

**ECONOMIC ANALYSIS  
OF THE  
NORTHERN ROCKIES ECOSYSTEM PROTECTION ACT**

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## **Executive Summary**

The proposed Northern Rockies Ecosystem Protection Act (NREPA) will save a least **\$245 million** dollars over ten years and is the most cost-effective means of protecting endangered species in the northern Rockies. In addition to restoring watersheds and saving the taxpayers money, NREPA creates more than 2300 high paying jobs for the region.

NREPA saves taxpayers money by prohibiting road building and logging in roadless areas designated as wilderness. Logging areas NREPA would protect at levels desired by the U.S. Forest Service would result in a net loss to U.S. taxpayers of approximately **\$375 million** over the ten-year period of 2003-2013 (see Tables I-V). Furthermore, this figure understates the loss because it does not include the millions of dollars in maintenance expenses that logging roads incur. In central Idaho alone, the federal government spent \$10 million repairing roads damaged by landslides in 1996. The Forest Service estimated that logging caused eighty- percent of these slides.

NREPA produces more jobs because of the habitat restoration work associated with the wildland recovery areas. The costs of this work will be approximately \$130 million over ten years (see Table VI). This cost is \$245 million less than the \$375 million net projected loss for logging these areas. Removing the roads and restoring the recovery areas will save the federal government tens of millions of dollars in reduced road maintenance expenses which would help reduce the \$8 billion back log of road maintenance needs in our National Forests. The Forest Service in a 2000 report titled *Water and the Forest Service* found that water originating from lands that NREPA would protect has a value of at least \$1 billion. It makes no economic sense to lose hundreds of millions of dollars on logging that harms the most valuable commodity our forests produce, water.

Since the total savings associated with this alternative are much greater than the total costs, a conservative estimate of the net savings would be at least **\$245 million** (see Table VII). NREPA saves taxpayers millions of dollars, creates 900 more jobs, provides maximum protection for grizzly bear and other endangered species habitat, shortens the total time frame for endangered species recovery and improves the economic viability of the northern Rockies states.

The Northern Rockies Ecosystem Protection Act (NREPA) creates jobs. People live and work in the Northern Rockies because of its natural beauty. The question of jobs versus the environment is a false one. These states would actually end up with more jobs if these lands were left in their natural state. It will directly create 2338 jobs by obliterating environmentally destructive roads. Only 1400 jobs will be lost in the wood products industry when these unique wildlands are preserved. NREPA will indirectly create thousands of more jobs by preserving a pristine environment, the economic base of the Northern Rockies' states.

These states' current economic vitality is dependent on their high quality natural environment, not declining extractive industries. Further damage to these pristine areas will threaten the economic future of these states.

Using Forest Service data, Professor Thomas Power, Chairman of the Economics Department at the University of Montana, estimated 1400 jobs would be lost if we preserve these roadless lands as wilderness. If we log all of this land today 1400 people would be employed for one year. But the loss of 1400 jobs could be made up in less than three weeks with normal job growth (Power). The job loss is small because most of these roadless lands are not suited for timber production. The trees are too small and too few. Moreover, the number of timber jobs will continue to decline with technological advancement and the diminishing supply of trees. Capital intensive technology is the main cause of the fall in timber related employment, not lack of trees. Employment in the wood products industry in Montana peaked in 1979 when 11,606 employees cut and milled 1 billion board feet of timber. In 1989, the timber industry harvested a record amount of timber, almost 1.3 billion

board feet, but only 9,315 people were employed. The data the Forest Service used in projecting job loss is from 1972. They estimate that for every one million board feet of timber cut 9 jobs will be created for one year. If current data is used only 1.5 to 2 jobs will be created for every million board feet logged. The number varies depending on how the wood is processed. Fewer jobs are created now than 30 years ago because of advances in technology. One person can cut in an hour what a two-person crew could cut in a day twenty years ago. With today's technology only 560 timber industry jobs would be lost if we preserve these lands as wilderness. If we cut all of these lands today 560 people would be employed for one year. We can expect further technological advancements in the future. Employment in the timber industry will continue to decline.

NREPA proposes nearly one million acres as National Recovery areas. 6,556 miles of roads would be closed and restored and fish and wildlife returned. These activities would employ people. The Forest Service estimates it costs an average of \$10,000 to totally obliterate a mile of road in the Northern Rockies. Obliterating 10,000 miles of roads would create approximately 625 jobs for heavy equipment operators. And these are good jobs that could be spread out well into the 21st century. Heavy equipment operators earn approximately \$25 per hour. The employment created by this method will greatly ease the transition from a timber-based economy. The money to pay for this could come from ending timber subsidies. In the last ten years, the Forest Service has lost over \$2 billion on its timber program. The justification for this corporate welfare is job creation. NREPA can produce more quality jobs and do so without destroying the west's major resource.

It is also argued that when we build roads we create something economically valuable but when we destroy roads we only make the mountains beautiful. In actuality, when we build roads we create a liability. Ninety per cent of the increase in silt from logging comes from roads. Roads contribute sedimentation to streams for an indefinite period. The road cut creates soil conditions that do not stabilize over time (Richard Hauer, PhD Flathead Lake Biological Station, personal interview). "Instream sedimentation

deposited in the stream bottom decreases the success rate of egg hatching and fry development by impeding water flow through the gravels in which the eggs undergo early development" (Final Report, Montana Environmental Quality Council, December 1988).

The bull trout was recently listed as an endangered species. Logging harms these fish as well. Sediment originating from logging and logging roads can reduce embryo survival of bull trout and westslope cutthroat trout and decrease the available pools used for rearing bull trout. Bull trout are selective in the streams they choose. They only spawn in twenty-eight streams of the hundreds available in the Flathead Lake water basin (Weaver, Fraley).

In central Idaho erosion rate along roads was 750 times greater than in undisturbed areas. The silt fills spawning pools and has led to population declines in fish such as bull trout, salmon and westslope cutthroat trout (Noss). Salmon population supports 60,000 jobs and a billion dollar industry. The federal government is spending millions of dollars trying to save these fish. It would be more cost effective to deal with one of the sources of the problem which is logging.

The Forest Service closes many roads after logging in an area has ended. But the simple closing of these roads does not mean an end to their maintenance costs. The Forest Service spends between \$300 and \$500 per mile for minimum road maintenance. The Forest Service estimates that it is more cost efficient to obliterate a road if it is not going to be used for the next 20 years. By obliterating these roads up to \$5 million in normal annual maintenance cost would be saved. The minimum maintenance does not take into account floods. Flood damage to roads runs in excess of a million dollars a decade per ranger district. This is due to maintenance costs alone. It does not take into account the tremendous environmental damage roads cause.

Elk population directly declines with road density. Two miles of roads per square mile leads to a 50 percent reduction in the elk population and six miles of roads per square mile eradicates virtually all elk in that area (Noss). The hunting of elk brings in a billion

dollars a year into Montana every year and creates more jobs than logging according to the Montana Department of Fish Wildlife and Parks. The continued destruction of these lands will directly harm the hunting industry. Roads also increase poaching. The majority of poaching occurs from roads because they offer easy access into previously remote areas. Grizzly bears avoid roads by an average distance of one half mile (Noss). This leads to a tremendous reduction in their habitat.

But costs are more than just what the market measures. We can not replace animals when they become extinct. Professor John Craighead believes additional road construction will mean the end of the grizzly bear in the continental United States. This is not a jobs versus the environment scenario. NREPA will protect the environment, create jobs, and save the taxpayers money. The trade-off is between permanently damaging the environment for the sake of a few hundred temporary jobs in the timber industry at the expense of destroying the Northern Rockies economic base, its natural landscape, and the thousands of jobs it attracts to the region every year.

**Table I**

Northern Rockies Ecosystem protect Act  
Savings from reduction in timber harvest  
Region I \$81,347,230

Region I National Forests	Avg. loss per thousand board feet (MBF)	Amount allowed to sell per decade in million board feet (MMBF)	% of ASQ from lands NREPA would protect	Regeneration costs	Savings from reduced logging under NREPA first decade
Beaverhead	\$143.64	173	8.1%	\$64,407	\$2,077,234
Bitterroot	\$186.32	100	28.3%	\$243,699	\$5,516,555
Clearwater	\$86.66	550	7.5%	\$325,322	\$3,900,047
Deerlodge	\$143.64	230	10.9%	\$472,801	\$2,038,477
Flathead	\$121.79	536	12.5%	\$390,955	\$8,550,885
Gallatin	\$183.93	100	67%	\$496,412	\$12,819,722
Helena	\$136.50	150	9.3%	\$51,433	\$1,955,608
Idaho Panhandle	\$50.81	800	10%	\$1,200,841	\$5,265,641
Kootenai	\$71.67	1200	1.5%	\$180,682	\$1,470,742
Lewis and Clark	\$81.79	121	4.4%	\$70,842	\$506,292
Lolo	\$86.66	1070	1.9%	\$104,869	\$1,766,643
Nez Perce	\$83.26	1380	30%	\$1,009,744	\$35,479,384
Total Savings from Region I					<b>\$81,347,230</b>

**Table II**

Northern Rockies Ecosystem protect Act  
Savings from reduction in timber harvest  
Region II \$4,335,434

Region II National Forests	Avg. loss per thousand board feet (MBF)	Amount allowed to sell per decade in million board feet (MMBF)	% of ASQ from lands NREPA would protect	Regeneration costs	Savings from reduced logging under NREPA first decade
Bighorn	\$89.42	149	15.4%	\$197,844	\$2,249,675
Shoshone	\$83.28	105	21.9%	\$170,736	\$2,085,759
Total Savings from Region II					<b>\$4,335,434</b> =====

**Table III**

Northern Rockies Ecosystem protect Act  
Savings from reduction in timber harvest  
Region IV \$87,389,020

Region IV National Forests	Avg. loss per thousand board feet (MBF)	Amount allowed to sell per decade in million board feet (MMBF)	% of ASQ from lands NREPA would protect	Regeneration costs	Savings from reduced logging under NREPA first decade
Boise	\$100.93	850	24%	\$16,944,316	\$37,534,036
Bridger-Teton	\$81.56	117	45.3%	\$396,754	\$4,719,516
Caribou	\$69.67	107	41%	\$359,093	\$3,415,516
Challis-Salmon	\$120	262	9.5%	\$294,553	\$3,281,353
Payette	\$69.30	809	30%	\$1,480,155	\$8,299,265
Sawtooth	\$50.42	75	9.9%	\$252,757	\$767,532
Targee	\$69.67	660	40%	\$978,922	\$19,371,802
Total Savings from Region IV					<b>\$87,389,020</b> =====

**Table IV**

Northern Rockies Ecosystem protect Act  
Savings from reduction in timber harvest  
Region VI \$201,942,834

Region VI National Forests	Avg. loss per thousand board feet (MBF)	Amount allowed to sell per decade in million board feet (MMBF)	% of ASQ from lands NREPA would protect	Regeneration costs	Savings from reduced logging under NREPA first decade
Colvilee	\$115.61	1707	24%	\$1,261,104	\$48,624,209
Malheur	\$171.12	2330	15%	\$3,635,299	\$63,441,739
Umatilla	\$104.03	3282	19%	\$1,869,578	\$66,740,605
Walowa-Whtm	\$136.50	1440	11%	\$1,514,681	\$23,136,281
Total Savings from Region VI					<b>\$201,942,834</b> =====

**Table V**

Total savings to U.S. Treasury from not logging in areas protected by NREPA  
(First Decade)

Region I	\$ 81,347,230
Region II	\$ 4,335,434
Region IV	\$ 87,389,020
Region VI	\$201,942,834
<b>Total</b>	<b>\$375,014,518</b>

**Table VI**

Jobs Created By Northern Rockies Ecosystem Protect Act  
Wildland Recovery Work

Jobs	Total Cost	Number of Jobs	Miles of Road Obliterated
Road Obliteration	\$40,442,178	364	6566
Road Reclamation Jobs	\$6,839,680	83	
Forest Reclamation Jobs	\$82,523,880	1891	
<b>Total</b>	<b>\$129,805,738</b>	<b>2338 Jobs</b>	

**Table VII**

**Northern Rockies Ecosystem Protect Act  
Fiscal Impact**

		<b>Jobs</b>	<b>Miles of Road Obliterated</b>
<b>Savings from reduction in logging See Table V</b>	<b>\$375,014,518</b>	<b>Number of Jobs lost due to reduction in logging &lt;1400&gt;</b>	
<b>Cost of Wildland Recovery Work</b>	<b>&lt;\$129,805,738 &gt;</b> _____	<b>Jobs created 2338</b>	<b>6566</b>
<b>Net Savings</b>	<b>\$245,208,781</b>	<b>Net Jobs Created 938</b>	

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