendations Legislation (if any) 		
State involvement with federal Endangered Species Act actions	Member Issue	<p>.1 FTE</p> <ul style="list-style-type: none"> Option intensified Possible work group or subcommittee <p>Deliverables:</p> <ul style="list-style-type: none"> Interim report Specific guidelines for state involvement Legislation (if any) 	<p>.05 FTE</p> <ul style="list-style-type: none"> Option C Research on other state approaches, programs Agency & Regulated Community panels Possible legal review <p>Deliverables:</p> <ul style="list-style-type: none"> White paper General policy of state Legislation (if any) 	<p>.02 FTE</p> <ul style="list-style-type: none"> General research on ESA Review sage grouse experience Agency & Regulated Community panel <p>Deliverables:</p> <ul style="list-style-type: none"> Staff summary Recommendations Legislation (if any) 		

Draft Environmental Quality Council Work Plan Decision Matrix 2015-2016

Topic	Why is this a topic?	Option A	Option B	Option C	Option D	Resources Allocated
Study classification of animals managed by the DFWP	Member Issue	<p>.1 FTE</p> <ul style="list-style-type: none"> Option B intensified Possible work group or subcommittee <p>Deliverables:</p> <ul style="list-style-type: none"> Interim report Legislation (if any) 	<p>.05 FTE</p> <ul style="list-style-type: none"> Option C Research on other state approaches Agency presentations Presentations from other stakeholders Possible legal review <p>Deliverables:</p> <ul style="list-style-type: none"> White paper Legislation (if any) 	<p>.02 FTE</p> <ul style="list-style-type: none"> Review current law, summarize for EQC Agency presentation <p>Deliverables:</p> <ul style="list-style-type: none"> Staff summary Recommendations Legislation (if any) 		
Study Smith River Corridor protection options	Member Issue	<p>.1 FTE</p> <ul style="list-style-type: none"> Option B intensified Possible work group or subcommittee <p>Deliverables:</p> <ul style="list-style-type: none"> Interim report Specific guidelines for state involvement Legislation (if any) 	<p>.05 FTE</p> <ul style="list-style-type: none"> Option C More research on protection options, procedures Research on similar approaches in other states Agency & Regulated Community panels Possible legal review <p>Deliverables:</p> <ul style="list-style-type: none"> White paper General policy of state Legislation (if any) 	<p>.02 FTE</p> <ul style="list-style-type: none"> Overview history and management of Smith River Corridor Overview mine proposal Summary of protection options Panel of stakeholders <p>Deliverables:</p> <ul style="list-style-type: none"> Staff summary Recommendations Legislation (if any) 		
Study status of sharp-tailed grouse	Member Issue	<p>.1 FTE</p> <ul style="list-style-type: none"> Option B intensified Possible work group or subcommittee <p>Deliverables:</p> <ul style="list-style-type: none"> Interim report Legislation (if any) 	<p>.05 FTE</p> <ul style="list-style-type: none"> Option C Additional panels Possible field trip <p>Deliverables:</p> <ul style="list-style-type: none"> White paper Legislation (if any) 	<p>.02 FTE</p> <ul style="list-style-type: none"> Compile relevant scientific and policy research and summarize for EQC Presentations from state, federal officials, stakeholders, others <p>Deliverables:</p> <ul style="list-style-type: none"> Staff summary Recommendations Legislation (if any) 		

Draft Environmental Quality Council Work Plan Decision Matrix 2015-2016

Topic	Why is this a topic?	Option A	Option B	Option C	Option D	Resources Allocated
EQC Statutory Duties	Statute	<p>.5 FTE</p> <ul style="list-style-type: none"> • Fulfill all statutory requirements • Establish MEPA training and training schedule for state employees and others • Review and comment on certain agency MEPA documents for compliance and consistency • Review and comment as a Council on environmental reviews for selected projects • Collect environmental trend information. Create online repository • Participate in all mandatory meetings and other environmental policy meetings (e.g. Board of Environmental Review, Fish, Wildlife and Parks Commission, etc.) • Notify/solicit permit applicants to present MEPA concerns to EQC 	<p>.2 FTE</p> <ul style="list-style-type: none"> • Fulfill selected statutory requirements in greater detail • Accept reports and select some for EQC review, analysis, and comment • Select specific topics for further analysis or presentation • Collect environmental trend information. Create online repository • Provide MEPA training to state agencies on as requested basis. Conduct needs assessment and develop periodic training schedule accordingly • Review selected controversial MEPA documents/projects 	<p>.07 FTE</p> <ul style="list-style-type: none"> • Fulfill statutory requirements at minimal level of effort • Accept reports • Participate in meetings as necessary • Identify and describe trends in EQC interim study work • Request trend information for each topic reviewed by EQC • Collect environmental trend information. Create online repository • Provide requested MEPA training to state agencies as time allows • Track MEPA litigation during interim 	No Action	

Draft Environmental Quality Council Work Plan Decision Matrix 2015-2016

Topic	Why is this a topic?	Option A	Option B	Option C	Option D	Resources Allocated
Agency Oversight	Statute	.1 FTE <ul style="list-style-type: none"> Option B intensified Committee of the whole involved Consistent EQC involvement encompassing a broad range of oversight issues Possible report, recommendation or legislation for changes in implementation of state policy 	.07 FTE <ul style="list-style-type: none"> Option C More intensive review of administrative rules. Attorney provides synopses of significant and controversial proposed rules Review draft agency legislation Active EQC review of rules and legislation 	.05 FTE <ul style="list-style-type: none"> Organize oversight issues before the EQC as requested Review advisory councils & reports Council members receive copies of rule notices of proposed adoption of rules Review draft agency legislation Receive and comment on the compliance and enforcement report required pursuant to 75-1-314, MCA Oversight on an as needed basis Legislation (if any) 	No Action	
Agency Oversight (Program Review) <i>See Attached Documents</i>	Statute	Using the attached flow chart, spreadsheet, and program review time estimates, the EQC may choose any combinations of programs to review at a designated level. The portion of FTE allocated to this topic would be the sum of those choices.				
EQC Publications	Statute and Historic Precedence	.1 - .3FTE <ul style="list-style-type: none"> Option B Identify publications for rewrite, redesign 	.05 FTE <ul style="list-style-type: none"> Option C Rewrite and edit for clarity Identify topic for info pamphlet, if necessary 	.02 FTE <ul style="list-style-type: none"> Update publications to reflect statutory changes EQC review 		
Total Available Staff Resources 1 FTE						Total FTE allocated

Interim FTE Equivalents

- .05 FTE = 136 hrs = 17 days
- .10 FTE = 272 hrs = 34 days
- .25 FTE = 680 hrs = 85 days
- .50 FTE = 1360 hrs = 170 days
- .75 FTE = 2040 hrs = 255 days
- 1 FTE = 2720 hrs = 340 days

Member Name:

EQC Program Evaluation Nominations 2015-2016

DEQ

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DNRC

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DFWP

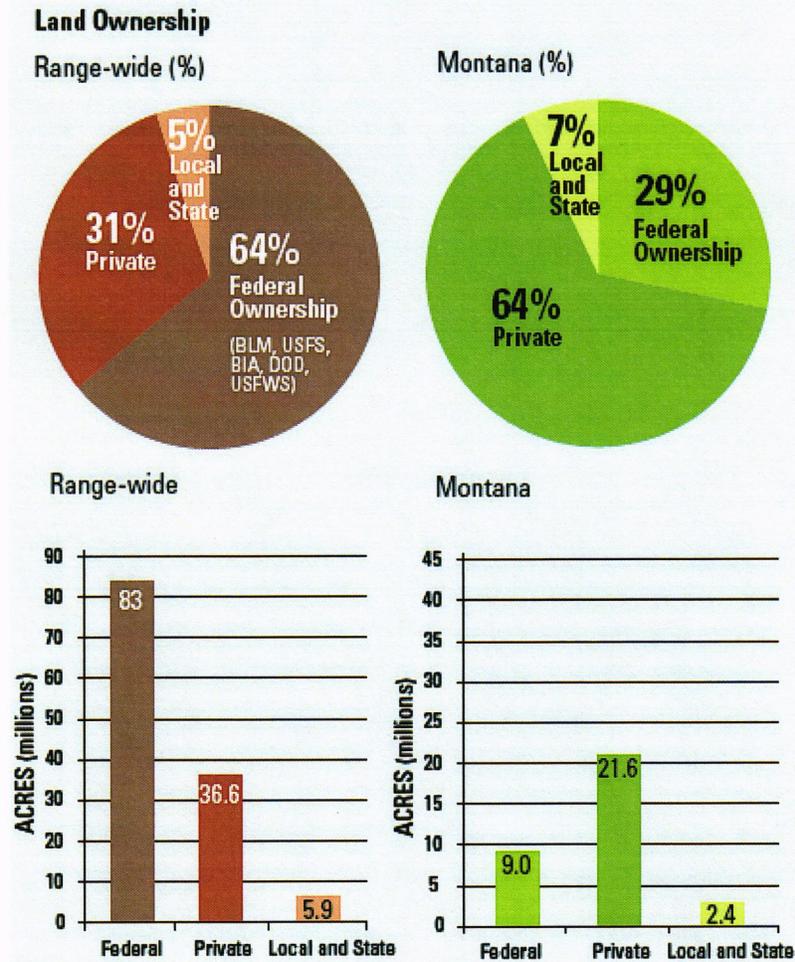
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Montana

Facts and Figures for BLM Conservation Plans for Greater Sage-Grouse

With nearly 1,000 leks and an estimated 18 percent of the total greater sage-grouse population, Montana is the northern-most stronghold for greater sage-grouse and is key to the species' survival. The state's populations also play an important role in connectivity with greatly reduced populations to the north (Canada) and east (the Dakotas). Unlike some western states, about two-thirds of Montana's sage-grouse habitat is on non-federal land.

Management of Greater Sage-Grouse Habitat



About the plans: The Bureau of Land Management (BLM) is amending and revising land use plans in Montana to address threats to the greater sage-grouse and its habitat such that protections under the Endangered Species Act are no longer warranted. The BLM plans provide a layered management approach that focus protections on priority areas identified by the U.S. Fish and Wildlife Service where additional loss of habitat would reduce long-term viability of sage-grouse populations.

Definitions:

- **Priority Habitat Management Areas (PHMA)**
 - **Definition:** BLM administered lands identified as having the highest value to maintaining sustainable greater sage-grouse populations. Priority habitat closely tracks Priority Areas for Conservation (PACs), identified in the Conservation Objectives Team report and based on state-mapped key greater sage-grouse habitats.
 - **Management approach:** The plans seek to limit or eliminate new surface disturbance.
- **Sagebrush Focal Areas (SFA)**
 - **Definition:** Areas within priority habitat that have been identified by the Service as “stronghold” areas essential for the species’ survival.
 - **Management approach:** The plans offer the highest protections in these anchor areas, seeking to limit or eliminate new surface disturbance.
- **General Habitat Management Areas (GHMA)**
 - **Definition:** BLM administered lands where special management would apply to sustain greater sage-grouse populations, but that are not as important as priority habitat.
 - **Management approach:** The plans seek to minimize disturbance.

Habitat Management Areas in Montana in Final Proposed Plan

Area	Acres	Percent of Montana
State of Montana	94,185,600	100%
BLM planning area	9,872,490	10%
PHMA	3,905,300	4%
SFA (within PHMA)	980,400	1%
GHMA	3,235,935	3%

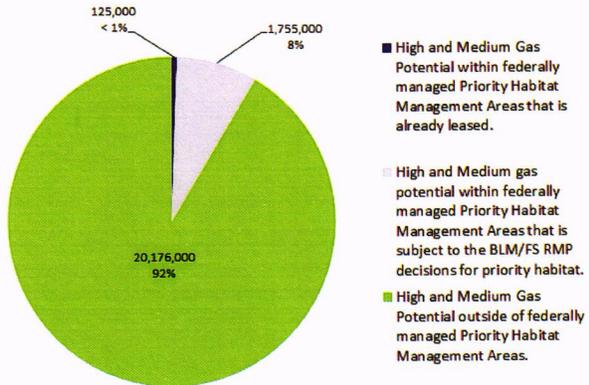
Current Development - Statistics below demonstrate the extent to which federally managed Priority Habitat Management Areas have existing energy development. The plans recognize all valid, existing rights.

- **Overall:** Approximately 7% of PHMAs on federal lands and minerals are covered by existing leases and ROWs for coal, oil and gas, solar and wind energy.
- **Oil and Gas Leases:** Approximately 7% of PHMAs on federal lands and minerals are leased, with approximately 1% of these held by production.
- **Coal Leases:** There are no coal leases in PHMAs on federal lands.
- **Solar Rights Of Ways (ROW):** There are no approved solar ROWs in PHMAs on federal lands.
- **Wind ROWs:** There are no approved wind ROWs in PHMAs on federal lands.

Energy potential within priority habitat - Statistics below depict the amount of energy potential estimated to exist *within* federally managed Priority Habitat Management Areas.

- **Oil:** Approximately 93% of federal lands and minerals within PHMAs have low oil potential.
- **Natural Gas:** Approximately 59% of federal lands and minerals within PHMAs have low natural gas potential.
- **Wind:** Approximately 57% of federal lands within PHMAs are in low to medium wind speed categories.

Out of approximately 22 million acres of high and medium gas potential in Montana, approximately 1.8 million acres (8%) will be subject to the BLM/FS RMP decisions for priority habitat.



Energy potential outside of priority habitat – Statistics below depict the amount of energy potential estimated to exist *outside* of federally managed Priority Habitat Management Areas.

- **Oil:** Approximately 98% of lands that have medium to high oil potential within the state are outside of federal lands and minerals within PHMAs.
- **Natural Gas:** Approximately 92% of lands that have medium to high natural gas potential within the state are outside of federal lands and minerals within PHMAs.
- **Wind:** Approximately 96% of lands in the high wind speed category within the state are outside of federal lands within PHMAs.

Hard Rock Mining Locations (A surrogate for hard rock mineral potential) outside of Sagebrush Focal Areas - 100% of hard rock mining locations within the state occur outside of federal lands and minerals within SFAs.

Analysis Details

PHMAs are summarized in this document for all topics except for mineral potential, which refer to SFAs. The extent of this analysis was defined by the area within the political state boundaries and the surface or subsurface estate as applicable to the subject as follows:

1. Oil, Gas, Coal and Minerals related analyses were limited to the federal subsurface estate within PHMA for MT, ND, SD, WY, CO, UT, and portions of ID. The federal surface estate (including BIA lands) was used as a surrogate for subsurface estate within PHMA for NV, CA, Northern ID and OR. Total oil and gas potential includes all lands within the political state boundaries.
2. Wind analysis was limited to the federal surface estate (including BIA lands) within PHMA and total potential for all lands within the political state boundaries.
3. Solar PEIS analysis extent was determined by the initial study, which included BLM administered lands within the political states of CA, NV, UT, CO, AZ, and NM. Only CA, CO, NV, and UT are summarized in these statistics.

Data Sources

1. **Oil and Gas Potential:** Inventory of Onshore Federal Oil and Natural Gas Resources and Restrictions to Their Development - Phase III Inventory – Onshore United States 2008. Detailed analysis was performed in defined basins, with an extrapolation model applied to all other areas.
2. **Solar PEIS Land Use Allocations:** Downloaded from <http://solareis.anl.gov/maps/gis/index.cfm> and modified for analysis by the Wildlife Habitat Spatial Analysis Lab with input from Argonne National Laboratory in April 2015.
3. **Wind data:** AWS Truepower, LLC acquired from the BLM.
4. **Metallic Mineral (Hard-Rock) Locations:** Extracted from the USGS Mineral Resource Data System (2012) database.
5. **Oil and Gas Leases, Coal Leases, Wind & Solar ROWs:** BLM submissions compiled by the Wildlife Habitat Spatial Analysis Lab in 2012.

Greater Sage-Grouse – Common Questions & Answers

What action is the BLM and USFS taking today?

The Bureau of Land Management (BLM) and the U.S. Forest Service (USFS) are releasing Final Environmental Impact Statements (FEISs) and the proposed plans for 14 planning areas in 10 states across the West: California, Colorado, Idaho, Montana, Nevada, North Dakota, Oregon, Utah, South Dakota, and Wyoming.

The plans seek to conserve important sagebrush habitat, address threats to the greater sage-grouse, and support sustainable economic development across the West.

What are the next steps?

The 14 proposed plans will now undergo a Governor’s Consistency Review for a 60-day period, as well as a concurrent 30-day protest period. The Records of Decision to finalize the land management plans will be signed in late summer.

By September 30, 2015, the U.S. Fish and Wildlife Service (FWS) will review the final BLM-USFS plans and other conservation actions to determine whether sufficient action has been taken to conserve the greater sage-grouse and its habitat such that a listing under the Endangered Species Act (ESA) is no longer necessary.

Why was this planning effort needed?

In March 2010, the U.S. Fish and Wildlife Service (FWS) found that the greater sage-grouse was warranted for protection under the ESA. Higher priorities precluded the FWS from proposing a listing rule, so it has been a “candidate” species for the past five years. In its 2010 petition finding, the FWS identified the primary threat as the loss and fragmentation of sagebrush habitat, coupled with a lack of regulatory mechanisms to protect habitat across the bird’s range.

Sixty-four percent of important habitat for the greater sage-grouse is on federal public land. The principal regulatory mechanisms for BLM are Resource Management Plans (RMPs), and for the USFS, Land and Resource Management Plans (LRMPs).

What is the BLM National Greater Sage-Grouse Planning Strategy?

The BLM developed the National Greater Sage-Grouse Planning Strategy in response to the FWS 2010 petition determination and commitment to make a listing determination by the end of Fiscal Year 2015. The BLM and USFS committed to amend 98 land use plans through a coordinated, cooperative approach to incorporate regionally appropriate, science-based conservation measures throughout the range of the greater sage-grouse. The planning strategy illustrates the BLM’s continued commitment to long-term, range-wide greater sage-grouse conservation and habitat restoration.

Where does the BLM-USFS effort fit in the bigger picture?

Effective conservation of the greater sage-grouse and its habitat requires a collaborative, science-based approach that includes strong federal plans, a strong commitment to conservation on state and private lands, and a proactive strategy to reduce the risk of rangeland fires.

The planning effort involves coordination between the BLM and the USFS, which manage nearly two-thirds of the remaining sage grouse habitat; relevant state agencies, which make decisions affecting state and private lands and currently manage the sage-grouse; USDA's Natural Resources Conservation Service, which provides technical assistance and financial support for conservation on private lands; and the FWS which has provided input into the BLM and USFS planning effort and supported conservation efforts across the range. The FWS will determine by the end of Fiscal Year 2015 whether the ESA protection is still warranted based on the status of the bird and cumulative conservation efforts being undertaken.

How were the proposed BLM and USFS land use plans developed?

The BLM-USFS plans build upon the foundation for sage-grouse conservation initiated by a number of states, including Wyoming's core area strategy, Idaho's three-tiered conservation approach, and Oregon's "all lands, all threats" approach. The plans also reflect guidance developed collaboratively by the BLM, USFS and FWS to reflect feedback on the draft plans from the FWS.

The proposed plans were developed in coordination with a range of stakeholders and cooperators, including farmers and ranchers, energy developers, state fish and wildlife agencies, and many others.

Draft EISs were released for public comment and review in 2013. The final EISs are the result of a robust, multi-year public process, including public scoping sessions, public meetings and a public comment period on the draft EISs.

What are the major changes in the EISs from Draft to Final?

This answer varies from state to state. In most cases, the changes include updated land allocations and design features and refinements to the adaptive management strategy and monitoring framework. In addition, the final EISs identify and incorporate Sagebrush Focal Areas and guidance for considering lek buffer distances during project implementation.

The Final EISs reflect comments received on the draft plans, including feedback from the FWS on what measures would provide certainty that the plans address major threats to the greater sage-grouse across its range.

What science or outside reports were used to develop the plans?

The plans are grounded in the best available science, drawn from published literature and input from recognized experts, state agencies, the U.S. Geological Survey, the FWS and other sources. Among the many reports and studies guiding the development of the plans are: a first-of-its-kind "Conservation Objectives Team" report that identifies priority conservation areas for the sage-

grouse and specific threats to the birds' survival, prepared by experts from both state and federal agencies; a "National Technical Team" compilation of science prepared by the BLM that provides options for dealing with the most significant threats to the sage-grouse; and a series of reports on how to address the threats of rangeland fire and invasive species prepared in collaboration with the Western Association of Fish and Wildlife Agencies.

How extensive is the greater sage-grouse's range? Why is its habitat declining?

Currently, greater sage-grouse habitat covers 165 million acres across 11 states in the West, representing a loss of 56 percent of the species' historic range. The primary threat to the habitat is loss and fragmentation due to increasingly intense rangeland fires, invasive species and development.

Who manages greater sage-grouse habitat?

The federal government manages 64 percent of greater sage-grouse habitat, primarily through the BLM and USFS. Private landowners own 31 percent and states manage 5 percent.

How many greater sage-grouse exist?

At one time, the greater sage-grouse population likely numbered in the millions, but today is estimated to have dwindled to 200,000 to 500,000 birds range-wide. There has been an estimated 30 percent decline in population since 1985, according to the FWS. Greater sage-grouse are monitored by state agencies, primarily by counting males at leks.

How many states are involved in the greater sage-grouse conservation effort?

There are 11 western states with greater sage-grouse habitat that are taking conservation actions: California, Colorado, Idaho, Montana, Nevada, North Dakota, Oregon, Utah, South Dakota, Washington and Wyoming. However, Washington State's greater sage-grouse habitat is primarily on state and private lands, so it is not included in the BLM-USFS planning effort. The BLM-USFS greater sage-grouse conservation strategy is designed to support the bird in the 10 other states.

What alternatives were considered in the Environmental Impact Statements?

The BLM and the Forest Service developed a range of alternatives for the EISs that were specifically structured to identify and incorporate appropriate conservation measures to conserve, enhance or restore greater sage-grouse habitat by reducing, eliminating, or minimizing threats to that habitat. Each regional effort developed and analyzed its own set of alternatives.

In many cases, various parts of the separate alternatives analyzed in the draft incorporated into the preferred alternative to develop the proposed plan.

Are the two sub-populations of the greater sage-grouse, the Washington State Distinct Population Segment and “Bi-State” Distinct Population Segment, addressed in this planning effort?

No. Greater sage-grouse in Washington have been managed under a specific Washington Greater Sage-Grouse Recovery Plan since 2004. The BLM and USFS have limited involvement in the Washington State Distinct Population Segment and only manage about 5 percent of the remaining habitat for this population.

In April 2015, the U.S. Fish and Wildlife Service determined that the Bi-State population does not require the protection of the ESA due, in large part, to the development of the Bi-State Action Plan, a conservation plan developed by partners in California and Nevada over the past 15 years and secured with \$45 million in funding.

Is the Gunnison sage-grouse a part of this planning strategy?

No. The Gunnison sage-grouse is a separate species and not included in this National Greater Sage-Grouse Planning Strategy.

What are the BLM and USFS doing to address wildland fire?

Rangeland fire can destroy sagebrush habitat and lead to the conversion of previously healthy habitat into non-native, cheatgrass-dominated landscapes. Experts have identified fire, fueled by invasive species, as one of the greatest threats to sagebrush habitat, particularly in the Great Basin region of Idaho, Utah, Nevada, Oregon and California.

The Department of the Interior has issued a comprehensive, science-based strategy to address the more frequent and intense wildfires that are damaging vital sagebrush landscapes and productive rangelands. This strategy will fight the spread of cheatgrass and other invasive species, position wildland fire management resources for more effective rangeland fire response, and accelerate the restoration of fire-impacted landscapes to native grasses and sagebrush.

What are the categories of land that the proposed plans identify?

The categories most common to the BLM-USFS plans are:

- *General Habitat Management Areas* (GHMA): BLM or USFS-administered lands that require some special management to sustain greater sage-grouse populations, but are not considered as important as priority habitat.
- *Priority Habitat Management Areas* (PHMA): BLM or USFS-administered lands identified as having the highest value to maintaining sustainable greater sage-grouse populations. These areas align closely with Priority Areas for Conservation (PACs) identified by state wildlife agencies and included in the Conservation Objectives Team report.

- *Sagebrush Focal Areas* (SFA): BLM or USFS-administered lands that are a subset of Priority Habitat and align with FWS-identified important landscape blocks with high breeding population densities of sage-grouse, existing high quality sagebrush habitat, and a preponderance of federal ownership or protected area that serves to anchor the conservation value of the landscape.

Due to differences in state approaches and ecological considerations, some plans may contain additional habitat categories. In addition, some plans do not contain Sagebrush Focal Areas.

What do the BLM-USFS plans propose?

The plans will provide a layered management approach that offers the highest level of protection in the most valuable habitat, known as Priority Habitat Management Areas. Within priority habitat, the plans seek to limit or eliminate new surface disturbance, particularly in Sagebrush Focal Areas, identified by the Service as “stronghold” areas essential for the species’ survival. The plans seek to minimize disturbance in General Habitat Management Areas, which are lands that require some special management to sustain greater sage-grouse populations, but are not considered as important as priority habitat. Additional information on the proposed plans is available [here](#).

Are the plans uniform in every state?

No. The plans include common elements across the range to address threats to the bird, while also allowing for state-based variations where different approaches or priorities were consistent with the overall conservation objectives. The federal plans build upon the foundation for sage-grouse conservation initiated by a number of states, including Idaho’s three-tiered conservation approach, Wyoming’s Core Area Strategy, and Oregon’s “All lands, All Threats” approach. The plans also reflect guidance developed collaboratively by the BLM and USFS to reflect feedback on the draft plans from the FWS.

Will the plans apply to state or private lands?

The plans will only apply to activities on federal public lands and federal subsurface minerals.

How do the plans affect existing oil and gas leases or rights-of-way?

The plans respect valid, existing rights, including those for oil and gas development, renewable energy, rights-of-way, locatable minerals, and other permitted projects.

Will oil and gas development be allowed under the proposed plans?

Yes. The plans seek to reduce surface disturbance from oil, gas and geothermal development while recognizing valid, existing rights. The BLM will work with lessees, operators and proponents of proposed fluid mineral projects on existing leases to mitigate adverse impacts to sage-grouse by avoiding, minimizing and compensating for unavoidable impacts. The plans will

prioritize future leasing and development outside of Priority and General Habitat Management Areas, and restrict surface disturbance associated with new federal leases in Sagebrush Focal Areas and Priority Habitat Management Areas.

Advances in drilling technology have enabled companies to access oil and gas deposits without disturbing the surface directly above those deposits, making it possible to conserve sensitive habitats while still developing subsurface resources. In states without a demonstrated all-lands regulatory approach to managing disturbance, the BLM will require no-surface occupancy measures in new federal oil and gas leases in Sagebrush Focal Areas and, with exceptions, in Priority Habitat Management Areas in order to limit surface disturbance to protect sensitive habitats. Exceptions will be limited to proposed development that will have no impact or a positive impact on sage-grouse.

The BLM estimates that for oil and gas, approximately 90 percent of lands with high to medium potential are located outside of federally managed priority habitat.

How will the proposed plans impact coal development?

The plans will seek to minimize surface disturbance caused by mining activities in Sagebrush Focal Areas and other priority habitat. The plans will ensure that greater sage-grouse habitat will be an important consideration in the BLM review of proposed coal mines or coal mine expansions.

What do the proposed plans recommend regarding hardrock mining?

The FWS has identified development from certain hardrock mining operations in highly important sage-grouse habitat as a threat. As a result, the BLM-USFS land use management plans recommend that the Secretary exercise her authority, through a separate, public process, to safeguard those most highly important landscapes identified by the Service – called Sagebrush Focal Areas in the plans -- through mineral withdrawals. During that process the Secretary will consider information provided by states, stakeholders and others on mineral potential, including rare earths, as well as the importance of the areas as sagebrush habitat. The Secretary intends to act promptly on the BLM-USFS recommendations to ensure Sagebrush Focal Areas that anchor the range-wide conservation strategy for greater sage-grouse are protected from the threat posed by hardrock mining.

How will the proposed plans impact grazing? Will there be a range-wide stubble height requirement?

The plans recognize – as does the FWS – that well-managed grazing can be compatible with long-term sage-grouse conservation. The plans put no lands off limits to grazing, nor do they require a one-size-fits-all approach to grazing allotments.

The BLM-USFS plans will use the best available science and recognize the need to evaluate varied local ecological conditions and site potential when deciding where and how to apply different types of management. During grazing permit renewals and modifications on lands

within sage-grouse habitat, the BLM will incorporate locally developed management objectives for sage-grouse habitat and rangeland health standards, consistent with ecological potential. The BLM and USFS will prioritize monitoring for compliance, review and processing of grazing permits in Sagebrush Focal Areas, followed by Priority Habitat Management Areas, with a focus on lands containing riparian areas and wet meadows.

Will the plans allow transmission lines to cross greater sage-grouse habitat?

The proposed plans will require that developers seek to avoid placing new transmission lines and other linear developments in sage-grouse habitat. Where important habitat cannot be avoided, mitigation measures will be required.

Will the conservation efforts impact military readiness?

The BLM-USFS land use plans will have no effect on military lands or installations. Related to the separate FWS determination, the Department of Defense has officially stated that it does not anticipate any significant adverse impacts to its mission from the pending listing decision, whatever its outcome. Over the 40+ year history of the ESA, hundreds of threatened or endangered species have successfully co-existed with military installations and facilities. Since 1978, the law has allowed the Secretary of Defense to obtain an exemption of any action from the requirements of the ESA for reasons of national security. In the ensuing 37 years, this exemption has never been used.

There are multiple military installations or facilities with confirmed populations of greater sage-grouse. Each installation has voluntarily undertaken conservation actions to benefit the sage-grouse and sagebrush habitat.

How will the Service consider these actions in their ESA determination?

The FWS is committed to using the best available science to determine whether threats to the species have been adequately addressed through federal, state and local actions. The Service has worked closely with the BLM and the USFS to help them develop plans with regulatory mechanisms that implement science-based methods to adequately address identified threats.

To ensure all conservation efforts are considered in the listing determination, the FWS established an unprecedented conservation efforts database open to all parties, including states.

Outside of regulatory measures, will the plans address habitat restoration and fire management?

The plans build on habitat restoration and improved fire management that federal, state and local partners have been investing in for years. The plans incorporate management actions to help reduce the threat of rangeland fire and to restore fire-impacted landscapes, consistent with the Secretary's recently released "Integrated Rangeland Fire Strategy." Additional new actions to support those activities are the President's \$60 million budget request for sage-grouse conservation and the President's proposed fire budget fix.

Does hunting greater sage-grouse pose a threat to the species?

In its March 2010 listing determination, the FWS did not find hunting, which is managed by states, to be a significant threat to the species: “We have no evidence suggesting that gun and bow sport hunting has been a primary cause of range-wide declines of the greater sage-grouse in the past, or that it currently is at a level that poses a significant threat to the species. ... continued close attention will be needed by States and tribes to carefully manage hunting mortality, including adjusting seasons and allowable harvest levels, and imposing emergency closures if needed.”

How will the plans be implemented? Will there be involvement from the states?

The BLM and the USFS will continue to look for ways to engage states and counties during plan implementation through mechanisms such as formal implementation agreements with states and collaboration with the Sage Grouse Task Force. The BLM and USFS will also continue to engage local partners on site and project specific issues.

Why is Wyoming’s plan different than other states? Is it consistent with the National Technical Team (NTT) report?

Wyoming has the most sage-grouse habitat and largest sage-grouse population in the United States. In 2008, Wyoming implemented a core area strategy, the first "all lands" regulatory mechanism developed by state or federal officials to conserve the greater sage-grouse and its habitat. To date, Wyoming’s proactive, landscape-level approach has proven to be an effective management strategy for conserving important greater sage-grouse habitat and encouraging robust development elsewhere.

The NTT report is a compilation of science prepared by the BLM that provides options for dealing with the most significant threats to the sage-grouse. In coordination with the FWS, the BLM considered and analyzed the NTT conservation measures, as well as the Wyoming Governor’s 2011 Executive Order on the management of greater sage-grouse core areas, in order to develop plans for Wyoming federal public lands that meet the conservation objectives of the planning effort.

What's Up With
Gasoline Prices?

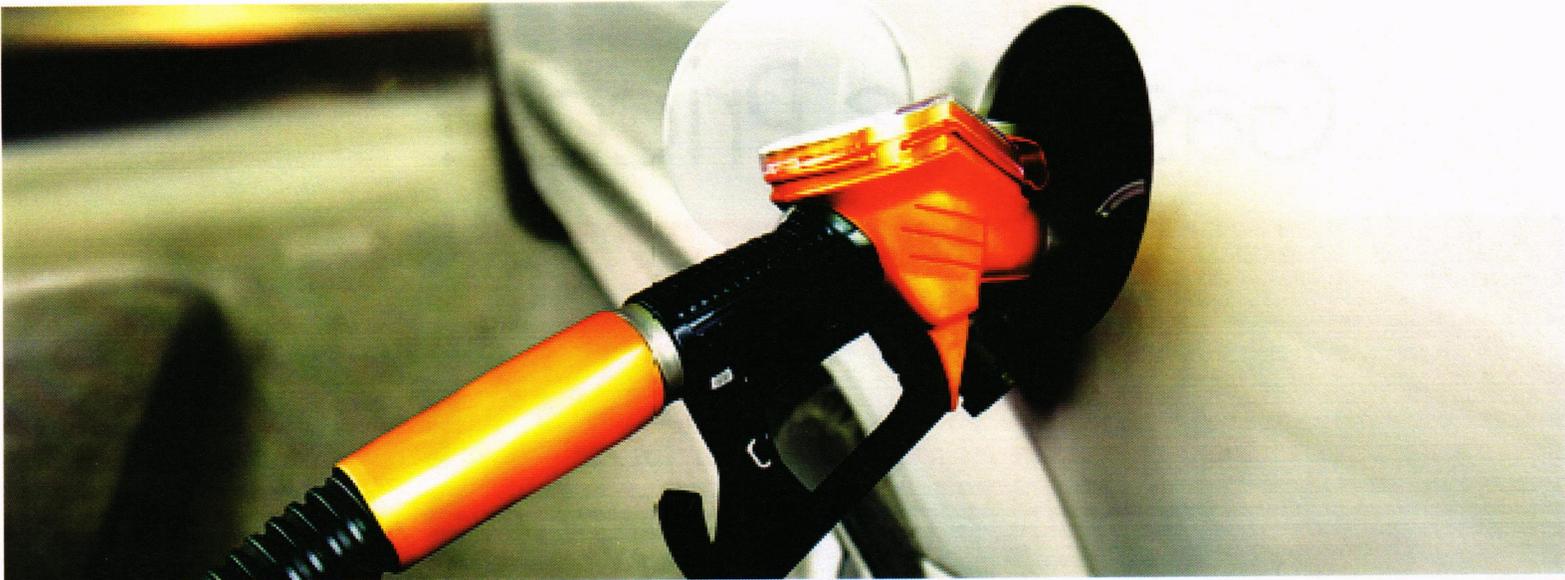


America's Oil and Natural Gas Industry

February 2015

For the latest report, please visit www.api.org/gasolineprices

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Gasoline, Diesel and Crude Oil Prices

Changes in gasoline and diesel prices mirror changes in crude oil prices.

Gasoline, Diesel and Crude Oil Prices



Source: NYMEX (WTI crude oil) and AAA (gasoline and diesel).

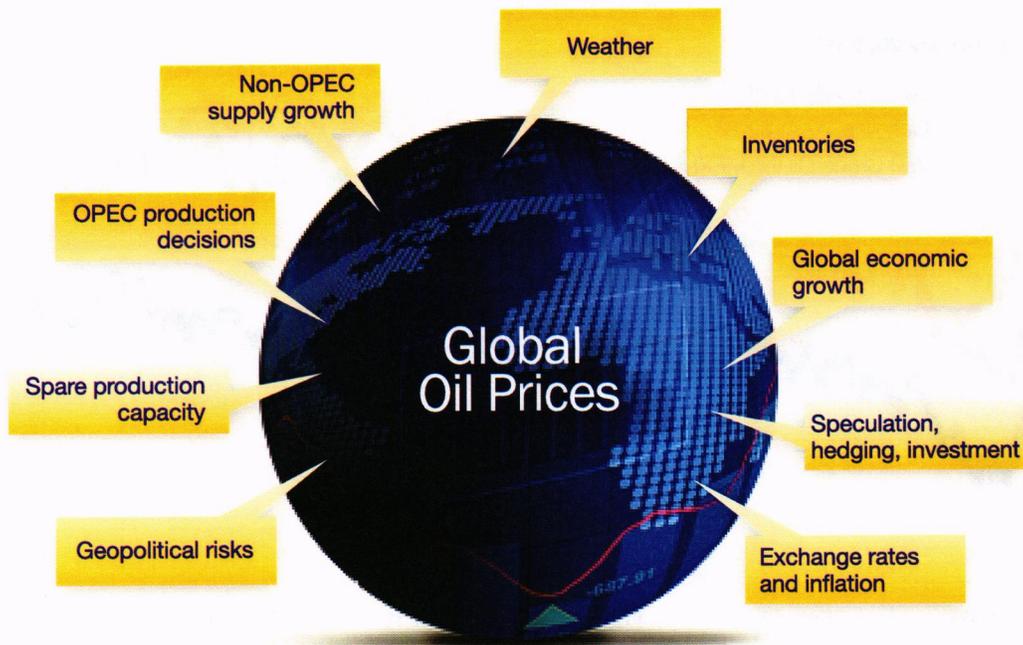
Changes in gasoline and diesel prices mirror changes in crude oil prices. Those changes are determined in the global crude oil market by the worldwide demand for and supply of crude oil. Weak economic conditions in the U.S. and around the world in 2008 and into 2009 led to less demand which helped push prices down.

With the worldwide economic recovery underway, demand is on the rise again but unrest in the Middle East and North Africa has put supplies at risk. This combination of rising demand and reduced supply helped to push prices higher over the last few years. However, the recent downturn in prices was the result of the growth in oil supplies, largely from the U.S., outpacing the growth in global demand.

Oil Prices Relate to Many Uncertain Factors

A host of factors, many of them uncertain, affect the price of crude oil and the products made from it.

Oil Prices Relate to Many Uncertain Factors



Source: EIA.

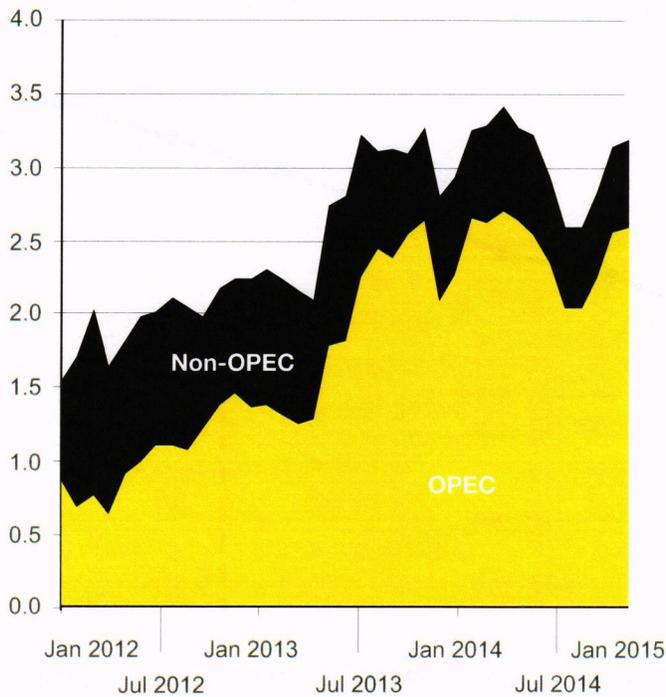
Crude oil prices are set globally through the daily interactions of thousands of buyers and sellers in both physical and futures markets, and reflect participants' knowledge and expectations of demand and supply.

In addition to economic growth and geopolitical risks, other factors, including weather events, inventories, exchange rates, investments, spare capacity, OPEC production decisions, and non-OPEC supply growth all figure into the price of crude oil.

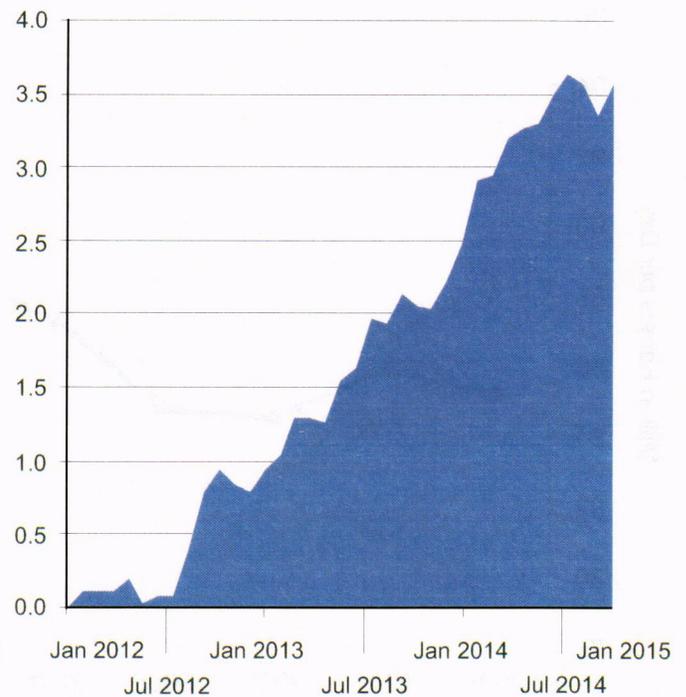
Global Oil Supply Disruptions vs. U.S. Oil Growth

Growth in U.S. oil production has largely offset the growth in global oil supply disruptions since 2011.

Growth in Global Oil Supply Disruptions
(mmb/d)



Growth in U.S. Oil Production*
(mmb/d)



Source: EIA.

* Include hydrocarbon gas liquids, biofuels, and refinery processing gains.

Unplanned supply disruptions in the global crude oil market have grown from 1.6 million barrels a day in 2012 to peaking at 3.4 million barrels a day in May 2014, before falling to 2.6 million barrels a day by September and October, but landing back up to 3.2 million barrels a day by January 2015. According to the EIA, this is the highest level of supply disruptions since the Iraq-Kuwait War (1990-91) when prices spiked to new highs.¹

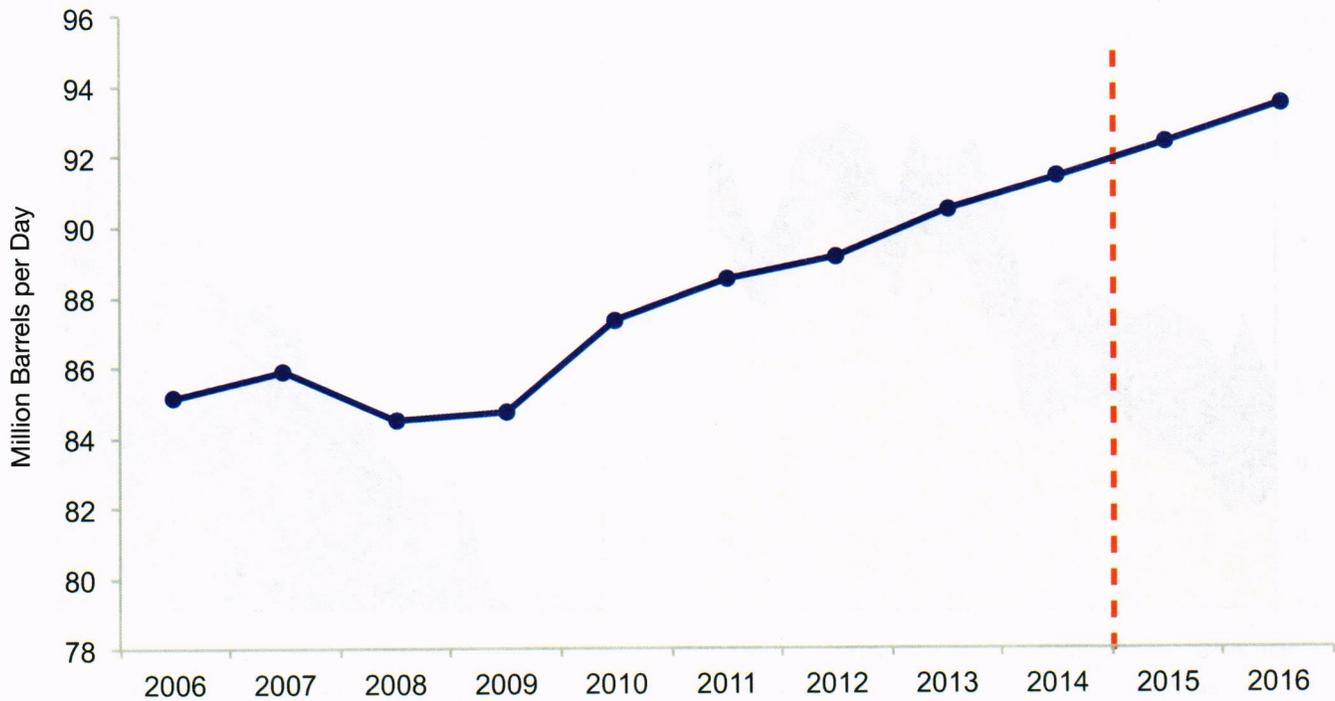
U.S. production growth has largely offset the loss from unplanned production outages around the world and put downward pressure on prices to the benefit of all consumers.

¹ EIA, Today in Energy, August 27, 2014.

World Liquid Fuel Consumption

World oil consumption is expected to grow as the global economy rebounds.

World Liquid Fuel Consumption



Source: EIA, Short-Term Energy Outlook, February 2015.

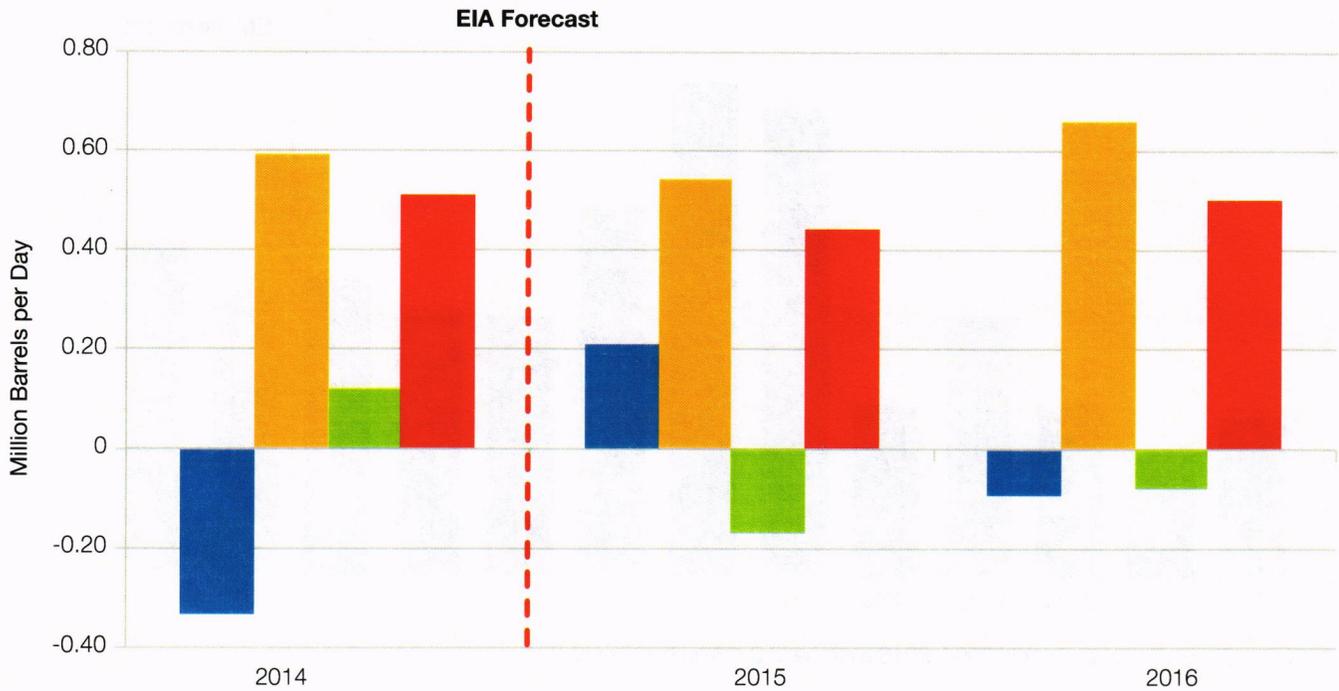
The world's demand for oil increased sharply for several years, peaking at 86 million barrels per day in 2007. However, the global economic slowdown in recent years reversed this trend and demand fell for two consecutive years to just 85 million barrels per day in 2009, or

over one million barrels per day less than at its peak before rebounding in 2010. The Energy Information Administration expects growth to continue over the next couple of years reaching 93.1 million barrels per day in 2015 and 94.2 million in 2016.

Growth in World Liquid Fuel Consumption

Growth in world oil consumption is expected to be concentrated in non-OECD countries.

Growth in World Liquid Fuel Consumption



Source: EIA, Short-Term Energy Outlook, February 2015.

The EIA projects consumption in the Organization for Economic Cooperation and Development (OECD)² countries to increase slightly this year before falling in 2016. Global growth is concentrated in the non-OECD countries including China, the Middle East and Central and South America with world gains of 1 million barrels per day in 2015 and 1 million barrels per day in 2016.

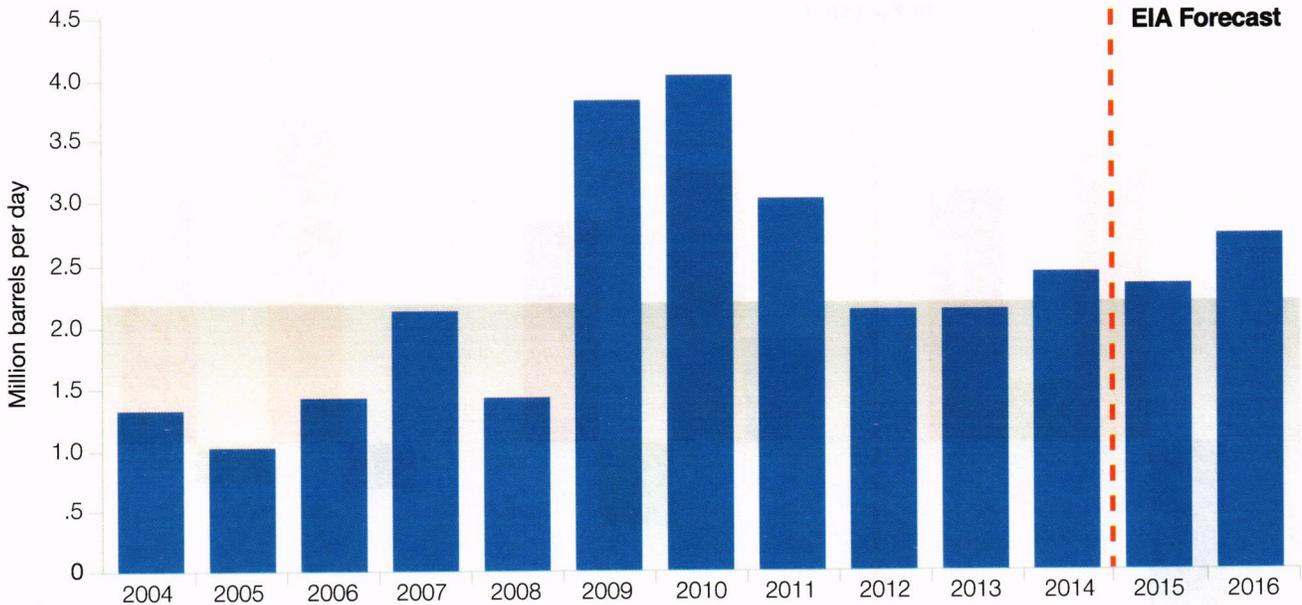
² The 34 member countries of the OECD include:

- | | | |
|----------------|---------------|----------------|
| Australia | Hungary | Poland |
| Austria | Iceland | Portugal |
| Belgium | Ireland | Slovakia |
| Canada | Israel | Slovenia |
| Chile | Italy | Spain |
| Czech Republic | Japan | Sweden |
| Denmark | Korea (South) | Switzerland |
| Estonia | Luxemburg | Turkey |
| Finland | Mexico | United Kingdom |
| France | Netherlands | United States |
| Germany | New Zealand | |
| Greece | Norway | |

OPEC Surplus Production Capacity

Surplus crude oil capacity is expected to increase.

OPEC Surplus Crude Oil Production Capacity



Note: Shaded area represents 2004–2016 average (2.2 million barrels per day).

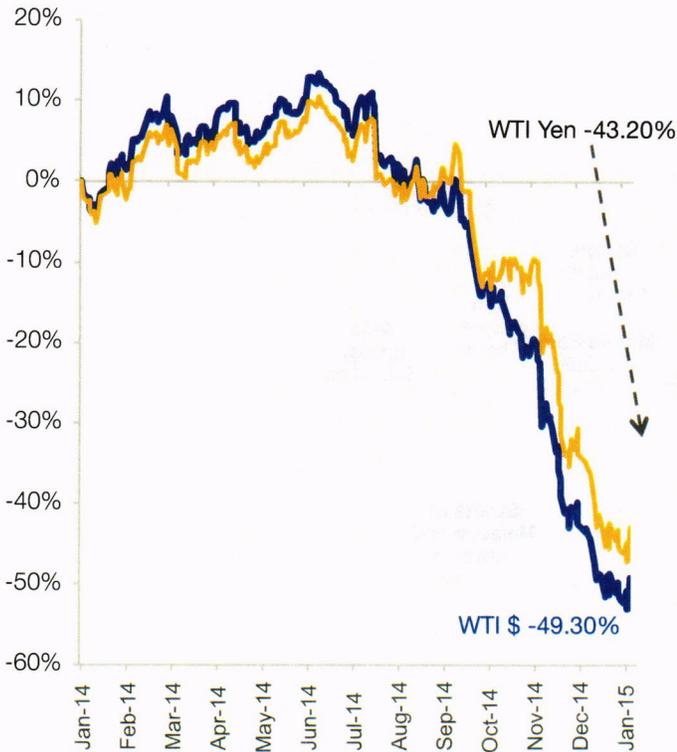
Source: EIA, Short-Term Energy Outlook, February 2015.

The amount of surplus crude oil capacity, which is the amount of oil available to meet surges in demand or disruptions in supply, remained at 2.1 million barrels per day in 2012 and 2013 before increasing to 2.4 million barrels per day in 2014 as demand for crude oil increased along with global economic growth, and supplies were put at risk by unrest in the Middle East and North Africa.

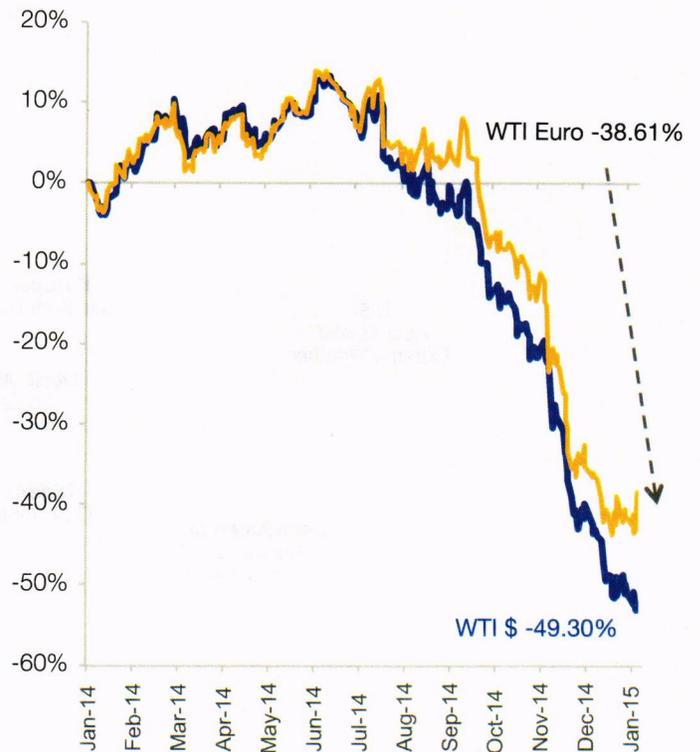
EIA expects OPEC surplus production capacity will average about 2.3 million barrels per day in 2015 and increase to 2.7 million barrels per day in 2016.

The Value of the Dollar Makes a Difference

Percent Change of West Texas Intermediate Crude (WTI) in Dollars and Yen (Jan 2, 2014 – Jan 30, 2015)



Percent Change of West Texas Intermediate Crude (WTI) in Dollars and Euro (Jan 2, 2014 – Jan 30, 2015)



Sources: Board of Governors of the Federal Reserve Bank, EIA, NYMEX.

The strength of the U.S. dollar against other currencies around the world has widened compared to the Yen and the Euro. For American consumers this means they are experiencing a greater fall in crude oil prices than the citizens of Japan and Europe.

As oil prices have fallen around the world, the price decline has been greater for countries that have a strong currency like the U.S., but less for those that don't.

Accumulating Risks to the Development of Oil and Natural Gas

There are accumulating risks to the development of oil and natural gas.

Accumulating Risks to the Development of Oil and Natural Gas



Source: NPC.

The National Petroleum Council (2008) examined a broad range of global energy supply, demand and technology projections through 2030 and concluded that “the world is not running out of energy resources, but there are accumulating risks to continuing expansion of oil and natural gas production from the conventional sources relied upon historically.”

These risks include political instability in the Middle East and North Africa, the resurgence of resource nationalism in Latin America, civil unrest in Nigeria, piracy off the African coast, transit vulnerability in the Caspian, energy subsidies in Asia, extreme weather around the world, and restricted access to resources in the U.S. These risks create significant challenges to meeting projected energy demand.

Strategic Petroleum Reserve

The Strategic Petroleum Reserve: America's insurance policy in case of an oil supply disruption.

SPR Storage Sites



The Strategic Petroleum Reserve (SPR), the world's largest supply of emergency crude oil, was designed to protect the country from fuel shortages in the event of an emergency. Although the need for a reserve had been recognized for decades, it was the 1973-74 oil embargo by Arab nations – which significantly affected the nation's economy – that led to its creation in 1975.

The oil in the reserve is stored in underground salt caverns along the coastlines of Texas and Louisiana. Its more than 700 million barrels – the largest emergency oil stockpile in the world – make it a significant deterrent to oil import cutoffs.

Under the Energy Policy and Conservation Act, the president is authorized to withdraw crude oil from the SPR in an energy emergency “to counter a severe supply interruption” and distribute it by competitive sale. The SPR has been used under these circumstances three times (during Operation Desert Storm in 1991, after Hurricane Katrina in 2005, and in response to the loss of Libyan crude in 2011).

In addition to energy emergencies, crude oil has been withdrawn from the reserve for a variety of reasons, including test sales, exchange arrangements with private companies, and as authorized by Congress to raise revenue.

The SPR was not intended to be used to interfere with the crude oil or gasoline markets or to ease temporary retail fuel price hikes.

According to the Congressional Research Service (CRS), it is unclear what sort of effect a draw on the SPR would have in a market where there is no actual physical shortage because oil companies may have limited interest in SPR oil unless they have spare refining capacity to turn the crude into useful products, or want to build stocks.³ The CRS also noted that it is possible that producing nations might reduce production to offset any SPR oil delivered into the market.

³ CRS, “The Strategic Petroleum Reserves: History, Perspectives, and Issues,” April 18, 2009.

What Consumers Are Paying for at the Pump

Pump prices: A fractional story.

What Consumers are Paying for at the Gasoline Pump
(as of December 2014)



Source: EIA estimate based on average price of \$2.54 per gallon, December 2014.

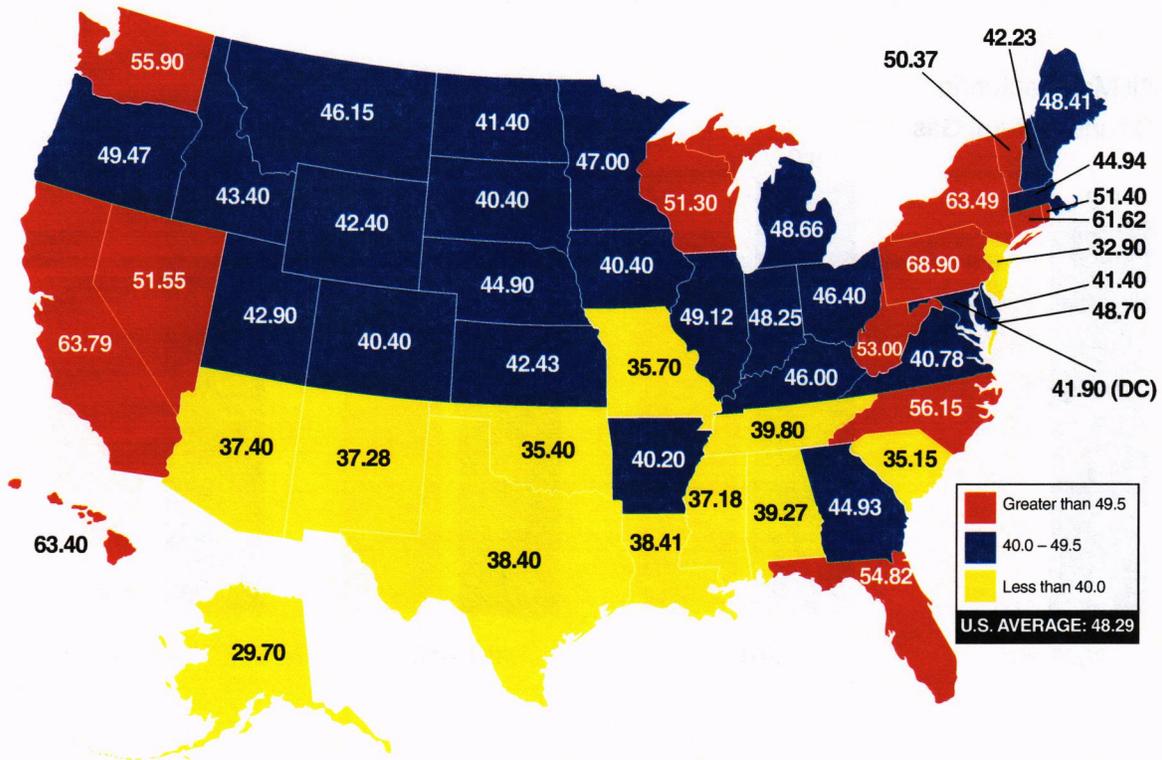
The biggest single component of retail gasoline prices is the cost of the raw material used to produce the gasoline – crude oil. Recently, that price has been between \$44 and \$52 a barrel, depending on the type of crude oil purchased. With crude oil at these prices a standard 42 gallon barrel translates to \$1.05 to \$1.24 a gallon at the pump. Excise taxes add another 48 cents a

gallon on average nationwide. So the price for gasoline is already at \$1.53 or more per gallon even before adding the cost of refining, transporting, and selling the gasoline at retail outlets. Crude oil costs account for about 57 percent of what people are paying at the pump. Excise taxes average 18 percent. That leaves just 25 percent for the refiners, distributors, and retailers.

Gasoline Taxes by State

One reason the price of gasoline can vary by state is the fact that the taxes often do.

Gasoline Taxes (Combined Local, State and Federal – Cents per Gallon, January 12, 2015)



The average nationwide tax collected on each gallon of gasoline sold at the retail station is 48.3 cents. Of that, 18.4 cents per gallon goes to the federal government; the rest ends up in state and local government coffers.

The amount of gasoline taxes collected by states can vary widely, from just 29.7 cents per gallon in Alaska, to as much as 68.90 cents per gallon in Pennsylvania.

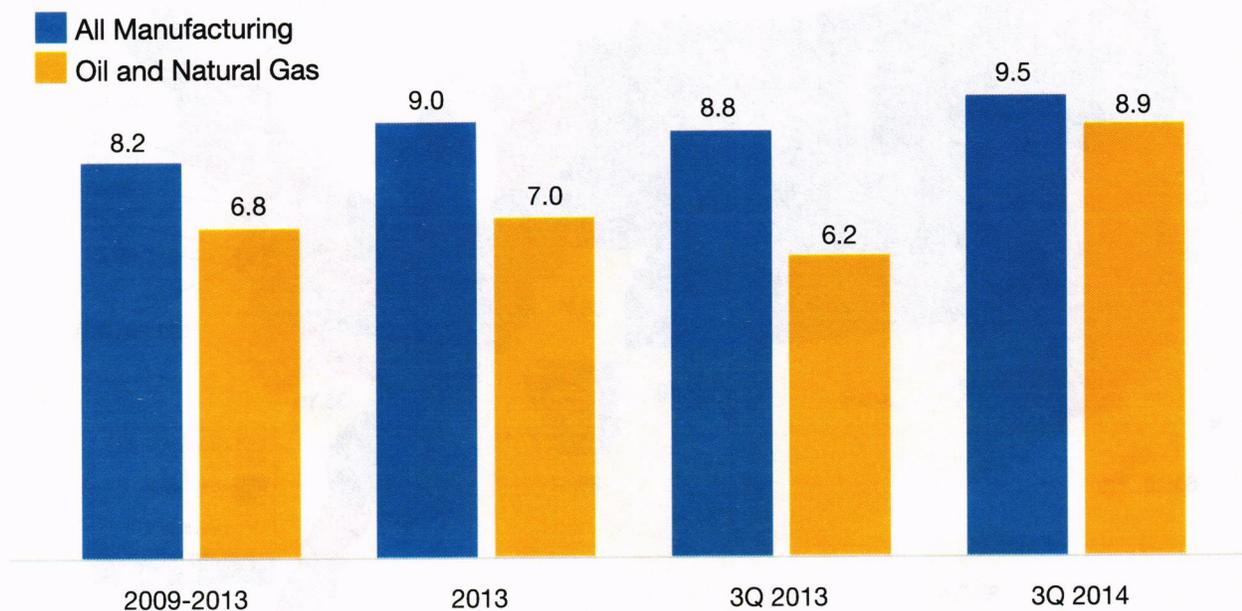
In addition to excise taxes, other taxes can also apply, such as sales taxes, gross receipts taxes, oil inspection fees, county and local taxes, underground storage tank fees, and other miscellaneous environmental fees. These additional taxes contribute to the difference collected among states.

Earnings Compared to Manufacturing

Earnings: Keeping America going strong.

Earnings

(cents of net income per dollar of sales)



Source: U.S. Census Bureau for U.S. manufacturing, and Standard & Poor's Research Insight for oil and natural gas.

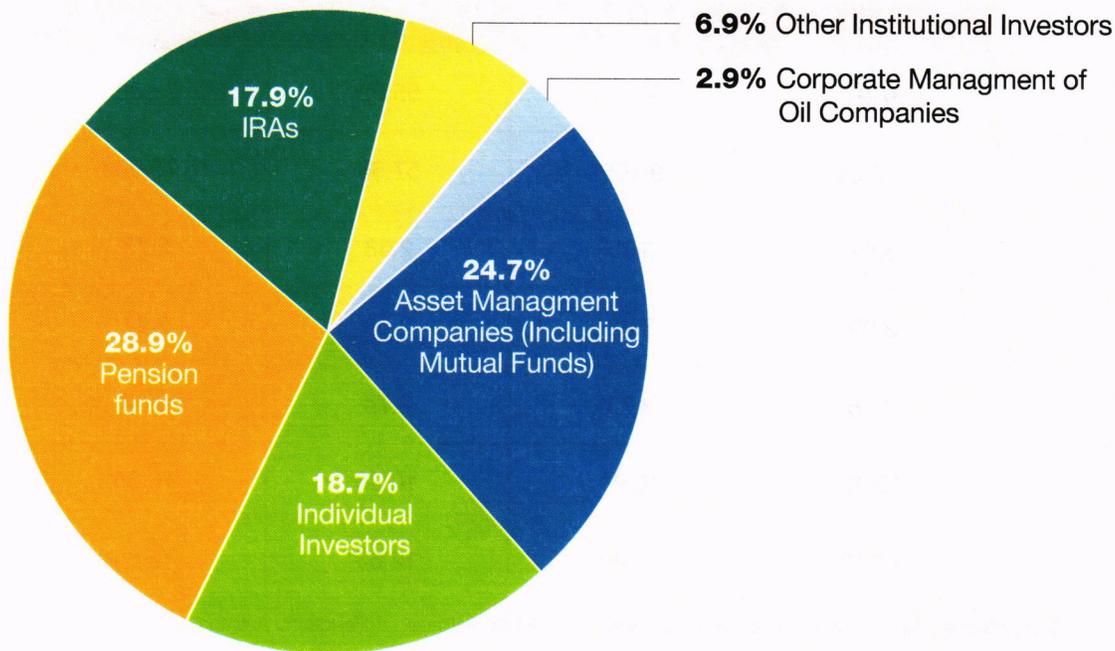
Over the last five years, average earnings for the oil and natural gas industry have been well in line with the rest of the U.S. manufacturing industry, averaging about 7 cents for every dollar of sales compared to 8 cents for manufacturing. By the third quarter of 2014, the average for the oil and gas industry increased to 8.9 cents on the dollar compared to 9.5 cents on the dollar for all U.S. manufacturing as the economy continued to recover.

Like other industries, the oil and natural gas industry strives to maintain a healthy earnings capability. It does so to remain competitive and to benefit its millions of shareholders, across the country and in all walks of life. Healthy earnings also allow the industry to invest in innovative technologies that improve our environment and increase production to keep America going strong – even as it leads the search for newer technologies, and new sources of energy that will provide a more secure tomorrow.

Who Owns the Oil Companies

When politicians talk about taxing “Big Oil” or taking their “record profits,” they should think about who they really would be hurting.

Who Owns “Big Oil?”
(holdings of oil stocks, 2014)



Source: Who Owns America's Oil and Natural Gas Companies, SONECON, October 2014.

If you're wondering who owns "Big Oil," chances are good the answer is "you." If you have a mutual fund account, and 57 million U.S. households do, there's a good chance it invests in oil and natural gas stocks. If you have an IRA or personal retirement account, and 46 million U.S. households do, there's a good chance it invests in energy stocks. If you have a pension plan, and 61 million U.S. households do, odds are it invests in oil and natural gas.

Contrary to popular belief, and what some politicians might say, America's oil companies aren't owned just by a small group of insiders. Only 2.9 percent of industry shares are owned by corporate management. The rest is owned by tens of millions of Americans, many of them middle class.

A strong oil and natural gas industry is a vital part of the retirement security for millions of Americans. State pension fund investments in oil and natural gas companies are providing strong returns for teachers,

firefighters, police officers, and other public pension retirees, according to a Sonecon study.⁴ Returns on oil and natural gas assets in the top two state funds in 17 states, which include almost half of all the people covered by state and local pension plans in the U.S., averaged 42 cents for each dollar invested compared to just 6 cents for other assets in these funds from 2005 through 2009.

The oil and natural gas industry is a major contributor to the health of these funds, many of which face huge future payout obligations. Investments in the industry accounted for 4.6 percent of the average fund's total assets while producing 15.7 percent of total returns.

⁴ Robert J. Shapiro and Nam D. Pham, "The Financial Contribution of Oil and Natural Gas Company Investments to Major Public Pension Plans in Seventeen States, Fiscal Years 2005-2009," SONECON, June 2011.

EIA Price Forecast

Looking ahead: EIA's price forecast.

EIA Price Forecast

	Year			
	2013	2014	2015 Projected	2016 Projected
WTI Crude^a (\$/barrel)	97.91	93.26	55.02	71.00
Brent Crude (\$/barrel)	108.64	99.02	57.56	75.00
Gasoline^b (\$/gallon)	3.51	3.36	2.33	2.73
Diesel^c (\$/gallon)	3.92	3.83	2.83	3.24
Heating Oil^d (\$/gallon)	3.78	3.73	2.74	3.03
Natural Gas^d (\$/mcf)	10.30	10.91	10.28	10.56
Electricity^d (¢/kwh)	12.12	12.49	12.63	12.85

^a West Texas Intermediate ^b Average Regular Pump Price ^c On-Highway Retail ^d Residential Average

Source: EIA, Short-Term Energy Outlook, February 2015.

Looking ahead, the Energy Information Administration projects the annual price of WTI crude will fall by \$38.24 per barrel in 2015 and increase by \$15.98 per barrel in 2016. Brent crude oil prices are projected to follow a similar pattern of falling this year and increasing next year. EIA expects changes in crude oil prices will be reflected in prices for the products made from crude oil, such as gasoline, diesel, and heating oil.

Fuel-Saving Tips for Drivers

Fuel-saving tips for drivers.

Simple Tips to Save Fuel



We count on our cars to get us where we want to go, when we want to go. That sense of freedom is important to us, but we also want to be sure we do our best to conserve natural resources for future generations.

Here are a few simple steps you can take to meet these goals.

- **Have your car tuned regularly.** An engine tune-up can improve car fuel economy by an average of 1 mile per gallon.
- **Keep your tires properly inflated.** Underinflated tires can decrease fuel economy by up to 1 mile per gallon.
- **Slow down.** The faster you drive, the more gasoline your car uses. Driving at 65 miles per hour rather than 55 miles per hour reduces fuel economy by about 2 miles per gallon.
- **Avoid jackrabbit starts.** Abrupt starts require about twice as much gasoline as gradual starts.
- **Pace your driving.** Unnecessary speed ups, slowdowns and stops can decrease fuel economy by up to 2 miles per gallon. Stay alert and drive steadily, not erratically. Keep a reasonable, safe distance from the car ahead of you and anticipate traffic conditions.
- **Use your air conditioner sparingly.** The use of air conditioning can reduce fuel economy by as much as 2 miles per gallon at certain speeds and under certain operating conditions.
- **Plan your trips in advance.** Combine short trips into one to do all your errands. Avoid traveling during rush hours if possible, to reduce fuel consumption patterns such as starting and stopping and numerous idling periods. Consider joining a car pool.

For more information, please visit

www.energytomorrow.org

www.api.org



AMERICAN PETROLEUM INSTITUTE

Spencer, Nadine

From: steve kelly <troutcheeks@gmail.com>
Sent: Tuesday, June 02, 2015 5:59 PM
To: Kolman, Joe
Cc: Bullock, Governor; Hagener, Jeff
Subject: Testimony for the hearing record at the June 4, 2015 EQC meeting.
Attachments: Sent via email to.docx

Sent via email to:

Joe Kolman, Director,
jkolman@mt.gov
Environmental Policy Office, Montana EQC

Legislative

June 2, 2015

re: Elimination of Native Species Biologist for Bison position cut and due respect for Montana's professional public servants.

Dear Mr. Kolman:

Please accept and enter the following testimony into the FWP portion of the hearing record at the June 4, 2015 EQC meeting.

I am writing to object to the termination of Montana Fish Wildlife and Parks (FWP) biologist Arnie Dood, and the position he held: Native Species Biologist for Bison. I fail to see how this particular budget cut will further the purposes of the program to restore wild bison as wildlife in Montana under FWP management. I believe this places the future of Montana bison management and restoration in jeopardy. Governor Bullock has said that making progress with the Montana bison planning process is a top priority. It is also true that actions speak louder than words.

Mr. Dood has accumulated a considerable amount of scientific expertise and 40 years of on-the-ground experience that FWP and Montana's wildlife need right now. He has served on the front lines for FWP during some of the most contentious wildlife issues in his four decades of public service. He always served the public interest with grace and professionalism. And this is the thanks he gets.

When considering fully what's been happening to wild bison and bison habitat, it makes no sense to get rid of the most qualified person in the program to make budget cuts that could easily be made elsewhere. This is not the time to back off or walk away from bison restoration.

Is state's bison management program being overrun by election-year politics? If this termination stands it appears obvious to me that neither FWP, nor our Governor, have serious intentions of restoring bison as wildlife to Montana anytime soon.

Have wildlife administrators and elected officials forgotten that sportsmen fund FWP? Montana sportsmen expect a professional organization that doesn't flinch every time some special-interest starts jumping up and down, wanting another subsidy, regulatory exemption, or exception, to boost their bottom line.

Nobody at FWP is as qualified as Arnie Dood to work on bison issues. Nobody. Please do not yield to special interests. Stand firm behind Montana's wildlife, sportsmen-funded wildlife programs, and Arnie Dood, a dedicated wildlife biologist who deserves to be treated with dignity and respect.

Sincerely,

Steve Kelly

P.O. Box
4641,
Montana 59772

Bozeman,

troutcheeks@gmail.com

cc.
vernor Bullock, governor@mt.gov,

Go

Jeff Hagener, JHagener@mt.gov

Spencer, Nadine

From: Joe Newman <solarfeller@gmail.com>
Sent: Saturday, May 30, 2015 1:12 PM
To: Kolman, Joe
Subject: Dear Director Kolman

I am writing in support of the position of wildlife biologist for Bison. I believe that if Fish Wildlife and Parks is to have a strong voice for bison it needs an expert who knows the needs of bison. The sad fact is that bison as they are today are becoming genetically more and more like cows. I believe that its time for the managers of this amazing creature to move bison into a more natural and wild habitat than presently exists in Yellowstone And other smaller refuges and ranches. I hope you agree with this and work towards that end.

Sincerely
Joe Newman
Box 833
Bozeman
MT

ENVIRONMENTAL QUALITY COUNCIL 1301 E. 6th Ave (State Capital) Room 172 Helena

SUBJ: The General Appropriations Act of 2013 HB 2 - FWP (pgs. 27-29)

My name is Dyrck Van Hyning of Great Falls, a semi-retired Montana Food Broker dba Van Hyning & Associates since 1991.

I would like to comment on the Montana Fish Wildlife and Parks Wildlife Funding. In the 63rd Legislature Short Title The General Appropriation Act of 2013 or HB0002–Page 27 & 28 Enacted 4% Personal Services Reductions on the Executive Branch agencies. In the Natural Resources and Transportation Division, Department of Fish Wildlife and Parks, there are 8 categories:

1. Information Services Division
2. Fisheries Division
3. Law Enforcement Div
4. Wildlife Division
5. Park Division
6. Communication and Education Div
7. Management & Finances
8. Fish & Wildlife Administration

Of the 8 categories of the FWP, only one full time employee (40 hours per week) in the Wildlife Administration was cut. That person was a 40 year employee, Arnie Dood, Natural Wildlife Game Species-Bison position. Wild free roaming bison would be wildlife, it would be hunted, licenced , managed, not livestock or endangered species. Arnie's position termination letter excerpts:

The department has determined that the position of Brucellosis Technician is available to you as a reassignment. This position reports to the Region 3 Wildlife Manager and is assigned to the Bozeman Office. Because this position is a Wildlife Biologist Band 5 if you chose this reassignment, you will be pay protected at your current base rate of \$ 29.6220 for six months. On January 1, 2016 your hourly base rate will be \$ ___./hour.

If you do not accept this reassignment you will be laid off effective July 1, 2015. As an

All other positions in FWP were already vacated positioned, minimum hours lawn keepers at 1.8 hours or moved laterally to full hours and pay at previous position.

Arnie Dood is a dedicated FWP wildlife biologist who advocated for the wildlife science. Arnie began working for FWP in 1975 – 40 years he has been our trusted public servant. He is even mentioned in the Montana's Wildlife Legacy book, "In 1974, Montana Fish, Wildlife and Parks appointed Dennis Flath as its first non-game biologist and in 1984 Arnold Dood was assigned as the Endangered Species biologist. Since then, more non-game biologists have been hired, but are

day comment period.

Without Arnie, this EIS will only go through the motions for lack of bison wildlife biologist knowledge. He was taken out of the Bison EIS process early on and the results will show forthwith. Apparently the 4/3/2015 Draft EIS topics were changed to something more friendly to the cattle industry based on a legislator's stock grower comment to the FWP.

Surely, FWP can do a better job of managing their resources for the state of Montana.

Sincerely,

Dyrck Van Hying
Great Falls
406-4536039