

SUMMARY OF PUBLIC COMMENTS

on

THE PROPOSED RULE DESIGNATING THE GREATER
YELLOWSTONE POPULATION OF GRIZZLY BEARS AS A
DISTINCT POPULATION SEGMENT and
REMOVING THE YELLOWSTONE DISTINCT POPULATION
SEGMENT OF GRIZZLY BEARS FROM THE FEDERAL LIST
OF ENDANGERED AND THREATENED WILDLIFE



October 2006



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INTRODUCTION

This report summarizes public responses to the proposed rule by the U.S. Department of the Interior (DOI), U.S. Fish and Wildlife Service (USFWS) to designate the greater Yellowstone ecosystem population of grizzly bears as a distinct population segment (DPS) and to remove the Yellowstone DPS of grizzly bears from the Federal List of Endangered and Threatened Wildlife.

The Proposed Rule was published on November 17, 2005 in the Federal Register on pages 69854 through 69884 (70 FR 69854). The Proposed Rule conducted a DPS analysis to see if the Greater Yellowstone Area grizzly bear population met the criteria for discreteness and significance under the 1996 DPS policy (61 FR 4722). Once the DPS status was evaluated, the Proposed Rule discussed the recovery process for the Yellowstone grizzly bear DPS. A "5 Factors Analysis" was presented. This analysis consisted of identifying and assessing factors which may affect the Yellowstone grizzly bear DPS' status in the foreseeable future. The five factors are:

- Factor A – The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range.
- Factor B – Overutilization for Commercial, Recreational, Scientific, or Educational Purposes.
- Factor C – Disease or Predation
- Factor D – The Inadequacy of Existing Regulatory Mechanisms
- Factor E – Other Natural or Manmade Factors Affecting Its Continued Existence.

The proposed delisting of the Yellowstone DPS would not change the threatened status of the remaining grizzly bears in the lower 48 States, which will remain protected by the ESA. If this proposed action is finalized, the Service intends to initiate a 5-year review of grizzly bear populations in the conterminous States outside of the Yellowstone DPS based on additional scientific information that is currently being collected and analyzed. Additionally, prior to finalizing the proposed action, the Service will – (1) finalize the Conservation Strategy that will guide post-delisting management of the grizzly bear in the Greater Yellowstone Area; (2) append habitat-based recovery criteria to the Recovery Plan; (3) append genetic monitoring information to the Recovery Plan; and (4) finalize revised methodology for calculating total population size, known to unknown mortality ratios, and sustainable mortality limits for the Yellowstone grizzly bear population

The comment period for the Proposed Rule began on November 17, 2005 and ended on March 20, 2006. Comments on the proposed rule were received from 164,486 individuals, organizations, and government agencies (Table 1). Those comments arrived in 193,578, letters, form letters, public hearing testimonies, and email messages. Twelve petitions were received with 974 signatures (Table 2). This degree of interest from the public indicates the strong feelings people have regarding recovery of grizzly bears in the Greater Yellowstone Area (GYA).

This analysis of the public's responses describes what people have said as completely and directly as possible without assigning weights or serving as a vote count. The system used to analyze comments is objective, reliable, and trackable. All responses to the proposed rule have been considered in the production of the summary, including email messages, individual letters, form letters, petitions, and hearing testimonies. Due to the sheer number of comments received, the summary of the issues includes trends, themes, and common concerns. While quantitative information is gathered and is important in assessing attitudes and concerns relating to particular issues, that is only part of the information analyzed. The reasons for respondents' concerns, preferences, and criticisms are reflected in the specific quotes included within each of the specific topics included in the Issues chapter of this summary. An analysis of form letters and petitions is also provided at the end of this chapter.

Comments sent in on preferred science and alternative research were wide ranging and diverse. Some respondents submitted technical papers and reports for consideration on this proposal. Those technical papers and reports are available for review in the project file and are being considered by the Fish & Wildlife Service along with this summary of public comments. Alternative science and methods are not included in-whole in this summary because of the need for brevity. This is more conducive toward

maintaining the integrity of the complete technical and scientific information and to ensure that alternative research/data/methods are not taken out of context.

PUBLIC INVOLVEMENT & OUTREACH

The public comment period for the Proposed Rule extended from November 17, 2005 through March 20, 2006.

- September 2005 – formal outreach plan developed by Region 6 US Fish and Wildlife Service office
- November 2005 – Proposed Rule published in the Federal Register (70 FR 69854) with 90 day comment period to end on February 17, 2006.
- November 2005 – Press release posted online and sent to news interests announcing the Proposed Rule
- November 2005 – Press conference with Secretary of the Interior, Gail Norton
- November 2005 – Proposed Rule, associated maps, concurrent documents (Draft Habitat-Based Recovery Criteria, USFS DEIS, Conservation Strategy, Reassessing Methods to Estimate Population Size and Sustainable Mortality Limits for the Yellowstone Grizzly Bear, Supplemental Information to be Appended to the Recovery Plan), previous Federal Register Notices, state Management Plans, and a List of Literature Cited in Proposed Rule were made available on the Fish and Wildlife Service's website (<http://mountain-prairie.fws.gov/species/mammals/grizzly/yellowstone.htm>)
- November 2005 – conference call with the USFWS, environmental groups, and non-governmental organizations discussing the Proposed Rule
- January 2006 – Press releases announcing the upcoming open houses
- January 2006 – Open houses/informational meetings held in major cities within the Greater Yellowstone Area. Public hearing held in Cody, Wyoming after the open house
 - Monday, January 9, 2006: Bozeman, Montana
 - Tuesday, January 10, 2006: Cody, Wyoming
 - Wednesday, January 11, 2006: Jackson, Wyoming
 - Thursday, January 12, 2006: Idaho Falls, Idaho
- January, February 2006 – Formal public hearings
 - Tuesday, January 10, 2006: Cody, Wyoming
 - Thursday, February 9, 2006: Bozeman, Montana
- February 2006 – Public comment period extended an additional 30 days
- March 2006 – Public comment period ended

THE PUBLIC COMMENT ANALYSIS PROCESS

The analysis method used for this project provides a means of categorizing each person's comments into separate subjects and categories, then grouping like categories together so that the public's comments can be more thoroughly examined. It accurately displays public concerns and reasoning about particular issues since each person's own words and phrases are captured. It provides a traceable, visible system for displaying public comments without injecting interpretation or judgment.

Responses were received in the form of letters or postcards, form letters, petitions, email messages, and public hearing testimonies. Each letter, email, etc., was first given a unique identification number. A coding system was developed to assign demographic information to each respondent and to capture their opinions on issues. The demographic information coded included identifying who the respondent represented, the medium used for responding, the respondent's overall preference for or against the proposed rule, and where the respondent was from.

Respondents were classified into an "Organization Type" category. See Appendix A for a list of the various Organization Types. A demographic summary of respondents is displayed in this chapter (Table 1) along with what types of responses they submitted (Table 2).

Next, substantive comments relating to a particular issue were coded, along with particular reasons or statements for support of, or opposition to, that issue. All substantive comments, accompanied by the appropriate coding for issues and demographic information, were then entered into a computer database for efficient sorting and retrieval.

At all times, objectivity and fairness were stressed in this public comment analysis. All respondents' values, perceptions, and opinions were captured, including those based on misinformation. The exact words of respondents were used rather than summaries of their statements to insure accuracy and objectivity. All letters, emails, and modified form letters were read at least twice by one or more members of the coding team, and all technical comments were read at least three times by two members of the coding team. A technical comment is basically a comment providing alternative science or preferred research or any response displaying a specific expertise in a particular issue. Technical comments are listed in Appendix B. A coder first read the entire response to gain an overall understanding of the respondent's viewpoint, and then re-read the response and coded substantive comments. To maintain accuracy and consistency, collaborative coding sessions were held. If questions arose, coders discussed the response and came to agreement on the appropriate coding.

The Content Analysis Coordinator and another coder collaboratively coded and discussed all form letters to ensure that consistent coding was used on each letter. Petitions were entered into the database along with the total number of signatures and any coded, substantive comments.

All non-form response types including letters, technical comments, emails, faxes, postcards, and public hearing testimonies were coded and included in the database. Copies of the technical comments have been provided to the deciding official for an in-depth review as described above.

Many people sent multiple comments over the course of the comment period. Through programmed checking of names, addresses, and email addresses, duplicate identical or multiple responses were consolidated into one record in the database. Records were considered unambiguously identified individuals when their email address or street address were identical. No one was identified as a duplicate record based solely on his or her name.

Any respondent's record and associated codes are stored in the database and are filed in the project file for this analysis. The project file includes the original response along with coded copies of the responses.

The content analysis team consisted of eleven people. Eight were employees of the University of Montana, one team member was a USFWS employee, one team member was contracted by the USFWS to provide database programming and support, and another team member, the neutral editor, was contracted by the USFWS to edit the final report and insure its neutrality. A list of team members is provided in Appendix C of this report. The analysis took place in Missoula, MT. Data entry began November 18, 2005 and ended July 14, 2006. The final report was completed on September 25, 2006.

DEMOGRAPHIC SUMMARY OF RESPONDENTS

This section presents the demographic information of the responses received. Information displayed includes *who* responded (individuals, organizations, agencies, etc.), *how* they responded (letter, email, petition, etc.), and *where* the respondents are from. Table 3 summarizes the total number of non-form and form letters categorized by which of the twenty five form letters was sent and where they were generated (state, foreign country, or unknown address).

WHO RESPONDED

Table 1. Total number of respondents commenting on the Proposed Rule categorized by respondent category.

Organization Type	Count
Business Owners	32
Congressional/Legislative Representatives	2
County Government	4
Environmental interest	34
Individual Citizens	164,204
Industry interest (ranch/timber/mine, etc.)	10
Private Organization	1
Professional Scientific Organization	7
Recreational interest	14
Social/Political interest	3
State Agency	2
State Government	3
Unknown	1
Youth	169
TOTAL	164,486

HOW THEY RESPONDED

Table 2. Total number of each response type received. **Note – Numerous respondents submitted multiple comments, so the total number of response types is greater than the total number of people/groups responding (displayed in Table 1).

Response Type	Count
Letters (non form letters)	857
E-mail Messages (non form letters)	2,172
Form Letters (individual modifications)	8,229
Form Letters (twenty-five)	182,223
Public Hearing	85
Petitions (974 total signatures)	12
TOTAL	193,578

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

WHERE RESPONDENTS ARE FROM

Table 3. Total number of form and non-form responses categorized by each respondent's location. **Continued on next page...**

STATE	NON-FORM LETTERS	FORM LETTER NUMBER																									TOTAL	%
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
Alabama	7	320	1			5			57	118		8		234	6	1	100					1			1		859	0.4
Alaska	10	247	3			6			27	44		3		146			78										564	0.3
Arizona	36	1993	9			42			298	362		21		849	9	1	398					1			1		4020	2.1
Arkansas	8	247	4			5			44	75		4		184	2		97										670	0.3
Armed Forces	0	11	1						2	2				5			2										23	0
California	444	19445	112			361	1		2353	2807		123		7231	50	3	3792	4			8	36			14		36784	19.0
Colorado	104	3820	17			77			392	437		21		1215	13	3	732	1	1				1	1	1		6836	3.5
Connecticut	17	1248	7			21			171	205		10		528	5		339								1		2552	1.3
Delaware	2	205				8			27	51		4		115	1		63										476	0.2
Dist. Columbia	12	190	1			7			21	14				80			27							1			353	0.2
Florida	44	3979	24			72			709	950		71		2029	48		1365								2		9293	4.8
Georgia	23	1360	8			26			229	398		27		850	11		369					15					3316	1.7
Guam	0	2												2													4	0
Hawaii	7	560	3			9			60	57				150	1		91										938	0.5
Idaho	77	506	6			33			52	55		3		379	3		81								325		1520	0.8
Illinois	89	3361	21			70			540	699		48		2032	22		986					1			4		7873	4.1
Indiana	19	1046	5			25			162	230		21		719	9		321					3			1		2561	1.3
Iowa	7	581	4			14			81	140		6		275	3		155					3					1269	0.7
Kansas	9	486	3			11			102	143		5		284	4		158					8					1213	0.6
Kentucky	11	559	3			13			90	152		5		325	13		172										1343	0.7
Louisiana	3	310	2			6			40	91		3		201	3		99								1		759	0.4
Maine	13	744	4			14			94	118		8		242		1	157										1395	0.7
Maryland	20	1436	11			27			209	297		23		791	11	1	422					1					3249	1.7
Massachusetts	33	3064	17			42			381	494		27		1070	10	1	619								3		5761	3.0
Michigan	42	2317	11			45			302	516		23		1420	16		636										5328	2.8
Minnesota	32	1670	34			25			232	252		10		946	10		356					1			1		3569	1.8
Mississippi	0	137	1			2			21	39		2		81	3		54										340	0.2
Missouri	26	1061	4			25			173	246		13		597	12		344	1							2		2504	1.3
Montana	295	616	7			70			69	62		3	19	541	2	3	115	2	1			196					2001	1.0

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

Table 3. Total number of form and non-form responses categorized by each respondent's location. **Continued on next page...**

STATE	NON-FORM LETTERS	FORM LETTER NUMBER																									TOTAL	%
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
Nebraska	10	227	3			2			48	71		4		152	1		64					18				2	602	0.3
Nevada	12	522	9			8			78	90		9		287	2		165			3							1185	0.6
New Hampshire	5	627	3			6			91	115		7		248	5		148				2			1		1258	0.6	
New Jersey	34	2405	21	18	19	42			429	597		45		1237	27		861								5	5740	3.0	
New Mexico	19	1196	4			16			142	123		3		410	2		244								3	2162	1.1	
New York	100	7038	24			113			940	1113		58		2494	35		1657							1	3	13576	7.0	
North Carolina	31	2043	10			23			253	429		23		692	15		532							1		4052	2.1	
North Dakota	8	38				1			12	12		2		134			20					23				250	0.1	
N. Mariana Is.	0	1							1			1														3	0	
Ohio	35	2425	16			54			487	611		36		1343	25	1	666						1	2		5702	2.9	
Oklahoma	8	383	1			10			64	94		8		233	5	2	116									924	0.5	
Oregon	52	2722	19			58			421	386		15		980	5		567					13		4		5242	2.7	
Pennsylvania	54	2976	19			65			580	715		49		1588	34	1	991					1		3		7076	3.7	
Puerto Rico	0	26				1			2	9		1		34			15									88	0	
Rhode Island	2	350	2			7			51	68		3		146	4		106									739	0.4	
South Carolina	5	480	3			10			64	122		8		279	7		155							1		1134	0.6	
South Dakota	5	76	1			2			19	23		1		81	1		36					6				251	0.1	
Tennessee	28	953	2			45			139	289		15		484	11		289					1		1	1	2258	1.2	
Texas	54	3293	19			83			528	824		41		2138	19	1	1013					28		1	3	8045	4.2	
Utah	21	534	5			22			80	80		7		248	2	1	121						1			1122	0.6	
Vermont	5	543	1			10			58	73		1		176	2		111					18				998	0.5	
Virgin Islands	0	14							2	1				1			1									19	0	
Virginia	28	1909	11			29			324	416		35		983	14		514			1					2	4266	2.2	
Washington	87	4121	15			81			526	557		23		1665	13	1	802					241			2	8134	4.2	
West Virginia	3	194	2			6			41	24		2		113	1		73									459	0.2	
Wisconsin	21	1559	12			24			241	360		11		913	10		405							2		3558	1.8	
Wyoming	276	200	2			26	4	6	19	21	10	1		173	1		44					100			2	885	0.5	
Unknown	814	90	4			26			441	704		39		145	1	1	9				1	2	2	1	11	2291	1.2	

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Table 3. Total number of form and non-form responses categorized by each respondent's location.

STATE	NON-FORM LETTERS	FORM LETTER NUMBER																									TOTAL	%
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
Argentina	0	10						1	6		3		2			3											25	0
Australia	0	166						1	30		8		18			1											224	0.1
Austria	1	16							2		2																21	0.0
Belgium	0	84						2	14		4		1			1											106	0.1
Canada	11	816	2			3		34	91		56		209	7		77	1										1307	0.7
Denmark	1	28						1	4		4					1											39	0
Finland	0	27							4		8		8	1		3											51	0
France	0	173				1		5	23		12		6			13											233	0.1
Germany	2	100				2		2	4		5		4			6											125	0.1
India	0	14							3				6			1											24	0
Ireland	0	27							10				3														40	0
Italy	0	62							9		1		9	1		4											86	0
Japan	0	27											3	1													31	0
Mexico	0	31						2	6		4		8			9											60	0
Netherlands	0	132				1		4	16		8		15	1		5											182	0.1
New Zealand	0	27				1		1	6		1		2			2											40	0
Other	1	339				2		5	51		14		211	5		61									1		690	0.4
Portugal	0	33				1		1	3		5		1														44	0
South Africa	1	35						2	4		4		2														48	0
Spain	0	43						2	9		6		5			2											67	0
Sweden	0	32							9		2		6			2											51	0
Switzerland	0	64						1	4		1		3			1											74	0
United Kingdom	2	448				1		14	69		19		53			12											618	0.3
TOTAL	3126	91200	533	18	19	1843	5	6	13097	17358	10	1107	19	41473	525	22	22057	9	3	4	10	1044	3	7	76	4	193578	
% of Total	1.6	47.1	0.3	0	0	1.0	0	0	6.8	9.0	0	0.6	0	21.4	0.3	0	11.4	0	0	0	0	0.5	0	0	0	0		

FORM LETTERS AND PETITIONS

FORM LETTERS

Twenty-five different form letters were identified, totaling 190,452 responses (98.4% of all responses). Twenty form letters opposed delisting, four form letters favored it, and one form letter was unclear about its overall opinion. Many individuals added their own comments to one or more of the form letters, and those responses were identified as modified form letters. Their unique comments are included among those presented in the “Comments on Issues” section of this report (pp. 23-191). The key issues from each of the form letters are summarized below.

Form Letter 1 – Natural Resources Defense Council (91,200 total, including 639 modified responses):

This email form letter was generated by the NRDC.

- “I strongly oppose stripping Yellowstone’s grizzly bears of endangered species protection. ...Taking these bears off the endangered species list now threatens to reverse a great conservation success story and jeopardizes the long-term survival of these icons of America’s natural heritage.”
- “Grizzly bears...have already been eliminated from 99 percent of their former habitat. Weakening current protections would further fragment and destroy their last remaining home.”
- “Delisting would increase the number of Yellowstone’s bears killed by humans. ...Wyoming, Montana and Idaho all have plans to allow grizzly hunting when the bears are delisted. And as your own estimates show, for every known grizzly killed, at least another bear was killed illegally.”
- “I would love to see grizzly bears removed from the endangered species list when they are ready, but that will not be the case until permanent protections are put in place to preserve their habitat and ensure their long-term survival.”

Form Letter 2 – Sierra Club (533 total, including 15 modified responses): This email form letter was generated by the Sierra Club.

- “The Yellowstone grizzly bear is an irreplaceable part of America’s natural heritage, a symbol of the independence that defines the American character and an icon of all that is wild and free.”
- “...threats to their habitat have only amplified, and sprawling development, oil and gas drilling, logging, road building, and off-road vehicles are crowding grizzly bears out of the last pockets of wilderness they need to survive. Without strong habitat protections in place, the long-term survival of the bear requires the safety net of the Endangered Species Act.”
- “Too many threats remain for the Yellowstone grizzly without the Endangered Species Act in place. Management plans for the National Forests surrounding Yellowstone, where many grizzlies find their homes, have yet to be finalized, and managing the Yellowstone grizzly after delisting will cost state and federal agencies an estimated \$3.4 million dollars per year – over a million dollars per year more than current funding levels.”

Form Letters 3 and 4 – New Jersey 1st grade class (37 total): These hand-written form letters came from two first grade classes in New Jersey. They stated simply that grizzly bears should stay on the endangered species list (Form Letter 3) or that if they are delisted, they will die (Form Letter 4)

Form Letter 5 – Greater Yellowstone Coalition (1,843 total, including 141 modified responses): Three versions of this form letter were generated by the Greater Yellowstone Coalition. The three versions all had similar themes and raised the following issues:

- “The proposal contains numerous promises that the states will extensively monitor and manage grizzly bears, but no secure, long-term funding source has been found to carry out that plan. Without a secure funding source, management of Greater Yellowstone’s grizzly bears will dwindle. Delisting should not occur until long-term funding is secured.”
- “...Wyoming’s and Idaho’s management plans exclude bears from large areas in the Greater Yellowstone Ecosystem, such as the Wyoming Range and the Pallasades areas. Indeed, some of the areas excluded under these management plans are already being used by grizzly bears. It makes no sense to remove federal protections for the grizzly bear and at the same time arbitrarily

place habitat off limits to them. This especially so because two key grizzly bear foods – whitebark pine nuts and cutthroat trout – are threatened and declining. If those declines continue, grizzly bears will need to seek new food sources in new areas.”

- “The delisting plan only protects lands inside the six million acre recovery zone, and leaves out over two million acres of suitable habitat. Much of these lands are vulnerable to development, especially energy development in Wyoming.”
- “Th[e] Conservation Strategy is premised on amending the Greater Yellowstone Ecosystem’s national forest plans to include enforceable [sic] standards to protect grizzly bear habitat. Since the Conservation Strategy was written, however, new federal rules remove the requirement that national forest plans contain such standards.”
- “The proposed delisting rule lacks a quick response plan in case Greater Yellowstone’s grizzly bear population declines. ...Their numbers can plummet quickly, especially if their food sources continue to dwindle. In such a case, the current proposal would only require that a review be conducted. An emergency response plan must be developed that requires necessary management actions be taken in such situations.”

Form Letter 6 – Unknown originator (5 total): This form letter originated from an unknown person/group.

- “The scientific and legal requirements have been met to merit delisting of the grizzly.”
- “The recently published “proposed rules” for delisting...state: “Outside of the Primary Conservation Area (PCA) grizzly bears will be allowed to expand into suitable habitat.” This comment is inconsistent with the Wyoming Game & Fish Department (WGFD) plan...”

Form Letter 7 – Unknown originator (6 total): This form letter originated from an unknown person/group.

- “On page 69860 of the ‘proposed rules’ it states, ‘Outside of the PCA, grizzly bears will be allowed to expand into suitable habitat.’ This is not consistent with the Wyoming Game & Fish Dept (WGFD), Grizzly Bear Occupancy Management Guidelines, June 13, 2005.”
- Please change the Federal Register “proposed rules” to comply with the State Plan.”

Form Letter 8 – Earth Justice (13,097 total, including 258 modified responses): This email form letter was generated from the Earth Justice website.

- “I would like to submit my comment in opposition to removing the Yellowstone grizzly bear population from the list of species protected by the Endangered Species Act.”
- “I am especially concerned that kicking grizzlies off the Endangered Species List would allow the majestic bears to be hunted, open grizzly habitat to large-scale real estate, logging, and energy development, and increase the likelihood of bear-human conflict.”
- “Independent scientists have repeatedly cautioned that if we want to maintain a healthy national grizzly bear population over the long term, then delisting the Yellowstone grizzlies would be the wrong thing to do.”
- “Prematurely removing the species from the endangered species list for political reasons would undermine the bears’ chances of fully recovering across the country.”
- “Instead of delisting the bears, we need to protect additional habitat and connect Yellowstone to other grizzly populations.”
- “I urge the service not to de-list grizzly bears until permanent protections are in place for their habitat and their long-term survival is secure. Yellowstone’s grizzlies need legal safeguards and habitat protections now, more than ever.”

Form Letter 9 – Unknown originator (17,358 total, including 3,094 modified responses): This email form letter was generated on The Petition Site website (<http://www.thepetitionsite.com>).

- “National forest lands are absolutely vital to the long-term success of grizzly recovery. By law, delisting can only happen when there are adequate regulatory mechanisms in place to protect the bear and its essential habitat. However, due to the ongoing efforts of the Bush Administration to undermine forest planning regulations, it is not possible to count on these protections remaining in place for grizzly bear habitat in our national forest lands.”
- “Consequently, I strongly believe the grizzly bear should remain listed under the Endangered Species Act to ensure the species’ the long-term survival in the lower 48 states.”

Form Letter 10 – Unknown originator (10 total): This form letter originated from an unknown person/group.

- “I support: 1) The delisting of the grizzly bear. 2) The Greater Yellowstone Area grizzly population designated as a Distinct Population Segment (DPS).”
- “The delisting rule should clearly state that when the grizzly bear is delisted, the management will be per the state plans.”

Form Letter 11 – Humane Society of the United States (1,107 total, including 28 modified responses): This form letter was generated by the Humane Society of the United States.

- “The USFWS is obligated under the Endangered Species Act to ensure the survival of this grizzly population. I ask you as an agency accountable to the American people, to uphold that obligation and immediately abandon your plan to delist the Yellowstone grizzlies.”
- “To remove the Yellowstone grizzly’s ‘threatened’ designation would establish trophy hunting seasons (under state management plans), which the species cannot sustain. Delisting would also compound the dual threats posed to survival of Yellowstone’s grizzlies by diminishing habitat and food sources.”
- “More than three decades of work and expense have been invested in Yellowstone’s grizzly population. I am outraged that at the slightest sign of recovery, the USFWS is willing to sacrifice that work to satisfy hunting and business interests.”

Form Letter 12 – Unknown originator (19 total): This form letter originated from an unknown person/group.

- “As you know, small business in Montana is big business. Like businesses across the state, our bottom lines in no small part depend on the clean water and rugged, natural landscapes in Big Sky Country. Our cash registers are evidence that a healthy landscape and healthy economy are closely linked.”
- “Our reason for opposing the government’s proposal to remove protection for the bear under the Endangered Species Act (ESA) is that the proposal will loosen protection of the big, natural areas bears need to survive, and that also support our businesses. Until stronger habitat protections are adopted in state and national forest plans, delisting the bears is premature.”
- “Colorado, California, Washington and Oregon all have lovely mountains. But the opportunity to see a grizzly in the wild is one of the things that make Yellowstone so special. ...The region’s abundant wildlife, clean water, and magnificent scenery contribute enormously to the quality of life of our families.”
- “As residents of the greater Yellowstone region, we have proven that we can successfully share the bear’s habitat. Even with the millions of visitors who travel to Yellowstone National Park every summer, the chances of being hurt by a grizzly remain incredibly low. This is due, in large part, to the sanitation and education efforts of the National Park Service. However, too many bears are being killed needlessly in areas adjacent to Yellowstone Park. Adequate garbage management systems in many communities outside the park are lacking. For the safety of people and bears, it only makes sense to resolve remaining problems before removing ESA protections.”

Form Letter 13 – Sierra Club (41,473 total, including 3,014 modified responses): This email form letter was generated by the Sierra Club, using the The Petition Site website (<http://www.thepetitionsite.com>).

- “Don’t delist the grizzly. The Yellowstone grizzly bear is an irreplaceable part of America’s natural heritage, a symbol of the independence that defines the American character and an icon of all that is wild and free.”
- “Given the hard work the American people have invested in restoring the grizzly over the last 30 years, there must be an insurance plan to make sure the success we’ve begun to see endures. The Endangered Species Act can be that safety net, and we the undersigned urge you to keep these important protections in place for the Yellowstone grizzly bear.”

Form Letter 14 – National Wildlife Federation (525 total, including 8 modified responses): This email form letter was generated by the National Wildlife Federation.

- “After 25 years of cooperative effort by state and federal managers, Yellowstone’s grizzly bears have recovered to the point where all of the recovery objectives in the recovery plan for the Yellowstone area have been met.”
- “...the Conservation Strategy for management of the habitat following delisting mandates protection of 6 million acres where development cannot exceed levels that existed in 1998.”
- “It is now time for the grizzly bears in Yellowstone to be managed directly by the state and federal agencies that have achieved this remarkable recovery.”

Form Letter 15 – Predator Conservation Alliance (22 total, including 9 modified responses): This list of talking points was generated by the Predator Conservation Alliance.

- “The proposed rule claims that grizzly bears will continue to be protected under a ‘Conservation Strategy’ signed by officials with the U.S. Forest Service and other agencies, but provides no assurance that this Strategy will be implemented, legally enforceable, or upheld over time. This is particularly risky under the current administration that has erased binding standards on national forests across the country.”
- “The proposed rule claims that human-caused mortality of grizzly bears will be kept to a numeric threshold described in the Conservation Strategy, yet Wyoming officials have stated that they will use hunting to limit the population to an arbitrary level. Without the ESA, how can we trust Wyoming and other states to abide by the Conservation Strategy?”
- “Wyoming and Idaho plan to exclude grizzly bears from many areas of suitable habitat, such as the Wyoming Range and the Palisades. Grizzly bears should be treated as other free-ranging wildlife, not limited to arbitrary administrative and political boundaries. This is especially important given that key grizzly bear foods are declining – such as the whitebark pine (due to an exotic disease and beetle epidemic) and cutthroat trout in Yellowstone and Jackson Lakes (due to invasion of exotic trout) – that may require grizzly bears to range across larger areas.”
- “Many of the long-term protections promised in this proposal are contingent upon ongoing and increased federal and state funding. This proposal should ensure funding sources that will replace the Endangered Species Act allocations.”
- “The Yellowstone grizzly bear population has been separated for generations from other grizzly bear populations in northwestern Montana, northern Idaho, Canada and Alaska. ...Federal protections should remain until all of the lower-48 grizzly bear populations are also recovered, and their collective, long-term survival is assured.”

Form Letter 16 – Defenders of Wildlife (22,057 total, including 1,006 modified responses): This email form letter was generated by Defenders of Wildlife.

- “While the grizzly bear has clearly met the recovery goals, by law delisting can only happen when there are legally binding protections in place for grizzly bear habitat on national forest lands. Due to the Bush Administration’s wrecking ball approach to national forest management, the necessary regulatory safeguards are not in place at this time to support delisting.”
- “I urge you to not ‘delist’ the grizzly bear until safeguards are in place to ensure the long-term protection of their habitat on public lands.”

Form Letter 17 – Sierra Club (9 total, including 5 modified responses): These email responses were taken from the Sierra Club website (http://www.sierraclub.org/grizzly/pdfs/2005-08_delistingfactsheet.pdf).

- “Establish a stable source of funding for grizzly bear management and habitat conservation.”
- “Expand efforts to reduce bear-human conflicts.”
- “Improve important but degraded grizzly bear habitat.”
- “Protect remaining wild lands.”
- “Protect lands that connect Yellowstone grizzlies to other grizzly populations further north.”

Form Letter 18 – Great Bear Foundation (3 total): These email responses were taken from the Great Bear Foundation website (<http://www.greatbear.org/>).

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- “Most independent wildlife and conservation biologists suggest that true viability for the lower 48 grizzly population requires 2-3000 bears with functional linkages between all 6 Recovery Zones (RZ).”
- “The FWS proposal declares Yellowstone a Distinct Population Segment (DPS) capable of recovery all its own, with just 600 bears in total isolation from all other Recovery Zones. For the slowest reproducing mammal in North America, this is a recipe for disaster.”
- “According to FWS, much of the ‘success’ of the proposal rests on the commitment of the U.S. Forest Service (USFS) to implement the Yellowstone Grizzly Conservation Strategy (CS), Habitat Based Recovery Criteria (HBRC), and incorporate them into the ecosystem-wide Forest Plan Amendments about to be finalized. However, the Bush administration has just issued a rule gutting Forest Plans (FP) as enforceable documents.”
- “The Recovery Zone line, established nearly 25 years ago is now called the Primary Conservation Area (PCA), which FWS says contains enough bears and secure habitat to [unclear] ‘persistence’ for the ‘foreseeable future’ (100 years). Thus, most protection after delisting is focused inside the PCA.”
- “The four key foods supporting GYE grizzlies...are imperiled, yet the proposal and the Forest Plan Amendments suggest such claims are ‘speculative’, or that grizzlies will simply adapt by shifting to other foods. Unfortunately, there are NO other foods that in quantity and quality provide the same level of nutrition as these four, and the peril is real. ...Despite the critical nature of these foods, federal proposals contain only monitoring – no safety net or thresholds to trigger action by providing mitigation or emergency habitat.”
- “The 1993 Grizzly Bear recovery Plan...says that the management of motorized access is one of the most important tools to balance bear/human needs. Yet none of the federal recovery documents have numerical, bear-based, motorized access management standards to provide secure habitat.”
- “The year 1998 was also chosen as the baseline for levels of secure habitat and developed sites that were supposed to be maintained – but this was immediately compromised by allowing 1% ‘habitat degradation loophole’ in perpetuity for every Bear Management Unit (BMU) in the Primary Conservation Area (PCA).”
- “Recently, several anti-carnivore County Commissions in Wyoming have passed resolutions that outlaw grizzlies within their borders and make it easier to kill grizzlies.”
- “Finally, none of the federal or state documents claiming to protect grizzlies and their habitat have any dedicated funding source, despite the fact that grizzly management will cost more after delisting. ...It should be clear that No funding = No Plan = No Protection!”

Form Letter 19 – Unknown originator (4 total): This form letter originated from an unknown person/group.

- “As a tax paying American Citizen, I STRONGLY [sic] request that you do not Delist the Grizzly Bear from the Endangered Species Act. The Grizzly Bear population has only just risen in the past few years, and the population at JUST 600 total, is *far too fragile* to even consider them an ‘Un-Endangered species’! *600 Grizzly Bears world wide...* consider how many Billions of Humans there are & ONLY 600 Grizzly’s! And right here. In America. Our own back yard!!!”
- “The threats to their habitat and food supply are already daunting enough. Please Remember Extinction is Forever! Do you honestly want to be the people responsible (for future generations of American Citizens to blame), if there are no more Grizzly’s?”
- “You are being paid by U.S. Tax dollars and we as American Citizens provide that money. This being the case, don’t you think you should take our wishes into consideration when you make such a Life & Death decision concerning any animal listed on the Endangered Species List???? Thank you for your time and your respect concerning this most crucial issue.”

Form Letter 20 - - Unknown originator (10 total, including 2 modified responses): This form letter originated from an unknown person/group.

- “The grizzly bear is a majestic symbol of the American West.”
- “Removing the protections of the Endangered Species Act will result in further habitat fragmentation due to increased logging, road building, off-road vehicle use, and oil and gas

drilling. Sprawling development threatens to block off any chance of connectivity with other grizzly bear populations.”

- “I am sure you are aware that when grizzly bears were originally listed as threatened under the ESA, one of the listing factors was Yellowstone’s isolation from other bear populations and the concern over its declining genetic diversity. And, in the Grizzly Bear Recovery Plan (1993) you and your colleagues discussed preservation of linkages between metapopulations as a ‘more legitimate long-term conservation strategy than are attempts to manage separate island populations.’”
- “The Yellowstone grizzly bear population should remain listed as threatened until its habitat and linkage corridors are protected in perpetuity.”

Form Letter 21 – Sierra Club Grizzly Bear Project (1,044 total, including 4 modified responses): This postcard was generated by the Sierra Club Grizzly Bear Project.

- “Removing these protections from the bear right now is far too risky. We are just starting to realize a return on our investment. Without these protections the last remnants of wild places grizzlies need to fully recover will be at risk from irresponsible oil drilling, unsustainable logging and sprawling development – all of which helped drive the grizzly bear to the brink of extinction in the first place.”
- “The Endangered Species Act is the safety net that grizzly bears need to guarantee their survival for future generations and I urge you to keep these protections in place.”

Form Letter 22 – National [sic] Resources Defense Council (3 total): These talking points were posted on the Grizzly People website (<http://www.grizzlypeople.com/>) and handed out at FWS-hosted open houses by attendees.

- “The current population is too small and isolated to ensure long-term viability. ...Long-term health of the population can be assured by maintaining a population of several thousand individuals. This requires expanding where bears can live in Yellowstone, recovering bears in the Selway-Bitterroot, and connecting grizzly bear ecosystems to source populations in Canada.”
- “The delisting plan relies on the importation of bears to address genetic problems. ...This is not natural recovery.”
- “The delisting plan fails to consider the degree and the pace of habitat change occurring in the region, and their implications for bear recovery. The plan wrongly assumes that the future will look like the past. It calls for maintaining habitat conditions as of 1998, but 1998 conditions have already changed significantly and will continue to do so.”
- “The plan also underestimates the pace and implications of the loss of whitebark pine, an important bear food, due to mountain pine beetles, blister rust and global warming. Recent studies show that whitebark pine loss is escalating from mountain pine beetle infestations – more quickly than US Fish and Wildlife Service (FWS) estimates. ...there appears to be no substitute bear food in the ecosystem. In addition, cutthroat trout spawning in Yellowstone Park and bear use of trout, another key food, is declining as a result of ongoing drought and the effects of alien Lake trout.”
- “To compensate for the significant changes occurring rapidly in the ecosystem, the agency must protect suitable unoccupied habitat outside the recovery zone, including areas such as the Wind Rivers and Wyoming Range, where bears have been prohibited in the Wyoming plan.”
- “[the] Forest Service has not yet finalized its forest plan amendments. The public cannot be fairly asked to comment on the adequacy of regulatory mechanisms after delisting, if it does know what mechanisms exist.”
- “Forest Service management plans will no longer contain binding habitat standards. Regulatory mechanisms to maintain habitat after delisting are not adequate if requirements are not binding.”
- “The delisting plan contains no habitat protections for about one-third of occupied grizzly bear habitat. These lands include some of the most threatened habitat in the GYE, especially by energy development in Wyoming.”
- “The plan lacks adequate funding mechanisms and fails to demonstrate agency commitment to implement the delisting plan.”

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- “The Wyoming plan will result in the decline of the grizzly bear population. Wyoming plans to manage the grizzly bear population down to 500 bears, which will result in an estimated killing of 50 bears annually.”
- “The US Fish and Wildlife Service and the State of Wyoming appear to condone Wyoming county laws prohibiting bears within their borders. Recovery goals cannot be achieved if these counties implement their laws as they intend.”
- “The plan relies on adaptive management, with no specific thresholds to prompt changes if they are needed. The only specific threshold to prompt a review of the status of the population after delisting is a violation of mortality limits.”
- “The delisting plan lacks binding motorized access management standards to protect habitat. The delisting plan downgrades current access management standards on National Forest lands from a management standard to a monitoring tool.”
- “The delisting plan fails to address issues associated with high, ongoing human-caused grizzly bear mortality. Most of the grizzly bears that die in the Greater Yellowstone Ecosystem die of human causes, and most are avoidable.”
- “In the 1995 Federal District Court ruling on the Fish and Wildlife Service’s Grizzly Bear recovery Plan, the use of females with cubs as the measure of the population was rejected as arbitrary and capricious, because of inherent biases and other problems. These problems have yet to be fixed. But, the agency continues to rely on these measures to determine whether population targets have been met.”
- “The Fish and Wildlife Service fails to acknowledge that recovery targets have not been met. ...In 2004, the agency violated the level of allowable female-caused mortality. Instead of acknowledging this fact, FWS changed the rules using a method that is only now being reviewed by the public.”
- The Fish and Wildlife Service wrongly assumes that delisting the grizzly bear will build social support and tolerance for grizzly bear recovery and the Endangered Species Act. The research cited does not support FWS’s argument that people will be more supportive of grizzly bears if they are no longer federally protected.”

Form Letter 23 – Unknown Originator (7 total): This form letter originated from an unknown person/group.

- “Clearly, the Yellowstone area population of 600 bears is hardly large enough a population to declare that the bears are no longer threatened. This species is especially vulnerable to man-made problems as well as natural problems. Their genetic pool is very small. Their native food sources are threatened. The unrelenting expansion of oil and gas exploration as well as at resort and retirement communities places pressure on their continued viability.
- As a citizen and taxpayer, I oppose the Department of Interior’s proposal to delist Yellowstone’s Grizzlies.”

Form Letter 24 – Larry Fahn (76 total, including 6 modified responses): These email form letters were taken from an editorial written by Larry Fahn that appeared in the San Francisco Chronicle.

- “If left to ‘management’ by the states, trophy hunting of these magnificent animals in places like Wyoming and Montana will likely follow.”
- “...there are many compelling reasons why removing ESA protections is premature at best and potentially devastating to the grizzly’s recovery. The still relatively small population remains subject to genetic difficulty. It is as if a family of siblings and second and third cousins were left to populate a desert island. Inbreeding is a serious threat to the genetic diversity of these animals.”
- “While bears in Yellowstone feed on elk, bison and fish, it is important to understand that their most essential food source is seeds and nuts from the whitebark pine. These trees, which grow at high elevations, are themselves under increased threat from blister rust, an accidentally imported fungus, and from mountain pine beetles, which bore into the tree’s bark to breed and rear young, killing the tree in the process. Both of these trends will increase as global-warming trends continue.”
- “Finally, delisting will re-open surrounding areas within the greater Yellowstone ecosystem to new development – golf courses, mini-mansions, malls, ranches, roads, pipelines, oil and gas drilling and logging. Human/bear interactions will increase, and bears will die.”

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- “Four Wyoming counties have already passed laws prohibiting bears within their borders. Local authorities are itching to start killing bears that might wander into their jurisdictions. Without maintaining federal ESA protections, it will be open season on these remarkable creatures.”
- “Rather than delisting grizzly bears, federal, state and local governments should be looking for ways to connect their habitats to those other regions to the north, most of which are in Canada, where small populations of the bears remain. Protecting forests with large roadless tracts, and developing biological corridors between grizzly populations can help ensure genetic diversity and the grizzly’s long-term survival.”

Form Letter 25 – Unknown originator (4 total): This form letter originated from an unknown person/group.

- “I support delisting the Yellowstone grizzly from the list of threatened and endangered species. I do NOT support the proposed Conservation Strategy / Management Plan by the U.S. Fish & Wildlife Service. It has nothing to do with the grizzly, and everything to do with taking away rights in the name of the grizzly.”
- “Private land should not be included in the recovery area / primary conservation area. According to your plan, only 195 square miles of private land is included in the primary conservation area. Since private land is such a small part of the recovery area, and since much of this private land (at least in Wyoming – according to their plan) is not suitable grizzly habitat, and since this proposed plan takes away rights of those private property owners, private property should be excluded from the recovery area of the final plan.”
- “Your strategy completely does away with multiple use on public land. It gives the grizzly bear power over people, livestock and responsible recreation on public land. No animal should have that much power – including the grizzly bear.”
- “The strategy gives ‘citizens’ (environmentalists and people who know nothing about the land and have no connection to it) as much say as landowners who have purchased the land, made improvements and who pay taxes. It is our responsibility to care for all the creatures God created – not just the grizzly bear and other so-called endangered species.”
- “Grizzly bears must be controlled, and hunting them must be allowed as a means to control [sic] them.”
- “You say, ‘Bears displaying natural aggression are not to be removed, even if the aggression results in human injury or death.’ This makes bears more important than human life... That should not be the case.”

PETITIONS

Twelve petitions were submitted with a total of 974 signatures. Ten of the petitions opposed delisting, and two petitions favored delisting. Many of the petitions received were copies of the form letters presented in the previous section, so their contents will not be repeated here.

Petition 1 – (178 signatures): This petition originated with an elementary school in Kailua, HI.

- “Our Second Grade here at Lanikai Elementary Public Charter School in Hawaii think that grizzly bears still need protection.”

Petition 2 – (55 signatures): This petition originated with the University of Chicago “Environmental Concerns Org.” It is identical to Form Letter 1, a summary of which may be found in the previous section on Form Letters.

Petition 3 – (16 signatures): This petition originated in Salt Lake City, UT. It presents the “points to consider” from Form Letter 15, a summary of which may be found in the previous section on Form Letters.

Petition 4 – (18 signatures): This petition originated with Lee Gooding of Forestville, CA. It is a copy of Form Letter 2, a summary of which may be found in the previous section on Form Letters.

Petition 5 – (263 signatures): This petition was submitted by an unknown originator. It is a copy of Form Letter 21, a summary of which may be found in the previous section on Form Letters.

Petition 6 – (9 signatures): This petition originated with Eco-Watch/Sonoma. It is a copy of Form Letter 2, a summary of which may be found in the previous section on Form Letters.

Petition 7 – (89 signatures): This petition was submitted by an unknown originator. It is a copy of Form Letter 21, a summary of which may be found in the previous section on Form Letters. The format and geographical distribution of the addresses are both different from Petition 5.

Petition 8 – (26 signatures): This petition was submitted from an originator in Friendswood, TX.

- “Allowing the hunting of Grizzly Bears will inevitably result in hunters killing as many as allowed by law. The loosening of hunting laws will also entice the illegal hunt of Grizzlies as the allure to bag a grizzly becomes a desire to those less law abiding individuals.”
- “It has been stated that hunting will only be allowed outside of the stated recovery zone. It is common knowledge that out of the 600 bears that have previously been in the no hunt protection zone, one third of these bears roam a territory that is not protected. All these bears will be put in jeopardy.”
- “Besides the decline of the Grizzly’s food source, white bark pine nut, a grizzly faces many dangers as a cub and needs the guidance of the mother to protect it and give it the ability to grow and reproduce as an adult. Hunting will end the lives of many of these cubs. When a female grizzly is killed in a hunt her cub will die too.”
- “It is my understanding that taking grizzlies off of the endangered species list will enable land to be freed up for the exploration of gas and oil drilling.”
- “Last summer my family spent five days searching all of Yellowstone for the thrill of seeing a Grizzly. We were fortunate to see a couple from a distance. These bears are more of a rare find than seems to be depicted by big business.”
- “By signing this petition we are choosing to preserve the species of animals that God gave all of us to enjoy and learn from. Every species adds to the balance of this great big beautiful world we are all a part of. Protect one species and you are protecting all.”

Petition 9 – (12 signatures): This petition was signed by petitioners from Duluth, MN and Superior, WI, and sent to the Washington, DC, office of the USFWS.

- “We, the undersigned, do not support removal of the grizzly bear from Endangered Species Act protections at this time. We strongly feel it is premature to take this step.”

Petition 10 – (6 signatures): This petition was signed by petitioners from Powell and Lovell, WY.

- “In favor of delisting.”

Petition 11 – (271 signatures): This petition is a two-page technical comment signed by 271 scientists against delisting. Specific comments are covered under the section on Comments on Issues.

Petition 12 – (31 signatures): This petition is a lengthy technical comment submitted as a response to a (non-petition) technical comment submitted by the Society for Conservation Biology – North America. The signatories on this petition support delisting. Its comments are covered under the section on Comments on Issues.

COMMENTS ON ISSUES

INTRODUCTION

This section identifies and summarizes the issues brought up in all public comments received (non-form letters). The code numbers associated with the issue categories were assigned during the content analysis to facilitate the grouping of similar comments together. The issue categories and their numerical codes are presented in outline form in Appendix A. In this section, each issue is summarized, and the summary is supported by examples quoted directly from the public comments. The example quotes that appear below were selected from a great many, to display the range of substantive comments expressed on each issue.

100 – GENERAL COMMENTS

Respondents whose comments are presented in this section are concerned with the public availability of the raw data collected by the Interagency Grizzly Bear Study Team and the U.S. Fish and Wildlife Service over the past 33 years. Many perceive Federal biologists as exercising monopoly control over those data and consequently denying access to the public. Several respondents want to analyze the data independently, to replicate the analyses conducted by IGBST scientists, and to test scientific hypotheses of their own. A few call for a new 90-day comment period that would allow the public and independent scientists time to evaluate the raw data. One respondent claims to have repeatedly requested data and information and so far has not received the information.

- "...one of the primary and best ways that the scientific community has to understand and quantify error and uncertainty in data analysis is for key data sets to be independently analyzed by multiple scientists, a possibility substantially blocked by the failure of the USFWS, IGBST and IGBC to release key data in their possession or control."
- "The bears in the 'study sample' are not representative.---Schwartz et al. (2002) divided the bears in their sample into two groups, the 'study sample' and the 'conflict sample.' Schwartz et al. (2005) assert that the study sample bears are representative of the Yellowstone grizzly bear population, even though most conflict bears were explicitly removed from this sample. Importantly, they simply assert that the study bears are representative, and fail to critically and systematically investigate this important assumption, using data that they have on hand. Schwartz and his colleagues will not investigate this critical assumption themselves, and they will not release the data needed for me and others to investigate it."
- "FWS has failed to provide important information on which the delisting decision was based. Despite repeated requests, FWS has failed to release important raw data that it used as the basis for its conclusions in the delisting rule. This approach is inconsistent with that taken by the agency in other endangered species cases. Furthermore, this approach runs counter to the spirit of scientific inquiry."
- "...the failure of the USFWS and IGBST to release key data, has greatly impeded the ability of myself and other scientists to precisely quantify and identify those portions of the ecosystem where grizzly bears are currently threatened due to human activity, as this would require a spatially explicit demographic analysis. What is more, the USFWS and IGBST have not undertaken this analysis themselves. And what is even more, there is abundant data in the possession of the IGBST that would allow this analysis. In summary, the USFWS and IGBST have withheld the very data that I and others need to more precisely delineate the portions of the Yellowstone DPS where grizzly bears are currently endangered."
- "Because the underlying raw data will establish whether or not the Service's statements are accurate and whether they support the proposed changes in population size estimates and mortality limits, it is

essential that the Service release that data to allow public inspection, review, and evaluation of these basic biological propositions.”

- “...the Service continues to stonewall requests for public information, collected or funded by public agencies, on public time, treating it instead as though it is the agency's private information. It is not, and FWS calls into question the validity of the Rule's underlying research by blocking independent review.”
- “To improve the involvement of the public, the agency has the responsibility to: a. provide all data used in its analysis, so the public can review and comment on how it was used; b. disclose exactly what the information means so that the average person can understand it; and c. explore ways to exchange ideas and information through a civil disclosure.”
- “Given its unique place in our history, the GYE and the species that depend upon it deserve decisions based on the best scientific knowledge, that are considered and made in the open, and which reflect accurately the uncertainty associated with dynamic ecosystems, data limitations, global climate change and other factors. Even before a true public discussion of the merits and drawbacks to pro- and anti-delisting forces can take place, it is essential that all participating parties have access to the same data used by regulatory agencies to make decisions. Without that basic and fundamental right to access, any discussion of delisting will be plagued by mistrust or worse. Good government and good policy require the open forum of public discussion based on an equal playing fields. FWS' refusal to release basic data upon which their decisions are based is inexcusable and can only lead to flawed policy formation.”
- “In order to comply with ESA caselaw, good government, and basic common sense, FWS should release the underlying data that informs its delisting and DPS proposal and initiate a new 90-day comment period that would allow the public and independent scientists to evaluate the underlying grizzly bear raw data.”

101 – CORRECTIONS TO FACTS AND DATA IN DOCUMENT

Responses suggesting corrections to facts and data in the proposed rule range from requests for inclusion of omitted cooperators to corrections to the presentation of statistical results. Some respondents call for acknowledgement that one of the recovery goals has not been achieved. Others question statistics included in the proposed rule, such as the distance from the closest grizzly bear population to the Yellowstone Distinct Population Segment, the amount of habitat designated in Wilderness Areas, and whether oil and gas leases exist in the Primary Conservation Area. A few respondents are concerned about conflicting data in the Conservation Strategy and the Delisting Proposed Rule.

- “Page 69880 - 3rd Column: The Draft Rule suggests Defenders of Wildlife have been compensating livestock losses during recovery. This is not the case in Wyoming. The WGFD should receive credit for maintaining their own compensation program during the recovery process.”
- “In several places the draft rules refer to an estimated 4 to 7 percent per annum population growth rate of Yellowstone grizzly bears, as derived by Harris et al. 2005... This 4 to 7 percent range is in reality two point estimates, masquerading as an interval estimate. The 4 to 7 percent range does not in any way characterize sampling error associated with Harris et al.'s (2005) estimate of population growth rate.”
- “The proposed rule wrongly assumes that delisting the grizzly bear will build social support and tolerance for grizzly bear recovery and the Endangered Species Act. The research cited does not support FWS's argument that people will be more supportive of grizzly bears if they are no longer federally protected.”

- "The Fish and Wildlife Service has repeatedly stated that all the recovery plan targets for Yellowstone grizzly bears have been met. This is not true. In 2004, the agency violated the level of allowable female-caused mortality. Instead of admitting it, they changed the rules using a method that is only now being reviewed by the public."
- "Furthermore, FWS wrongly characterizes the oil and gas lease situation inside the PCA. The plan states that, 'there are no oil and gas leases inside the PCA as of 1998.' This is not true. According to Forest Service lease data, 9 parcels are currently under lease inside the PCA."
- "The discussion about relisting is confusing and incomplete and the criteria to prompt change are unclear. In the CS, FWS has indicated that a violation of population targets for one year would trigger a management review. In the delisting rule, FWS has indicated it would be two years. Which is it? And the plan is not clear what mortality thresholds will be. It does not state whether new methods will be made part of the recovery plan or whether they will be guidance documents only."
- "Page 69880, 2nd Column, 2nd full paragraph: A source citation is needed or the claim modified. The WGFD is not aware of an analysis that concludes 59% of human-caused mortalities could have been avoided by better I&E, especially considering Chuck Schwartz's recent analysis of hunter-caused mortalities. The WGFD agrees that education and I&E are important, but the WGFD is not aware of data substantiating the 59% claim. If such data is available, it should be included in the Final Rule."
- "Page 69873 - Human Predation: The Draft Rule addresses the types of human caused bear mortality that will be allowed when bears are delisted. 'In other words, it will still be illegal for the public to kill grizzly bears unless it is in self defense or they have a hunting license issued by a state wildlife agency.' Current state statutes in Wyoming do not allow individuals to take grizzly bears in the act of killing livestock or destroying private property. However, it is the understanding of the WGFD that Montana does allow such take, and Wyoming could consider a statutory change to allow this form of take in the future, since this type of take will never account for significant bear mortality. This form of human caused bear mortality should be included in the statement."
- "Page 69868, column 1: The Rule needs to clarify that food storage will only be enforced on USFS and NPS lands in suitable habitat, as defined in State management plans, and not on all lands."
- "The draft Delisting Rule asserts at 69880 that '[d]elisting would increase acceptance of grizzly bears by giving lower levels of government and private citizens more discretion in decisions which affect them.' This assertion is not adequately supported, and the literature cited in that paragraph does not directly address whether listed status affects acceptance."
- "The recently published 'proposed rules' for delisting in the Federal Register, dated November 17, 2005 states: 'Outside of the Primary Conservation Area (PCA) grizzly bears will be allowed to expand into suitable habitat.' This comment is inconsistent with the Wyoming Game & Fish Department (WGFD) plan for grizzly bear recovery which was previously approved. The final rule should state that grizzly bear recovery outside the PCA will be in accordance with the WGFD Plan. Do not allow the grizzlies to expand into the Southern Wind River Mountains."
- "...the proposed rule only protects lands inside the six-million acre recovery zone, and leaves out over two million acres of habitat. Contrary to FWS statements, only 15% of this land is protected as Wilderness, and the rest is open to development. These lands include some of the most threatened habitat in the GYE, especially lands in Wyoming threatened by energy development."
- "The draft rule then incorrectly states that 'an effective migrant is defined as an individual that emigrates into an isolated population from an outside area, survives and breeds' (70 Fed. Reg. 69878). This definition is simply incorrect; see Whitlock and McCauley (1999) and Wang (2004) for an explication of the factors that must be considered in determining the effective number of migrants."

- "On page 69857 of the proposal, the listing of agencies that have been participating in the Yellowstone subcommittee omits the Eastern Shoshone tribe, although representatives of the tribe have been participating for the last several years. We suggest that they be added to the list. In addition, on page 69876, the Eastern Shoshone tribe is discussed, yet there is no mention of the Northern Arapaho tribe, who, together with the Shoshone, manage wildlife on the Wind River Reservation."
- "The Proposed Rule contains inaccurate information regarding grizzly bear distribution. At page 69,864 it erroneously describes as 'occasional anecdotal reports of grizzly bears from the NCDE as far south as Highway 12 near Helena, Montana.' However, the Helena National Forest (2000) has verified the presence of grizzly bears south of Highway 12, including a female with cubs. These sightings were also verified by a Montana Department of Fish, Wildlife & Parks biologist. The Tobacco Root Vegetation Management Plan DEIS and EIS (U.S. Forest Service 1999; 2001) describe the Tobacco Roots as habitat occupied by grizzly bears on both a resident and transient basis. This puts the two populations just 45 miles or 72km apart, far less than 130 miles (209km) cited in the Proposed Rule. Yellowstone Grizzly Bear Study records also show that a female grizzly bear with cubs was observed in the southern end of the Bridger Mountains north of Bozeman, Montana."
- "The draft rules incorrectly define an effective migrant, and fixing this problem may increase the level of translocation required."

102 – USING SCIENCE AND DATA TO THE BEST EXTENT POSSIBLE

Many respondents question the quality or interpretation of the data used to support the proposed rule. Others characterize federal bear research as politically tainted. Several respondents question the reality of the apparent increase in grizzly numbers on which the delisting rule is based. Those respondents offer alternative explanations for the increases in the population estimates that would not require an actual increase in bear numbers.

Some respondents object to what they consider as out-of-date data, particularly regarding the spread of diseases and parasites of whitebark pine, and advocate the use of readily available and more recently collected data sets. A few respondents argue that the management time horizon of 100 years in the Proposed Rule does not reflect the best available science for the temporal scale of modeling grizzly bear persistence.

Other respondents are satisfied that the best available science and data has been used in the development of the Proposed Rule. Some are concerned that the level of scrutiny for this Proposed Rule will adversely affect research efforts in other Recovery Areas.

- "Schwartz (2004) reports that 71% of cone transects had some indication of blister rust, with a PCA infection rate of 18.9% +/- 5%, and admits he doesn't have good current figures for outside the PCA. The same report notes the dead trees 'were not marked, but were recorded as being present', suggesting that crews were not doing a scientific study of 'percent of stand dead' which could be compared to past and future years to determine trend of the disease - an absolutely vital piece of information."
- "FWS estimates for rates of reproduction and survival and models of population dynamics include numerous measurements, each of which has its own levels of uncertainty. Combining these factors compounds the levels of uncertainty. FWS fails to provide a clear idea about how cumulative uncertainty affects the uncertainty estimates for population size and growth rates."
- "The draft rules need to be rewritten so as to consider the data in Mattson et. al (2004), specifically as it relates to grizzly bear foods that are alternatives to whitebark pine."

- "To foster greater support, understanding and sound management the ASM would recommend that the CS includes the creation of an Oversight Committee composed of independent mammalogists, ecologists and population biologists charged with annually reviewing the monitoring data, conclusions and management recommendations from the CS. A subcommittee, independent of government agencies, reviewing the work would lead to greater public acceptance, improved science, independent confirmation of results, and more effective management."
- "FWS analysis fails to fully evaluate source-sink dynamics and the effects on the future of the population."
- "In stark contrast to the continued reliance on a flawed population monitoring method in the Yellowstone area, FWS and other federal agencies have employed a dramatically more reliable population-monitoring tool---DNA---in assessing the NCDE grizzly bear ecosystem. Apparently, the only reason this more reliable scientific method has not been employed to assess Yellowstone bear population dynamics is that FWS has been unable to obtain federal funding for the undertaking. FWS asserts, without support, that it would cost \$3.5-5.0 million to accurately sample the Yellowstone grizzly bear population. Reassessing Methods at 12-13. Because FWS fails to disclose what was included in this cost estimate, it is impossible to determine why a better scientific method was rejected."
- "The draft rules entirely fail to consider the relation between population isolation on the one hand, and increased fluctuation in population size and elevated extinction rate on the other."
- "The Yellowstone grizzly bear population is the most thoroughly studied and well-known bear population in the world. Since the Interagency Grizzly Bear Study Team was formed following the listing of the species, this team has produced some 200 peer-reviewed publications. Schwartz et al. (2005) is a Study Team monograph that summarizes many aspects of the ecology of the population and concludes that grizzly population in the core habitat within Yellowstone Park is at carrying capacity. We consider it unlikely that similarly intensive and cooperative federal-state research efforts will be undertaken in the other Recovery Areas if even this level of science and documentation is inadequate to delist the Yellowstone DPS of grizzly bears."
- "...apparent increases in estimated population size may in fact be due to changes over time in observer effort (driven for example, by increasing numbers of observers in the Yellowstone ecosystem, or year-to-year variations in sightability). By far the best approach is to gather unbiased data in the first place, not to try to correct a badly biased dataset ex post facto, as in Keating (2002). The standard way to avoid gathering a biased data set is to operate under a written protocol that has been carefully vetted and critiqued before data collection begins."
- "The proposed delisting rule ignores one of the most important and best-documented patterns in population biology---the theory of island biogeography. See McArthur and Wilson (1967). Although the theory was originally proposed for oceanic islands, it also explains the increased extinction rates on continents when habitat destruction creates a few isolated habitat islands surrounded by a 'sea' of human activity...It is well established that such habitat fragmentation causes extinction...Due to loss of some 98% of its historic range in the lower-48 states, the Yellowstone grizzly bears currently exist on a small habitat island, with a consequent dramatic increase in the probability of their going extinct."
- "In reviewing the present draft rules, the public is faced with a conundrum: What if the 'best scientific and commercial data available' is quite poor on an absolute scale, yet still the best available? And what if the reason that we do not have better data available is because of critical research design errors made by the very government agencies that now want to convince the public that the FCOY data is the best available? And what if these government agencies have repeatedly failed to institute better methods of estimating population size, even though they have known about these difficulties for some time (Fund for Animals vs. Babbitt)?"

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- "You note that climate change is predicted to lead to increased mountain pine beetle and white pine blister rust outbreaks but then claim ignorance about impacts, citing one old paper. This is a blatant refusal to consult the best available scientific information."
- "The Proposed Rule uses a management time horizon of 100 years, while the best available scientific information is that the temporal scale for modeling grizzly bear persistence is at least 200-500 years (Boyce et al. 2001), and as much as 1,000 years (Allendorf & Ryman 2002)."
- "Sampling error is usually the most important source of uncertainty in scientific data. (1) Yet the draft rules fail to present the sampling uncertainty associated with the population growth rate, and indeed are deceptive in this failure (see below, 'The draft rule presents point estimates as though they are interval estimates'). (2) As a second example, population size estimates are presented in the draft rules and Draft Document without any indication of sampling uncertainty: 'the total population estimate of Yellowstone grizzly bears in 2004 was 588...'"
- "...the estimation of population growth rate in Harris et al. (2005) is of limited utility for recovery planning, as the models used inadequately considered the manner in which birth and death rates are structured within the population (e.g., effects of whitebark pine on death rates and recruitment) and the effect of flow among the subpopulations."
- "One glaring oversight is the repeated failure of the draft rules to disclose sampling uncertainty using confidence intervals. Consideration of all known sources of error and ambiguity in the data, and in their analysis, produces a much less secure future for the Yellowstone grizzly bears than what the draft rules paint."
- "USFWS is using methodology that has not undergone review by the scientific community, and which suspiciously inflates both the estimated numbers of bears and sustainable mortality limits by very large margins. My initial assessment of your document trail is that it is chaotic (purposely so, to fend off scrutiny)? For example, Reassessing Methods to Estimate Population Size and Sustainable Mortality Limits for the Yellowstone Grizzly Bear uses the Chao2 estimator based on Keating et al. 2002. But Keating et al. 2002 endorsed another estimator (second-order sample coverage estimator) and state 'we cannot recommend the other methods we compared' (which includes the Chao2)."
- "We suggest that once the bears are delisted, and if hunting occurs in state managed areas, a research program be implemented to compare grizzly bear population demographics before and after the hunt to examine female fitness, habitat use and cub survival rates."
- "Exacerbating the problem of managing habitat to 1998 levels are inaccuracies associated with the underlying database on roads and development... The agency has conceded that thousands of miles of 'ghost roads' exist on the forests that are not part of Forest Plans or the transportation databases used to assess access. (Gallatin Forest Plan)."
- "...there are alternative theories to explain the increase in numbers. One hypothesis that FWS did not evaluate is the increase in key bear foods since the mid-1980's. For example, Yellowstone cutthroat trout rebounded after fishing regulations were instituted in the mid-1970's. Buffalo and elk numbers increased after the slaughter on the northern range was terminated. These years were dominated by good whitebark pine seed crops. And, in the early 1980's, Yellowstone were discovered to be using army cutworm moths, another high-quality food source. The abundance of these foods could be a driving factor in the growth of the population."
- "By using old information, the delisting rule deliberately ignores the issue of extensive conifer forest mortality in the GYE, although this is crucial to grizzly bears in the near and extended future. Information is readily available from government agencies, e.g.: 'Mountain Pine Beetle (MPB) - caused tree mortality increased regionwide for the second consecutive year... Three distinct areas comprise the majority of the tree mortality... The third area, located on the Bridger-Teton National

Forest in Wyoming, increased dramatically for the third consecutive year. In this area, tree mortality increased 82 percent from approximately 240,000 trees over 37,000 acres in 2003 to 982,700 trees across 212,000 acres in 2004. Lodgepole and five-needle pines were the most affected tree species in all three areas.' (USDA Forest Service. Forest Insect and Disease Conditions in the United States 2004 Forest Health Protection, August 2005)"

- "FWS further seeks to rely on Schwartz, et. al. (2006) to assert that the PCA includes 'approximately 90 percent of the population of female grizzly bears with cubs.' See 70 Fed. Reg. 69860, 69870, 69872, 69881. Schwartz et al., (2002) and Schwartz et al. (2006) do not provide a comprehensive summary of currently occupied grizzly bear habitat. The existing survey methods have focused primarily on sighting bears within the PCA; consequently analysis of these data sets would not provide reliable information on what portion of Yellowstone bears spend any time outside the PCA."
- "Based on what appears to be sound scientific study, I believe the requirements have been met to remove this population from the ESA."
- "The draft Delisting Rule gives scant attention to blister rust, and relies on field surveys that are up to 11 years old (Proposed Rule, 69879; citing Kendall and Keane 2001). This information is outdated, and more current information is available from recent field surveys (GYWPMWG 2005)."
- "On page 99 of the proposed plan notes that whirling disease, lake trout, and drought have combined to reduce fishing activity by 87%, but says this may not be significant because adult grizzlies only consume on average 8-55 trout per year. This assumes they know every bear in the ecosystem who fishes, and have watched them 24 hours per day and catalogued 100% of their diet. A special on Yellowstone on television last night noted a significant decline both in the number of spawning cutthroat trout and the number of bears feeding on the trout in the spawning streams. What are those numbers, what are those trends?"
- "I personally am happy that the bears are here and hope they remain. They add a sense of wildness to the areas in which we recreate and are a true symbol of the wilderness. However, unfortunately we have deprived them of habitat to the point where they must be managed and managed by the States where the populations exist. Although, I agree that the bear is a national symbol and the forests belong to all taxpayers, the management and delisting decisions should be based on science and executed by those who live with the results on a day to day basis."
- "When discussing tree diseases, you use old papers (published in 2001) that predate the recent manifestation of the disease problem. More recent information is easily obtainable from the National Park Service, US Forest Service, and state of Wyoming, if not from your own biologists in the USFWS."
- "It makes no sense to apply a more reliable grizzly bear population monitoring method in the NCDE population, which is not proposed for delisting, while continuing to rely on unreliable population monitoring methods for a population which FWS proposes to delist and commence grizzly bear hunt. "
- "On the first point, we do not believe the methods are currently state-of-the-art although the document 'Reassessing methods to estimate population size and sustainable mortality limits for the Yellowstone grizzly bear' provides a thorough overview of the approach taken. Fundamentally, the method as presented is vulnerable to error although it is scientifically rigorous. Our preference would have been to see confirmation of the ratio-based approach using an independent estimator directly from a mark and recapture study using hair snags and DNA."

Many respondents request more research be conducted to quantify or predict the effects of management or environmental change on grizzly bears before delisting. The effects of mining, logging, energy development, roads, and hunting are frequently mentioned. Some respondents call for the predictive modeling of mountain pine beetle infestations, and of food abundance in general. One respondent suggests a re-analysis of data already collected, with the objective of quantifying potential bias in the assignment of "unduplicated" status on observations of female grizzlies with cubs.

- "The State bear management plan must recognize the need to monitor the health of grizzly bear populations in the state. This includes a statewide grizzly count to provide as accurate of an estimate that can be made of the total grizzly population and a full account of all grizzly mortality. The only way to understand the effects and outcome of a state management plan on grizzly bear survival is to monitor all bears in all areas."
- "Until the American Public can be assured that energy development and other development threats will not have negative impacts on a sustainable Grizzly population, a conservative approach should be taken. Clearly, further research is needed."
- "MPB models have been developed, peer-reviewed, and tested extensively (Williams and Liebhold 2002; Perkins and Roberts 2003; Jackson and Murphy 2004; Logan and Powell 2004). These models could be applied to the Yellowstone Ecosystem to assess likelihood of catastrophic damage to WBP."
- "the increases in mining, logging, and related toxicity in the northern Rockies has not been accounted for in your evaluation about the viability of the grizzly bear in the greater Yellowstone and other key areas in the Rockies."
- "...possible destabilization of population structure through removal of males is an issue that warrants further investigation, as studies are not conclusive at this point."
- "The FWS must therefore evaluate, through careful modeling, the projected impact of hunting on the GYE grizzly bear population when considering the increased human-bear conflicts that will ensue and the risk of grizzly bears further associating humans, e.g. hunters, with food, e.g. carcasses."
- "...I respectfully submit that there is a great need for well-designed, focused, and usable social science research into the complex relationship people in the Yellowstone Ecosystem have with grizzlies."
- "How do we know which sightings are of different bears, and which are of the same bear? The USFWS and/or IGBST could have easily had two scientists go through the FCOY raw data independently (i.e. using a blind protocol), determining which were observations of the same bears, and which were of different bears. Had they done this, we would have a quantitative estimate of the extent to which this subjectivity influences the FCOY data. I see no reason why this simple and cheap analysis was not undertaken."
- "The capacity of the GYE to withstand assaults on various major food sources can only be understood if the FWS assesses the abundance of that food throughout the GYE. Delisting would therefore be improper when the status of food sources - and therefore the assessment of habitat effectiveness - is unknown for more than half of the suitable habitat in the proposed DPS."
- "Because of the documented loss of genetic heterogeneity related to this isolation, and advances in conservation genetics science since the 1993 USFWS plan, we recommend that whether or not delisting occurs, specialists in bear genetics, including a population ecologist, be impaneled to conduct a new comprehensive analysis of genetic issues that may affect the population and how to best mitigate impacts. The panel should (1) address the potential importance of further inbreeding and other problems to genetic health of the population, (2) assess whether augmentation of bears

from nearby populations is advisable, and, (3) if so, recommend the number and frequency of translocations that should take place. Efficacy of any translocations undertaken should be assessed by monitoring the survival and breeding success of translocated bears through radio telemetry.”

- “The need for further research regarding the impacts of motorized activities is readily apparent considering that motorized use is expected to increase at a faster rate than regional projections, and as it does, the areas outside of the PCA are expected to absorb the impacts of the increase.”
- “If the grizzly range is to expand into the Southern Wind Rivers (which is not acceptable), the socio-economic impact must be studied and the State Plan must be re-written with a new comment period.”
- “...if the decision is made to delist the grizzly bear and thereby transfer authority to state rather than federal agencies (i.e. more local control), this should be accompanied by systematic and robustly designed research in human dimensions/human attitudes towards grizzly bears. Documenting changes in attitudes towards grizzly bears by local residents concomitant with delisting, elucidating why changes occur, and how changes are manifested, could contribute substantially to our understanding of the human side of wildlife management, for helpful reference in future situations.”
- “Since it is widely accepted that the diet of NCDE grizzlies is approximately 90% vegetarian, while GYE bears are substantial meat-eaters (Schwartz 2004), acclimation of introduced grizzlies would seem to be a major problem, even for a species as adaptable as the grizzly. Again, this has significant implications for whether transplanted bears survive, yet we see no comprehensive analysis from the Service.”
- “Without a complete inventory of roads and trails and information about current levels of actual use, the Forest Service cannot assess compliance with 1998 standards, nor evaluate the impacts of future change.”

104 – COMPLIANCE WITH FEDERAL LAWS AND COURT SETTLEMENTS

Many respondents object to failures to comply with previous court rulings involving the ESA, including a 1995 court ruling involving the 1993 Grizzly Bear Recovery Plan, and to what they feel are violations of the ESA in the proposed rule. The most common objection is that the term “significant portion of its range” is intended to apply to the historical range of a species, rather than its currently occupied range. Respondents assert that, since grizzly bears currently occupy only about 2% of their historical range in the lower 48 states, they do not occupy a significant portion of it. Some respondents feel the designation of the GYA grizzly population as a Distinct Population Segment is inconsistent with previous court settlements, since it would leave the status unchanged for the remainder of the bears in the lower 48 states.

The population estimation method using unduplicated counts of female grizzlies with cubs-of-the-year was found to be arbitrary and capricious in a previous court ruling. Many respondents object to using a modification of that method to estimate grizzly abundance. Several respondents suggest that a population estimate using data from a DNA sampling survey would be more acceptable to the courts.

Other respondents object that population augmentation for genetic purposes violates the intent of the Endangered Species Act; that the Wyoming State Plan is inconsistent with the ESA and the Wilderness Act; and that the view that the ESA requires “prevention of extinction”, rather than recovery over large areas of historically occupied habitat has been repeatedly rejected by the courts.

- “The delisting plan relies on population measures that have been found to be arbitrary and capricious. In the 1995 Federal District Court ruling on the Fish and Wildlife Service's Grizzly Bear Recovery Plan, the use of females with cubs as the measure of the population was rejected as arbitrary and capricious, because of inherent biases and other problems. These problems have yet to be fixed.

But, the agency continues to rely on these measures to determine whether population targets have been met.”

- "The Wyoming Grizzly Bear Occupancy Management Guidelines (Moody et al. 2005) state that: 'Human uses, including livestock grazing, timber harvest, oil and gas development, areas of high road densities and recreational activities/developed sites create potential increases for human/grizzly bear conflicts increasing potential for bear mortalities. Areas supporting these human uses are considered socially unacceptable for grizzly bear occupancy.' In effect, this phrase states that criteria other than biological recovery of the species in question can have precedence in the recovery process. In particular it means that sheep, cattle, and horses have precedence over threatened species on public lands; including designated Wilderness areas such as the Popo Agie and the Bridger Wilderness Areas. As such it violates the spirit, if not the letter, of the Wilderness Act."
- "The governors of Montana, Idaho, and Wyoming in 2001 appointed a 15-member citizen roundtable to review the Draft Conservation Strategy for the Grizzly Bear in the Yellowstone Area developed by the interagency Grizzly Bear Committee. One of the recommendations of the panel, echoing the language of the Conservation Strategy, was to support the expansion of grizzly bears beyond the PCA, into areas that are biologically suitable and socially acceptable (*italics added*). This language: 'biologically suitable and socially acceptable', was subsequently incorporated into the State grizzly bear conservation strategies of each of the States. In our reading, there is no equivalent language in the ESA: recovery criteria are entirely based upon biological criteria, and rightly so. This language, particularly the phrase 'socially acceptable' has no basis in law as a recovery criterion, and we feel that it interjects a significant element of political bias into the recovery process."
- "In the 1995 Federal District Court ruling on the FWS's Grizzly Bear Recovery Plan, the use of females with cubs as a measure of the population was rejected as 'arbitrary and capricious.' The court cited inherent biases and other problems... In its delisting plan, FWS has continued to rely on these measures in establishing the new population estimates... More reliable methods for assessing population size and trend have been used elsewhere, particularly DNA, which is being applied in the Northern Continental Divide Ecosystem... In an attempt to address the problems associated with the females with cubs monitoring method, the IGBST initiated a capture/mark/recapture study as a means of obtaining reliable information. This study was only continued for two years, and discontinued despite recommendations to continue the study in the IGBST Annual Report. The possibility of continuing or expanding this approach, or adopting other approaches to fix the problem, were dismissed in the delisting rule and related documents without a fair evaluation of their potential."
- "Moreover, four of the five listing factors... have not been addressed based upon the best available scientific and commercial information."
- "The Endangered Species Act gives the Secretary of the Interior authority to list and delist species (Section 1533(a)(1)), but does not give the Secretary authority to promulgate a rule that designates part of a listed species as a separate DPS, while leaving the status of the remainder of the species unchanged (as is proposed in 70 Fed. Reg. 69853-69844)."
- "This is an especially egregious procedural flaw because it is in direct conflict with the settlement agreement and district court ruling in *Fund for Animals v. Babbitt* lawsuit. That settlement agreement provided that prior to publishing any proposed delisting rule, the USFWS would establish habitat-based recovery criteria for the ecosystem. See *Fund for Animals*, March 31, 1997 signed settlement agreement at pp. 3-4."
- "The plan requires importation of two bears every ten years into the GYE to address genetic problems, if natural migration from the NCDE does not occur by 2020. Simply put, this is not natural recovery, and violates the intent of the ESA to restore, wild, self-sustaining populations."

- "FWS Has Continued to Rely on Females-with-Cubs-of-the-Year, a Population Monitoring Method Invalidated by the Fund for Animals Court. In *Fund for Animals v. Babbitt*, 903 F. Supp. 96, 114 (D.D.C. 1995), the D.C. federal district court ruled that the Service's use of the 'females with cubs' method of monitoring bears' population status in the 1993 FWS Grizzly Bear Recovery Plan was illegal. Yet, in proposing to delist the Yellowstone grizzly bear, FWS still relies on this legally discredited measure. The district court's ruling is directly applicable here."
- "While the phrase 'significant portion of its range' is not defined in the ESA, all courts considering this language have concluded that it refers to the historic range of the species. See *Defenders of Wildlife v. Secretary, United States Dep't of Interior*, 354 F. Supp. 2d 1156, 1163-69 (D. Or. 2005); *Defenders of Wildlife v. Norton*, 239 F. Supp. 2d 9 (D.D.C. 2002), remedy vacated on other grounds, 90 Fed. Appx. 273 (D.C. Cir. 2004); *Defenders of Wildlife v. Norton*, 258 F.3d 1136, 1145 n.10 (9th Cir. 2001). The grizzly bear is not simply in danger of extinction throughout significant portions of its historic range, but rather, it has been completely extirpated from 98% of that range - a vast area that must be considered 'significant.'"
- "The Endangered Species Act was designed not only to save species from complete extinction, but also to protect and ultimately recover species threatened with extinction across significant portions of their historic range."
- "The proposed rule, by defining 'range' as 'the area within the DPS boundaries where viable populations of the species now exist' (70 FR 69886), and tautologically concluding that 'the grizzly bear occupies all of its range within the DPS...' (70 FR 69886), is thus at odds with the intent of the ESA."
- "As a 'threatened' species, the ESA requires that the Sec. of the Interior to proclaim 'critical habitat' for that species."
- "Reestablishing natural connectivity is not only possible, but it is necessary for the FWS to fulfill its mandate under the ESA. Whether a species can be considered for delisting depends on whether it is recovered over a significant portion of its range. See Section I, supra. In order to ensure that the grizzly bear is recovered throughout a significant portion of its range, the FWS must reestablish natural connectivity between the GYE and other areas where grizzly bears exist."
- "...FWS focuses exclusively on the area where bears are now without regard to the much larger area where bears once were. As a result, FWS fails to consider whether the Yellowstone grizzly is still imperiled in any significant portion of its DPS range that is currently unoccupied. This violates the ESA."
- "The claim that the ESA mandates only maintaining a species' viability (preventing extinction) rather than effecting recovery was first made in a 1986 revision to the regulations governing the ESA enforcement (USDOI and USDOC 1986), but has been repeatedly rejected by the courts (*Suckling and Taylor 2005*)."

105 – COMMENTS ON CONCURRENT DOCUMENTS

The concurrent documents which the USFWS and cooperators plan to finalize before publication of the proposed rule are the Conservation Strategy; the Habitat-based Recovery Criteria; the Genetic Monitoring information; the document on “Reassessing Methods to Estimate Population Size and Sustainable Mortality Limits for the Yellowstone Grizzly Bear”; and the Forest Plan Amendments. Most comments regarding concurrent documents were sent by respondents who object to the proposed methods presented in the document “Reassessing Methods to Estimate Population Size and Sustainable Mortality Limits for the Yellowstone Grizzly Bear.” Most of those respondents are critical of population estimates derived from unduplicated counts of female grizzlies with cubs-of-the-year (FCOY). They claim the FCOY method is subjective and unreliable. One respondent asserts that abundance of cubs-of-the-year is not simply a function of adult female abundance, and that the unduplicated counts of females with cubs-of-the-year, as presented in the “Reassessing Methods ...” document, do not match up with counts for the same years presented in other IGBST documents. One respondent feels the new ratio of known-to-unknown mortalities is conservative and of unverifiable reliability.

Some respondents feel the USFWS should have completed the Habitat-based Recovery Criteria prior to publishing the proposed rule. Some also contend that until the Fish and Wildlife Service develops an adequate methodology for assessing Yellowstone population size and whether mortality levels are excessive, delisting is inappropriate. They also call for a thorough and independent peer review prior to a delisting rule.

Comments on preferred science and alternative research were wide ranging and diverse. Some respondents submitted technical papers and reports for consideration on this proposal. Those technical papers and reports are available for review in the project file. Alternative science and methods are not specifically repeated in the summary of this section because of the need for brevity. It is also more conducive to maintaining the integrity of the complete technical and scientific information and to ensure that alternative research/data/methods are not taken out of context.

- "The failure of FWS to promulgate habitat criteria prior to considering delisting leaves all interested parties without a basic set of management goals and standards and invites the type of haphazard and destructive development that harms bears throughout their remaining range."
- "Given all of these difficulties with the methodology used to identify and correct the bias in the FCOY dataset, I recommend that these authors of the Draft Document devise a new method for estimating population size that does not rely on the FCOY data. There is a large literature on possible approaches (see e.g. Williams et al. [2002] and references therein, many of the authors of which are on the USFWS or USGS payroll)."
- "A second method of estimating bear numbers or additional information indicating the method's accuracy would be beneficial..."
- "Although the USFWS has developed habitat-based recovery criteria (USFWS 2002), those criteria remain in draft form and do not effectively address several habitat threats described below. Clearly, a proposal to delist the GYE population is premature without scientifically credible recovery criteria."
- "Meaningful public input is further frustrated by the convoluted and confusing nature of the reassessment paper itself. FWS must explain in plain English how the analysis was done, the associated assumptions and uncertainties of the process, and the implications for the future of bears in Yellowstone."
- "It is difficult to understand FWS' continued reliance on the controversial Females with Cubs of the Year (FCOY) method for estimating population size when DNA-based methods provide for greatly increased precision and accuracy for monitoring populations. How can FWS claim to be using the best available science when better substitutes are readily available?"

- "The change to the new ratio of known-to-unknown (1 to 1.7) is certainly more conservative than the old one (2 to 1) but there are no means of verifying the reliability of the estimate."
- "Is the method adequate to support an application to delist grizzlies? This question is more difficult to answer. Under the 'current method', the minimum population size in 2004 was 431 bears but this increases to 588 in 2004 if the 'revised method' is applied. The increase in numbers is due to the modeling approach used. Radio-based methods are prone to error and the change in methods alone reflects a difference of 157 bears, or roughly 36% of the 'current method.' We have less than complete confidence in such an approach although it is a good second choice if no direct estimations are available."
- "Numerous scientific articles published since 1993 further demonstrate that the females-with-cubs-of-the-year population measure is inherently subjective in identifying grizzly bears in the wild and produced varied results depending on observer effort expended, the number of hours spent conducting aerial overflights, the changing nature of bear behaviors, weather conditions, and the location and availability of grizzly bear foods. Schwartz, et al. (2002); Craighead (1998); Craighead, et. al. (1995); Mattson (1997b)."
- "The revised method for calculating total population size is intended to be appended to the Recovery Plan and the Conservation Strategy. The revised method uses counts of adult females with cubs-of-the-year to the total number of independent females and then moves through a modeled sex ratio based on population structure to determine the number of males. Lastly, the number of cubs [less than] 2 years old is added to obtain the total population size. In general, such approaches to estimating population size are vulnerable to error because of errors in any particular term caused by annual variation, or more seriously by directional trends."
- "We are uncomfortable with the conclusion in the Register that 'Independent males can endure a relatively high mortality rate without affecting the overall stability or trajectory of the population...' At some point, a reduction of males in a population will affect recruitment, and there should be some means of detecting if that point is being reached."
- "Recently developed methodology uses these same data to estimate both population size and trend. However, it is unclear how this methodology can take into account the likely demographic differences between bears in the core range versus those in the expanding front of the population. Sex-age composition, reproductive rate, and mortality rate at the edge of the range are potentially quite different from those at the core, particularly as the core population approaches carrying capacity."

106 – PUBLIC INVOLVEMENT

Several people commented on the public hearing process and how it might be improved in the future. Most respondents want more than two public hearings, and many lament that the hearings were held in locations difficult to get to in the middle of winter. Local residents on both sides of the issue want more local hearings, better public notice of those hearings, open houses in more than five communities, and more opportunities for public involvement. Some respondents living outside of the tri-state area and who oppose delisting want public hearings held in their own states. Local residents who favor delisting often object to the mass emailing of form letters from elsewhere in the U.S. and the world. They feel the public involvement efforts focused too much on outside influence over what they view as a local issue.

Many respondents object to the process of releasing multiple related documents for concurrent public comment. They feel that all of the other concurrent documents should have been finalized before the public comment period for this proposed rule was opened, so that the public would have the opportunity to evaluate the effects those final documents might have on grizzly bears and their habitat. The most popular concurrent documents of concern are the U.S. Forest Plan amendments for grizzly bear

conservation, particularly for their central role in delineating post-delisting habitat protection. Another concurrent document of concern is the Conservation Strategy. People question which version of the Conservation Strategy will affect this proposed rule. A few respondents feel that parts of the proposed rule are difficult for the general public to understand. Some respondents claim that not all information was made available to the public during the comment period.

- "First, the FWS refused to provide meaningful opportunities for the public to speak on the proposal. The only public hearings were held in Cody, Wyoming, and Bozeman, Montana. The only open houses were held in Cody, Bozeman, Jackson, Wyoming, and Idaho Falls, Idaho. No opportunities for public involvement have been provided outside of those communities, except via websites and mail, even though the fate of Greater Yellowstone's grizzly bears is a significant concern to American's across the country."
- "The transcripts from Cody, Wyoming in early January 2006 reveal a mixed message between delisting and continuing to list the grizzly bear. Some comments reveal a need for additional locations to give public comment, such as Seattle, New York, or Denver. We strongly disagree with these suggestions, as these city dwellers are not the ones to encounter grizzlies on a daily basis. The ranchers who commented in Cody have valid points about grizzly bear management, on-site encounters, and strongly support the delisting of the grizzly. These local people have seen first hand how the bear has recovered and can give personal testimony of how the bears have expanded their territories."
- "Despite their central role in delineating post-delisting habitat protection, the U.S. Forest Service (USFS) has failed to release its 'Final Forest Plan Amendments for Grizzly Bear Conservation for the Greater Yellowstone Area National Forests' (USFS 2005, Amendments). Thus the public is being asked, in violation of both common sense and the law, to comment on a document they've never seen."
- "It seems that you will listen to other persons, from far away, who are pursuing their happiness and putting us in harm's way but you have no regard for us. Just who do you work for and who are you representing? You do not represent the majority of people who live in Wyoming and you are denying us our Rights."
- "The Conservation Strategy has not yet been signed by the USFWS. And if it has not been signed, I must presume that there is opportunity for it to change before it is finalized. In essence, I am being asked to comment on the delisting proposal based on a post-delisting management plan that the USFWS has not, at the present time, sign off on. The draft rules assert that the USFWS intends to sign the Conservation Strategy, but does not make it clear whether they will sign the Conservation Strategy in its present form, or only after additional changes are made."
- "In addition to the paucity of opportunities for communities around the country to participate in the debate regarding grizzly bear delisting, the procedure for the delisting proposal is further flawed because not all of the pertinent information has been available to the public during the public comment period."
- "Finally, we are less than pleased with your public process. In the middle of winter, when many of us are unable to reach Cody, you choose only one site for a public hearing. We don't believe that adequate consideration was given to a fair and due public process."
- "The delisting proposal relies on habitat management plans which are not yet in place. The Forest Service has not yet finalized its Forest Plan amendments. These plans are critical because they will dictate land management on 70% or more of grizzly bear habitat in the GYE. These processes must be finalized before FWS solicits public comments on the delisting proposal. Otherwise, the public is being asked to comment on whether delisting is appropriate without knowing what specific

mechanisms will be in place for protection of habitat in the long-term. This approach is backwards, and frustrates public comment.”

- “The public cannot meaningfully evaluate the delisting proposal when one of the key underpinnings of the proposal---mortality limits---is in a state of flux.”
- “The USFWS is effectively asking me and other members of the public to comment on government documents pertaining to grizzly management that we cannot see, because they do not even exist at present. Or if they do exist, they may change significantly before being finalized. This strikes me as being antithetical to the very essence of public participation in agency decision-making.”
- “How come there's no hearings in New York? How come there's no hearings in Denver? How come there's no hearings in California where they still fly a flag that's got a grizzly bear on it, but the lands around there have no grizzlies on them? Where you worried about what you might have heard if you'd had hearings in those places? Could be.”
- “And I really do want to address the fact that the U.S. Fish and Wildlife Service decided to have one public hearing on such an important issue and in a place that's pretty inaccessible from around the country. If the Bush Administration was interested in hearing what the American people had to say, they would have more hearings and a longer comment period. The definite message is a huge middle finger to the American people, and I hope you rethink this and extend the comment period.”
- “It's pretty obvious to me that by having one hearing on this very important issue in the middle of Wyoming, in the middle of the night, in the middle of the week, in the middle of the winter, that you don't care about what the American public wants or thinks about this issue.”
- “Nevertheless, although draft habitat-based criteria have been issued (USFWS 2002), they have not yet been finalized, and appear inadequate in several respects as detailed below. New standards for setting mortality thresholds, as well as Forest Service guidelines for managing grizzly bear habitat, also currently exist only in draft form, making evaluation of their impact on recovery difficult.”
- “We believe that there must be an overhaul of the system which generates over 100,000 e-mail form letters and yet people living on the land were only allowed three minutes of public comment time at two public meetings one of which was poorly advertised. We want to see an excellent breakdown of the comments by source, type and location of origin in your final report.”
- “I am glad that Gov. Schweitzer had enough questions about the lack of public input and discussion regarding removing Yellowstone's Grizzly Bears from the Endangered Species List.”
- “The hearing in Cody, WY was adequate for people to comment publicly. There is no agenda by the Bush administration or anyone else to keep people from commenting - as you've shown by extending the comment period, and by accepting comments in the mail, by email and fax.”
- “I was unable to attend the only public hearing in Wyoming, due to distance and severe winter weather. I protest USFWS making it so difficult for the public to participate, particularly given the long history of involvement in grizzly bear issues by the people of Teton County WY.”
- “It makes no sense, for example, to ask the public whether delisting is warranted before key decisions have been made on the management of forest lands in 70% of the ecosystem, and on appropriate mortality limits. What is more, several of the documents, such as the population reassessment paper, are almost incomprehensible to the average reader.”

200 – DISTINCT POPULATION SEGMENT (DPS) COMMENTS

Many respondents contend that the proposed DPS does not consist of a sufficient number of grizzly bears to ensure population viability. Those respondents prefer designating a DPS that includes all grizzly populations in the lower 48 states and establishes connectivity between those populations. An associated opinion is that designation of a Yellowstone DPS leaves the remaining bears in the lower 48 states without DPS designations. Some of those respondents feel that the remaining populations should be designated as distinct and listed as Endangered.

Several respondents criticize the boundaries of the proposed DPS, particularly using highways, and claim they were chosen merely for administrative convenience. They feel that the USFWS should have designated boundaries based on demonstrated habitat suitability.

Some respondents assert that the DPS boundaries contain an area too small to encompass all of the area that the GYA grizzlies are likely to disperse into. They feel that the DPS boundaries should be expanded, so that dispersing GYA bears would have delisted status. Similarly, some respondents feel that any grizzly bears originating from the Yellowstone DPS area should have delisted status, regardless of where they occur geographically.

A few respondents point out that the Endangered Species Act does not permit the designation of a DPS for delisting purposes, only for listing. Some view the proposal to change the status of the Yellowstone grizzly to a Distinct Population Segment as an act of convenience meant to facilitate the delisting process. A few respondents also suggest designating distinct population segments throughout the historical range of the grizzly, and exploring the recovery potential in each, before delisting.

- “If the USFWS wants to designate a Yellowstone DPS and then delist it, they must reconsider the status of all grizzly bears in the conterminous United States. This specifically includes the Selkirk, Cabinet-Yaak populations, Northern Cascades populations, for which the USFWS has previously admitted an endangered classification is warranted. Such a review would also allow the USFWS to analyze the genetic viability of the entire conterminous United States population.”
- “Unlike anadromous fishes, DPS designation is not appropriate for the GYE grizzly population, especially if ESA delisting would follow immediately. Because the GYE alone cannot support an isolated grizzly population that would be viable over the long-term, effective recovery and conservation of GYE grizzlies requires genetic and demographic connection with grizzly bears in other areas.”
- “The Service does an excellent job of describing why the Yellowstone population of grizzly bears qualifies as a Distinct Population Segment (DPS) by being both discrete and significant. While the boundary that had been drawn defining the DPS appears to include all the areas where bears may occur in Wyoming, the northern boundary extending into Montana should be extended more broadly, given grizzly bear’s ability to disperse. It seems that it should be shifted north to provide more of a buffer beyond what has been determined to be suitable habitat.”
- “Federal protections should remain until all of the lower-48 grizzly bear populations are also recovered, and their collective, long-term survival is assured.”
- “The establishment of a DPS and the removal of ESA protections will hamper connectivity efforts when they are most needed.”
- “In addition, FWS relies in part on the unique genetic characteristics of the Yellowstone bears to demonstrate the uniqueness of the population as a basis for a separate DPS. 70 Fed. Reg. 69864. However, because of the extremely small population size and genetic impoverishment of the Yellowstone bear population, FWS is proposing to augment the population by translocating bears. If such an approach is implemented, over time introducing genes from other populations will destroy the claimed genetic uniqueness of the Yellowstone bear population.”

- “You should be evaluating threats to viability and opportunities for recovery throughout the historic range of the grizzly bear, not applying DPS like a potion to stimulate delisting efforts in Yellowstone. I am concerned that delisting under this proposal will preclude recovery in adjacent areas...”
- “This action is improper, because distinct population segments cannot be used as an expedient for delisting. The text, structure and legislative history of the ESA indicate that DPSs are to be used when making listing determinations, and only when neither the larger species nor subspecies warrant protection. Additionally, the FWS cannot create a Yellowstone DPS while maintaining the grizzly bear’s subspecies listing, because doing so would create a remnant population that cannot be listed under the ESA.”
- “Even though the plan to create a Distinct Population Segment of the Yellowstone grizzly bear may be necessary in order to delist the bear, there is a problem in that the area for the DPS is too small of an area. The concern is that once a bear in Idaho crosses I-15 or Highway 30 it is once again under the protection of the Endangered Species Act. A bear is a bear no matter where the geographic ‘boundary’ is. This part of the plan lacks some consistency.”
- “Thus, although the proposed GYE grizzly bear DPS does not meet current standards that require ‘sparing’ use of the DPS designation, it would represent a valid management unit under a revised policy similar to that described in Green (2005). However, to be coherent, such a policy would first require a comprehensive evaluation of recovery potential, and establishment of recovery goals, in all biogeographic zones historically inhabited by grizzly bears.”
- “The FWS has repeatedly claimed that lack of funding prevents it from protecting and restoring grizzly bear populations in the North Cascades, Selkirk, Cabinet-Yaak and Bitterroot ecosystems. Yet now, it proposes to use its scarce resources to create and delist a Yellowstone DPS.”
- “In the delisting rule, FWS’s definition of the Yellowstone bear DPS was not based on analysis of how much habitat the bear population will need, especially in the face of future changes. Rather, it was drawn around existing highway systems. FWS never explained how this area related to the future of the bear, and how this area could be affected by loss of food and human encroachment. Nor did it evaluate the area in the context of the Yellowstone grizzlies’ former range.”
- “The draft rule itself fails to acknowledge that Miller and Waits (2003) explicitly state that a effective population size of at least 500 would be needed to maintain quantitative genetic variation, implying an actual population size of at least 1850. This is likely larger than the total population size of all grizzly bears in the lower 48 states, suggesting strongly that, at the very least, all of the grizzly bears in the lower 48 need to be managed as a single population. Conversely, this implies that that it is not sensible to delist a portion of a population that is not viable from the viewpoint of maintenance of quantitative genetic variation, as proposed in the draft rules.”
- “Any proposal and subsequent designation of a Yellowstone grizzly bear DPS should be within the broader context of recover planning throughout all significant portions of the species’ historic range in the contiguous 48 states; thus, other DPS’s would have to be proposed and designated simultaneously. Piecemeal designation of DPS’s and delisting thwarts the intent of both the vertebrate population policy and the Endangered Species Act.”
- “Without further biological justification for the proposed DPS boundaries, it is unclear whether FWS is ‘drawing a line around a population whose conservation status differs from other populations’ of grizzly bears, Defenders, 354 F. Supp. 2d at 1170, or whether the agency is arbitrarily defining the DPS in one of two ways: by ‘expanding the boundaries’ of the DPS in order to delist large areas ‘without considering the listing factors,’ Defenders, 354 F. Supp. 2d at 1170, or defining the DPS too narrowly in order to exclude significant portions of this population’s range.”

- "In our estimation, the proposed Yellowstone DPS is too limited in geographic scope. As proposed, once a bear crosses Interstate 15 or Highway 30 in Idaho, it suddenly becomes a listed species again. This is nonsensical. It seems that this will only result in disruptive management of the species and confusion amongst the federal and state agencies. Rather than creating a limited DPS, the FWS should delist all grizzly bears that have derived from the Greater Yellowstone area in order to promote more effective and fluid management."
- "Of course, instructing federal agencies to use their power to create distinct population segments only 'sparingly,' and limiting this power to vertebrates, would make little sense if Congress intended the creation of distinct population segments to be used as a delisting tool."
- "We view the proposal to change the status of the Yellowstone grizzly to a Distinct Population Segment as an act of convenience meant to facilitate the De-listing Proposal. It is not based upon the best available science and it is a transparent attempt to circumvent detailed analysis of one of the original listing factors."
- "De-listing population by population goes against the best available science on meta-population dynamics and genetic viability."
- "As the DPS policy states, 'loss of an interstitial population could well have consequences for gene flow and demographic stability of a species as a whole.' Rather than consider Yellowstone delisting as part of a broader strategy for recovery, the current proposal seeks to prematurely downgrade protection for the population with the largest potential role in rangewide recovery. The argument that delisting will enhance rangewide recovery by redirecting resources to other recovery areas is specious, since the same political figures promoting Yellowstone delisting have blocked reintroduction of grizzly bears to central Idaho and thus would be unlikely to support effective recovery efforts outside the GYE."
- "Even if the proposed DPS's configuration is deemed valid, the DPS cannot be delisted both because the grizzly bear population is still jeopardized and because significant portions of the proposed DPS have few or no bears, and thus by definition the populations are not recovered in those areas."
- "Distinct Population Segment - Defining the area as a distinct population segment was logical from a biologically and bureaucratic perspective although it ignores recovery in a broader ecological context of connectivity. The decision that 130 km is 'too far for normal grizzly bear dispersal distances' is a statement that ignores specific conditions on the landscape (human alteration and population fragmentation) and ultimately, the recovery of these linkages will be crucial for the long-term persistence of the Yellowstone population.."
- "In defining the Yellowstone grizzly bear DPS, FWS fails to draw geographic boundaries based on sound biological principles. FWS identifies 'boundaries of convenience' in the form of several highways. See 70 Fed. Reg. 69854, 69862. Yet FWS never explains how this highway-boundary area relates biologically to the habitat needs of the Yellowstone grizzly population (i.e., is the habitat encompassed in these boundaries more or less than is needed to support a recovered bear population for the foreseeable future?) or how the area relates to the historic range of this population (i.e., what proportion of the Yellowstone grizzly's former range does the DPS represent and why?)."

201 – DISCRETENESS

The few respondents commenting on the discreteness of the proposed DPS object that the current physical discreteness of the GYA population is due only to modern barriers to dispersal. Some feel the genetic isolation is not something to maintain, but something to reverse. They refer to genetic evidence that suggests that all grizzlies from Jasper National Park south to Mexico were members of a single lineage.

One respondent argues that the grizzly bears comprising the DPS are not unambiguously distinguishable from other grizzly bears, contrary to the requirements of the Endangered Species Act.

- "We do not dispute that the Yellowstone grizzly bear population has been isolated during the past 100 years, but we disagree that it should be designated 'discrete' from the other populations and remain this way during the next 100 years, as we look ahead to a long-term vision of full recovery of grizzly bears in the lower-48 states. The barriers to movement during the past century are not permanent in nature, and the genetic isolation that has resulted is not something to maintain, but something to reverse."
- "The designation of the Yellowstone segment of the grizzly bear population is not supported by either the historical or genetic evidence. Historically grizzly bear range in the lower U.S. was continuous from current border with Canada south into Mexico (Mattson and Merrill, 2002). Genetically all grizzly bears populations south of Jasper National Park (Canada) to the GYE were within one clade (Waites et. al., 1997) meaning they were genetically more similar to themselves than to bears in the other 2 clades of brown bears in North America."

202 – SIGNIFICANCE

The few respondents who commented on the significance of the proposed Distinct Population Segment feel that the significance of the GYA grizzly population to recovery is independent of DPS designation. They contend that a DPS designation to include all of the grizzlies in the lower 48 states would be at least equally significant.

- "Consideration of a population's significance, however, makes no sense if a distinct population segment is being created only for delisting purposes. This is evident in the Delisting Proposal... Under this logic, if the Yellowstone population was not 'significant' to the species, the FWS would not be permitted to create a distinct population segment, and would be required to maintain existing protections."
- "We fully support the FWS position of the clear 'significance' of the Yellowstone grizzly bear population. We believe that to maintain a DPS boundary that includes all of the grizzly bear recovery areas in the lower-48 states would not reduce the significance of this population and its importance toward achieving full recovery."

300 – DELISTING

Numerous respondents commented in general about the need for delisting, and many of the respondents are perplexed as to why delisting is being proposed at this time. They see the current program as working, and don't see a need for change. Many respondents feel that grizzlies or any other species, once listed, should remain under the protection of the Endangered Species Act forever. Several people feel that delisting should not occur until more has been done to assure long-term survival of grizzlies in the lower 48.

In contrast, respondents who favor delisting state that the ESA was not intended to provide permanent management guidance for species that had exceeded their recovery goals. They feel that the intent of the ESA is to recover species so that they could be removed from the list. Some also contend that overprotecting any species could have a corresponding negative impact on ecosystems. Some also feel delisting provides proof that the Endangered Species Act is a viable and useful tool in the protection and recovery of endangered plants and animals throughout our country.

A few respondents suggest amending the ESA to include a category of transitional management for species that have met their recovery goals. Under this suggestion, "recovered species" would continue to be managed and protected under the ESA until some later date.

Some respondents say delisting the grizzly bear in the Greater Yellowstone Ecosystem is a political issue. Several voice their concern over what will happen after delisting when authority shifts to the States.

- " Why would this administration even consider removing the Yellowstone Grizzly Bear from this list or any wildlife, until their long term survival is ensured"
- "Why is a change even being considered? Has there been an increase in bear attacks on humans or on farm/ranch animals in the area? Is there a strong movement by hunters who want to hunt the bears? Are the bears causing any problems? Then what's the problem? Why make a change for the sake of change??"
- "...there is no sense in overprotecting any species as this can have a corresponding negative impact on the ecosystem."
- "Refusal to delist because of possible future threats is a prescription for perpetual listing of species and is inconsistent with the intent of the ESA to identify recovery objectives and strive to achieve them."
- "Revisit the question of delisting when more has been done to assure the long-term survival of grizzlies in the lower 48."
- "In our view, the success of the Yellowstone recovery effort should be a model for successful recovery in other areas and not a model for the futility of even trying to attain delisted status for a population of grizzly bears that has achieved significant success."
- "There will always be potential threats to the continued survival of Yellowstone grizzlies but the Act was never intended to be a refuge for species until all risks were eliminated. It was intended to be a repository where species would reside until declines were reversed and viable populations were achieved. This has been achieved for Yellowstone's grizzlies and the National Wildlife Federation congratulates the participants in this effort."
- When the population reaches the same level as Alaska, perhaps the move would be warranted."
- "I understand that you want to demonstrate the effectiveness of the endangered species act. I think the best time to do that is yet to come. Please don't rush to delist only to have to relist, perhaps when it's too late..."
- "Perhaps a new ESA category needs to be in place. I suggest something like a 'recovered' category that still keeps in place some ESA-based protections to avoid the species returning to threatened status."
- "For a program to be successful, it should be cared for at least 10 years past the cut off date to ensure that the species is once again strong and able to stand alone."
- "The Chapter observes that the ESA was not designed or intended to be the management paradigm for species that are not endangered or declining toward endangered status."
- "The possibility of future declines from a number of causes can never be positively eliminated and perpetual listing of a species based on speculative future threats is not consistent with the intent of the ESA."

- "The FWS Yellowstone delisting proposal devotes virtually all of its analysis and discussion to an examination of historic grizzly bear population/habitat trends and developments. In essence, this rear-view mirror analysis sets up a simple comparison: are Yellowstone grizzly bears better off in 2005 than they were in 1975 at the time of delisting? But, in proposing to remove the Endangered Species Act ('ESA') protections for Yellowstone grizzly bears, the fundamental question is, what will the future hold for Yellowstone grizzlies? Unfortunately, all the available evidence indicates that the future will be a much less hospitable place for Yellowstone grizzlies and that their very existence will be placed squarely in jeopardy."
- "I believe that removing protection for the grizzly bear is unacceptable, and believe that removing protection is inappropriate for all the species which we consider 'wild' and threatened. Every entity on the endangered list is there to stay."
- "What, precisely, would be the problem with permanent listing of Grizzly Bears as endangered species?"
- "Keep the Grizzly on the Endangered Species list for 5 more years. What's the harm in that?"
- "Relisting, if necessary, is a more appropriate response than not delisting in anticipation that such circumstances might arise. The possibility of future declines from a number of causes can never be positively eliminated and continued listing of a species based on speculative future threats is not consistent with the intent of the ESA."
- "In the current global environment every living thing is an endangered species and all living things, except humans, should be considered endangered and placed on the endangered species list. I exclude humans because as a species humans are causing the global environmental disasters."
- "I believe that the delisting of the grizzly bear for the Greater Yellowstone Ecosystem is a positive step towards the conservation of large carnivores in the lower 48. Not only does this delisting bode well for people and grizzlies in the West, it provides proof that the Endangered Species Act is a viable and useful tool in the protection and recovery of endangered plants and animals throughout our country."
- "rebuilding a threatened or almost extinct species is a much more daunting task than maintaining the slow growing population that currently exists."
- "Please do not take the grizzly bear off the endangered list, it's too soon to be doing this. California has already shot and killed so much of its wildlife there is nothing left."
- "Grizzlies need more time to recover from their recent brush with extinction."
- "...what's the big deal about keeping them on the list a little longer?"
- "Until we have a better idea of how the current trends in habitat are going to play out, and how we are going to respond to such trends with conservation action, it is best to keep the Yellowstone grizzly population protected under the Endangered Species Act."
- "If there is sufficient evidence that the animal in question has met qualifications to be taken off the Endangered Species Act, but is met with evidence suggesting that taking said animal off the list can cause more harm than good; the animal should be placed in a transitional period of care. During this transitional period, if said animal is making progress, a committee will review if the time is right to let the animal on its own under minimal human protection."

- “We believe there is sufficient merit in the document to indicate that the delisting criteria have been met, but that there are possible gaps in our knowledge and uncertainties on the status of the population and political support for conservation that make an unconditional endorsement of the delisting a tenuous position for IBA. There are credible scientists advocating on both sides of delisting. Most of the debate focuses not on the science of the case, but the expectation of what will happen when delisting occurs, and authority shifts to the States. The reality is that the debate over delisting is essentially political.”
- “I believe the purpose of the Endangered Species Act is to protect wild populations to aid recovery of numbers. It appears this has happened in the Yellowstone region therefore, celebrate the success and remove this population from the list. Continual monitoring will give information about the success of this step.”
- “The recovery of grizzly bears in the GYA is a great success, and TWS urges the FWS to focus renewed attention on the other five grizzly bear recovery areas in the United States because, without progress at these other recovery areas, the species will remain vulnerable.”
- “The Yellowstone population satisfied that requirement several years ago. If the process is to mean anything at all, species should be de-listed when they satisfy the goals set forth in a recovery plan. Otherwise, the process has little meaning or credibility. Farmers, ranchers and other landowners who can significantly enhance the status of listed species will be less likely to be willing to help imperiled species if they are not de-listed when the recovery goals have been met.”
- “With proper wildlife management either by state or federal resources, we can still monitor the situation, and if the numbers start to decline again, we can always put them back on the list”
- “However, continued success for the population is biologically possible but socially and politically doomed under current and foreseeable conditions.”
- “The majority of my family and myself agree that no animal should be taken off the endangered species list until their natural habitat has been restored and sufficient numbers exist to sustain life without human intervention.”
- “It is too early to discontinue protection of grizzlies. If we allow this to happen prematurely, they will surely be endangered within our lifetimes again. Please wait and allow us to see how habitat and other issues develop to allow them a better chance before discontinuing protection.”

301 – FISH & WILDLIFE SERVICE DEFINITION OF “RECOVERED”

Respondents commenting on the U.S. Fish & Wildlife Service's definition of recovery perceive the recovery goals in three different ways. Many respondents argue that the recovery goals had not been met, particularly noting that the human-caused mortality threshold had been exceeded in 2004 and 2005. One respondent believes there were so many potential errors in estimates of population size, growth rate, and viability that it cannot be determined if the GYA population is recovered. Many others acknowledge that the recovery goals have been met, but judge them to be inadequate for ensuring long-term persistence of grizzly bears in the GYA. Those respondents recommend that the recovery goals be changed to require a larger estimated population size, a lower human-caused mortality rate, a wider distribution of grizzly bears within and outside of the PCA, or connectivity with other populations. A third group of respondents agree that delisting is appropriate because they believe the recovery goals have been met.

- “With our new insights into the need for large interconnected populations, a prudent policy would be to revise upward the minimum population required before delisting is implemented.”

- “In summary, all the recovery criteria in the USFWS recovery plan have been met and exceeded. If a population can not be delisted following demonstrable recovery, what point is there in writing a recovery plan, and under what circumstances should the public have faith in its wildlife management agencies?”
- “Opponents of delisting will counter that the original criteria were not adequate to ensure population viability (Craighead 2005, Wilcox 2005). As each population goal is met, they revise their goals. They now maintain that 2000-3000 bears are necessary to maintain viability. However, it is likely that the bears of Yellowstone have arrived at carrying capacity, and it is not biologically possible to obtain or maintain such a population unless a much larger recovery area is implemented. Since it is unlikely that humans will be evicted from the remainder of the ecosystem in the near future, theirs is a recipe for permanent ESA listing. This is no doubt their goal. It is interesting to note that Craighead (Gilbert et al. 2004) has also recommended that 70% of British Columbia be converted to Grizzly Bear Management Areas and that these areas be totally restricted from nearly all human uses.”
- “We do not believe that isolated populations of grizzlies, such as the one in Yellowstone, must be inter-connected before delisting can occur. Such connectivity is clearly desirable for any grizzly bear population. Insistence on connectivity as a precondition for delisting, however, would likely become a barrier to continuing conservation efforts. The states of Montana, Wyoming and Idaho have worked cooperatively with federal agencies for 25 years to achieve recovery objectives identified in the 1993 recovery plan for the Yellowstone area. We doubt that these states would have participated in these efforts to the same degree if delisting in Yellowstone was held hostage to recovery in areas over which the Yellowstone-area states had no influence (e.g. the North Cascades, the San Juans, Utah or Arizona). Such a standard would likely inhibit transference of the successful Yellowstone recovery model to other recovery areas.”
- “The proposed rule fails to acknowledge that recovery targets have not been met. FWS has repeatedly stated that all the recovery plan targets for Yellowstone grizzly bears have been met. This is not true. In 2004, the agency violated the level of allowable female-caused mortality. Instead of acknowledging this fact, FWS changed the rules using a method that is only now being reviewed by the public.”
- “While FWS asserts that the range of the Yellowstone grizzly bear has dramatically increased in recent years, this assertion ignores the relevant data concerning historic grizzly bear locations. For example, in the 1980 IGBST Annual Report federal biologists noted that : ‘Two verified sightings of lone grizzlies were reported from the Sawtooth Mountains, east of Obsidian, Idaho. Four verified observations of a female with young and one sighting of a large lone grizzly were reported in the vicinity of Buffalo Bill Reservoir, Wyoming.’ Id. At 9. This historic evidence demonstrates that grizzly bears were widely dispersed in 1980, long before the alleged increase in range on which FWS relies.”
- “Merely meeting recovery goals for the species is not enough to guarantee their long term survival. De-listing of any species should not occur until populations reach ecologically effective densities, not just some arbitrary number that keeps them from the brink of extinction. This may never occur for some species whose habitat has been mostly destroyed or altered.”
- “The recovery plan's idea of recovery has nothing whatsoever to do with establishing a viable population. The recovery plan begins by drawing a line around the area grizzlies occupied at the time of listing and then calls this the recovery zone. This zone has nothing to do with sufficient habitat to support a viable population. Since the Yellowstone recovery zone contains 9,500 square miles and GYE grizzlies occupy an average of 29 square miles, the FWS has concluded that a viable, recovered population is one that has reached a minimum of 328 bears ($9,500/29=328$). This is not science.”

- “FWS has repeatedly stated in the press and public presentations that all the recovery plan targets for grizzly bears have been met. This is not true. In 2004, the number of mortalities in the Greater Yellowstone Ecosystem violated the threshold for allowable human-caused mortality. Because of the high level of human-caused mortality in 2004, and with an additional two adult female mortalities in 2005, allowable levels were also violated in 2005.”
- “Until the central Idaho recovery area is fully occupied, populations in the Cabinet-Yaak and Selkirk recovery areas increase substantially and, secure ecological connections between recovery areas are established the Yellowstone subpopulation remains threatened by foreseeable habitat loss and degradation, loss of genetic diversity, and inadequate regulatory protection.”
- “Expanded range of bear occurrence can be attributed to many factors in addition to population increase (e.g. food shortages in the core PCA--The delisting rule admits that distribution and range are influenced by food availability.). Nevertheless, agency biologists and managers keep using range expansion as seemingly conclusive proof of a reliable trend of an annually-increasing population. This is very thin ice, especially since bears outside the PCA are at increased risk of human-caused mortality, and particularly if bears are removed from the Endangered Species list.”
- “The fate of grizzly bears, under this proposal, is an island of bears within the PCA, continually removed as they try to occupy other suitable habitat in Wyoming and Idaho. This is not a recovered and robust population of animals, but one that is heavily dependent on hoped-for but unlikely circumstances, such as the ability to find new major food sources and to be 'accepted' by an ever-increasing number of humans, as well as the compliance of a large group of state and federal agencies in following non-binding measures.”
- “Finally, although FWS and Schwartz acknowledge that a recovered population must contain at least 500 individuals, and a corresponding 48 Females with Cubs of the Year (FCOY), the Rule lists the current six year average for FCOY as only 40. Nevertheless, the Service continues to claim viability and recovery have been achieved.”
- “Demographic Recovery Criterion 1 - (Maintain a minimum of 15 unduplicated females with cub-of-the-year over a running 6-year average) it appears likely that the criterion, as stated, has been met and that the inventory approach applied is sufficient. However, there remains the question of whether or not this criterion was sufficient in the first place.”
- “Significant portions of the proposed DPS have few or no bears, and thus by definition the grizzly bear is not recovered in those areas.”

302 – POPULATION GROWTH RATES AND SLOW REPRODUCTION

Respondents commenting on population growth rates generally feel that growth rates for grizzly bears are very low, and that managers should be cognizant of that fact. One respondent states that the population growth rate outside of the PCA is negative. Another respondent observes that the 4% to 7% annual growth rate reported by the USFWS does not adequately represent the uncertainty around this estimate.

- “The Yellowstone grizzly bears have a negative population growth rate outside the current Recovery Zone, and hence are in danger of extinction within this portion of their range.”
- “In reality, the cause of these differences in population growth rate could simply be sheer road density and numbers of people. This points to the importance of private land development and the lack of control managers may indeed have, both over the current situation and any future situations that may arise.”

- “Given the low reproductive rate of grizzlies in comparison with other species, such as the wolves that have been successfully reintroduced to that ecosystem, deaths of adult females would be especially egregious.”
- “A population of 600 of anything with a 4-7% annual growth in numbers is tenuous at best”
- “FWS estimates for rates of reproduction and survival and models of population dynamics include numerous measurements, each of which has its own levels of uncertainty. Combining these factors compounds the levels of uncertainty. FWS fails to provide a clear idea about how cumulative uncertainty affects the uncertainty estimates for population size and growth rates.”
- “By ignoring, at key junctures, the alternative hypothesis that any increase in bear populations in recent years was due to favorable environmental conditions not likely to persist in the future, the draft rules incorrectly attempt to infer causation from correlation”
- “Grizzly bears are the second slowest reproducing mammals in the Western Hemisphere. Their numbers can plummet quickly.”

303 – SUFFICIENT HABITAT TO ENSURE A VIABLE POPULATION

A frequent belief expressed by respondents commenting on the habitat sufficient to ensure a viable population is that grizzly bears “need more habitat with less human disturbance”. Many other respondents contend that the Primary Conservation Area, as currently delineated, is too small to support a viable population, and that the area outside of the PCA lacks sufficient regulatory mechanisms to function as suitable habitat. A few people point out that because one-third of the bear population occurs outside the PCA there is little or no protection.

Some respondents who support delisting when the time is right say that should not happen until permanent protections are in place to protect grizzly bear habitat to ensure long-term survival.

A few respondents take exception to the 1982 Recovery Zone boundaries remaining the basis for the 1993 Yellowstone recovery zone boundaries, the PCA, and the delisting proposal. These respondents believe the Recovery Zone boundaries were based on incomplete and inaccurate data and unresolved differences regarding appropriate standards for assessing occupied habitat.

One respondent does not want bears outside the Primary Conservation Area and suggests that a more acceptable number would be 400 rather than 500.

- “When the Grizzly Bear Recovery Plan was developed, the Yellowstone recovery zone was an estimate of those places where grizzly bears currently resided or where they could exist without generating conflicts with established developments and human activities.”
- “How do you justify your claim that the ‘primary conservation area’ (formerly the ‘recovery zone’) has a sufficient population to ensure ‘persistence’ for the ‘foreseeable future’ when at least a third of the bear population is outside of the ‘primary conservation area?’”
- “FWS’s delisting proposal is based primarily upon an allegedly increasing grizzly bear population without regard to habitat status and threats. FWS cannot rely on historic population trends as a guarantee that sufficient habitat is being provided for grizzly bears under the Conservation Strategy.”
- “Not only does the proposal designate a recovery zone that is far too small to accomplish the task of supporting a recovered subpopulation, it also fails to use a scientifically valid mechanism to determine those boundaries.”

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- "The 9,200-square-mile PCA is large enough to include only 6 non-overlapping home ranges of adult male grizzlies, and 20 of adult females. Thus, simple geometric considerations demonstrate that most adult Yellowstone grizzlies will encounter the edge of the Yellowstone habitat island at some point in their life, with a consequent increase in mortality, Schwartz, et al. (2005)."
- "Certainly, grizzly bears should be removed from the endangered species list when the time is right. That will not be the case until permanent protections are put in place to preserve their habitat and ensure their long-term survival..... The artificial boundaries of Park protection would have to be removed so as to eliminate these 'islands of refuge,' against which human habitation now exists. Being plains beasts by nature, they would have to be able to seek homes on the prairies and plains of the country, as well as in their current mountain homes. They would need to be totally protected from any human harm. Good luck!"
- "...the 1982 FWS Recovery Zone was not only designed to support an unsustainably small population of 229 bears, it was also based on incomplete and inaccurate data and unresolved differences regarding appropriate standards for assessing occupied habitat. While the 1982 recovery plan contemplated further ""refinements,"" the originally drawn recovery zone remains the basis for the 1993 Yellowstone recovery zone boundaries, the PCA, and the delisting proposal."
- "What it does not state is how many bears are within the park itself and whether those protected bears will be able to replenish the species to the same level of success seen in the last 30 years."
- "If we truly want this magnificent species to be safe and secure, we will have to let it re-take more of its ancestral range."
- "FWS repeatedly claims that the Primary Conservation Area ('PCA') alone is sufficient to support a recovered grizzly population, implying that the boundaries of the PCA are the product of scientific analysis. See 70 Fed. Reg. at 69860, 69872. That is simply not the case. The PCA is the product of historical accident and political compromise, not scientific analysis."
- "Guidelines for restricting road building and development would exist on federal lands within the Primary Conservation Area (PCA, formerly the Designated Recovery Zone (RZ)). By limiting such restrictions to the PCA, the proposed rule in effect asserts that this portion of the DPS constitutes a reserve of adequate size to maintain a self-sustaining population of grizzly bears in perpetuity with no significant risk of extinction, and that this criterion meets standards for recovery under the ESA."
- "Given the magnitude of expected fluctuations in demographic and environmental factors, management of grizzlies after delisting does not ensure sufficient habitat beyond the PCA to act as a buffer for potential fluctuations in carrying capacity within the PCA."
- "If habitat quality were to remain high in the places where bears live today, and if bears were allowed to expand into additional suitable habitat in the ecosystem, a significantly larger number of bears could be sustained in Greater Yellowstone. It is the duty of FWS to do what is necessary to ensure the long-term survival of the Yellowstone grizzly. The best way to do that is to allow for reoccupation of all remaining suitable habitat in the ecosystem."
- "The bears are being forced out of the large spaces that they need to successfully reproduce."
- "We prefer that the grizzly bear not be allowed outside the Primary Conservation Area and the viable number be 400 rather than 500. It has been stated that the PCA will sustain this viable population."
- "Grizzly bear habitat inside the PCA has some measure of protection under the proposed rule. Thirty-four percent (34%) of the DPS's occupied grizzly bear range, however, lies outside of the PCA (Schwartz et al. 2002, 2005b), with little or no protection."

- “The PCA is not capable of supporting a viable grizzly bear population under current conditions and will be less able to support a viable population under future conditions.”
- “The US Forest Service would limit habitat protections for grizzly bears to the Primary conservation Area (PCA), which encompasses about 66% of current grizzly bear range. These habitat protections are discretionary and non-binding and are thus subject to FS policy changes. Post-delisting management would effectively confine the grizzly bear population to the PCA. This area is probably inadequate to support a long-term viable population without intensive management.”
- “Under the proposed rule, guidelines for restricting road building and development would exist on federal lands within the PCA, and little or no restrictions are placed on lands outside PCA. By limiting such restrictions to the PCA, the proposed rule in effect asserts that this portion of the DPS constitutes a reserve of adequate size to maintain a self-sustaining population of grizzly bears in perpetuity with no significant risk of extinction, and that this criterion meets standards for recovery under the ESA. The PCA, however, contains only 66% of currently occupied range and only about 86% of the current population of grizzly bears within the Greater Yellowstone Ecosystem.”

304 – MORTALITY CONTROL

Nearly all respondents commenting on mortality control are concerned that grizzly bear mortalities will increase after delisting. Many contend that small populations of bears tend to experience significant variation in annual mortality rates and are likely to decline and go extinct. Some respondents are concerned that transferring management to the States will have an adverse effect on bear mortality. They are particularly wary of the State of Wyoming. One respondent points out that because no one knows for sure how many bears are in the area that the actual mortality rate is unknown.

- “The proposed rule claims that human-caused mortality of grizzly bears will be kept to a numeric threshold described in the Conservation Strategy, yet Wyoming officials have stated that they will use hunting to limit the population to an arbitrary level.”
- “We've spent years trying to bring the numbers back and bring them out of jeopardy - that can all be changed with just a few careless killings.”
- “Small populations of bears tend to experience significant variation in annual mortality rates and are likely to decline and go extinct. In the Yellowstone grizzly bear population, this anticipated annual variation in bear mortalities is exacerbated by increased bear-human conflicts and mortalities in years when whitebark pine seed cones in remote, high-altitude areas are not abundant. Managers need to provide further protections to minimize mortality for Yellowstone bears to buffer this added extinction risk.
- “Similarly, the Conservation Strategy provides that ‘[o]nce population and distribution goals have been met, the mortality standards will be reviewed and revised as necessary using the best available information and science to meet these population goals. All management of and information on mortality management will be open to full public review.’ See Conservation Strategy at 34. Because the Conservation Strategy has set the population goals at limits that have already been achieved (e.g. a goal of maintaining 500 bears in the GYE), the Conservation Strategy appears to allow for immediate revision of mortality limits upon delisting.”
- “There are not yet enough numbers to withstand the additional killing that is sure to go on if/when they're removed from listing.”
- “...no one really knows how many bears are out there and two, no one really knows what the mortality rate is.”

- "FWS plans to establish a system that would allow states to 'trade' mortalities, so that if one state exceeded the limits, another would compensate by permitting fewer mortalities... as indicated in comments at recent grizzly bear meetings, as well as newspaper articles, Wyoming is likely to take advantage of the situation by elevating its allowable level of mortality, assuming that Montana and Idaho will pick up the slack, because of their more liberal policies allowing bears outside of the PCA."
- "Too many grizzly bears will be allowed to die. Grizzly bear mortality should not increase under state management. The Conservation Strategy allows the bear population to drop to 500 bears. This could prevent a resilient, healthy bear population from thriving."
- "Wyoming contains the vast majority of the Yellowstone population, and Wyoming officials have made repeated public statements that mortality will be increased to levels that exceed limits established in the Conservation Strategy"

305 – NEGATIVE ATTITUDES TOWARD GRIZZLIES

Numerous respondents express their concern about what activities the States will condone regarding the killing of grizzly bears. Several people refer to the intention of four counties in Wyoming, and Fremont County in particular. Those respondents fear that local residents or governments would begin killing grizzly bears after delisting.

Other respondents disagree with the claim in the proposed rule that delisting will increase the tolerance of local residents for grizzly bears. They claim that the literature cited in support of that hypothesis in the proposed rule is not relevant to delisting in the Greater Yellowstone Area.

A few local respondents favor the passage of local ordinances banning nuisance grizzly bears. They feel expanding grizzly bear populations and range will negatively affect their safety, customs, culture, heritage, and economic viability.

- "Someday, hopefully, when the people of Wyoming, Montana, and Idaho are ready to live in harmony with bears, and the number of grizzlies in the Yellowstone ecosystem is at a sustainable level, we will be ready for delisting."
- "Removing federal protection from grizzly bears at this time is a very huge mistake. Local support for bears is here, but mostly in a segment of the population that has little political influence."
- "The hostility of the Wyoming Game and Fish Commission and four Wyoming counties, which have passed laws prohibiting bears within their borders, demonstrates that federal oversight is still necessary to protect grizzlies from unsustainable mortality---the problem that lay at the core of the original listing decision."
- "It is understandable that local residents are irritated and fearful of the bears, but as human beings, we are capable of recognizing any threats in our surroundings and we always have opportunities to move elsewhere. The bears do not have the same option."
- "The HSCFB [Hot Springs County Farm Bureau Federation]...agree with others who insist that Local Plans, adopted by legally elected officials acting in accordance with State law, must be given the same standing as State Plans, especially when Local Government has used the public hearing process."
- "The proposed rule wrongly assumes that delisting the grizzly bear will build social support and tolerance for grizzly bear recovery and the Endangered Species Act. The research cited does not support FWS's argument that people will be more supportive of grizzly bears if they are no longer federally protected."

- “There has been, to my knowledge, no strong social science research on the question of whether de-listing would foster greater tolerance of grizzly bears in the Yellowstone Ecosystem. This would be useful information. However, if the Conservation Strategy is fully implemented after de-listing, it would appear that local people are NOT necessarily going to have greater discretion and flexibility in dealing with grizzlies, since habitat protections, food storage regulations, and limits on mortality are slated to remain in place. Local people may, in fact, end up feeling duped - insofar as they expected grizzly delisting to dramatically change how many and under what circumstances they could kill grizzlies.”
- “The US Fish and Wildlife Service and the State of Wyoming appear to condone Wyoming county laws prohibiting bears within their borders. Four counties in Wyoming have passed laws barring bears within their borders. Fremont County has already requested that its county sheriff start killing bears. These counties will have more authority over grizzly bear management after delisting.”
- “Local hostility to grizzlies remains a serious problem, especially among Westerners and agricultural people (so-called), who retain the virulent anti-wildlife attitudes that wiped out grizzlies in the first place during the 19th Century. Three counties in Wyoming have actually banned grizzlies.”
- “If people don't want these bears as neighbors, they should live and/or recreate elsewhere.”
- “Long standing, deep seeded fears regarding bears (and wolves) control the emotions of many residents, and their reactions to these animals are as much based on myth as are the emotional reactions of those who want to protect them. Local concerns should not have sway over the fate of natural treasures like the Brown Bear.”
- “According to Fremont County, its powers under the state's land use planning legislation trump the bear management responsibilities of Wyoming's Game and Fish Department (WGFD”). See Fremont County Resolution 2004-20 (December 14, 2004). It is evident that the Wyoming counties that contain the majority of the bear's habitat have determined to do everything in their power to thwart the bear's successful recovery. In light of such hostile, anti-bear county ordinances, there are clearly no ‘adequate regulatory mechanisms’ in place to protect Yellowstone grizzly bears in the event of delisting.”
- “One county has even instructed its sheriff to begin shooting the grizzlies. Until the bear is delisted, this would be a federal offense. The county laws are certainly not a reasonable way to manage bear/human conflicts and should not be condoned by the Service. The plan to delist operates to condone these laws and will likely encourage additional local efforts to destroy the bears.”
- “The only habitat connectivity between suitable habitats lie to the west through to the Selway-Bitterroot ecosystem, through the area southern Madison Range, Gravelly Range, Centennial Range, Snowcrest Range and on into the southern Bitterroots. This is pretty hostile territory for bears, and rumors of shoot, shovel and shut up activity in these connecting ranges were running through discussions among conservationists in the mid-90s. I have no reason to not believe these accusations.”
- “The state legislatures of all three states are totally dominated by livestock raising interests. These people have never ceased to express their hostility to the presence of grizzly bears, and wish for their extinction.”
- “The expansion of the grizzly bear into Fremont County is not acceptable. Expanding grizzly populations and range will negatively affect our safety, custom, culture, heritage and economic viability for generations.”

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- "However, local governments at the county level have notoriously opposed recovery of the species both in word and deed. Four counties which comprise most of the primary conservation area are on record in varying degrees in opposition to recovery of the bear. Most notorious is Fremont County in Wyoming which has outlawed the bear and directed county officials to destroy the animal. That county is currently very politically unstable and is advocating criminal actions which exceed the sovereign power of that level of government."
- "I am very happy to hear that bear population in Yellowstone has reached a point where officials feel that they can be de-listed. However, with that comes a bit of trepidation at the thought of them losing their endangered status, due primarily to the attitudes of local residents, ranchers and hunters regarding the bears. I feel that the endangered status does prevent some of the more law abiding citizens in the area from being tempted into shooting grizzly bear for whatever their reasons"
- "When the people residing in those states where the grizzly bear recovery program is taking place show a clear understanding and willingness to co-exist with bears, only then will delisting be appropriate."
- "Park, Fremont, Sublette, and Lincoln counties in Wyoming have passed ordinances which highlight the insufficiency of the State Management Plans as regulatory mechanisms. Those ordinances effectively state that grizzly bears will not be tolerated in those counties, declaring that grizzly bears as 'unacceptable species' from which the counties' citizens must be protected. Fremont County recently stated that Wyoming's Grizzly Bear Management Plan was inconsistent with the county's land use plan, and declared Fremont County off limits to grizzly bears. This approach to grizzly bear management does not bode well for the continued recovery of the species after delisting."
- "A minority of vocal citizens in Wyoming mounted increasing opposition to grizzly recovery and occupancy in their state over the last few years. The following are examples of comments from a WGF meeting in Riverton, WY on Dec. 13, 2005: 'Why can't you push bears north into Montana and Idaho? Get 'em out of Fremont County!' 'Why don't we just put 500 bears on a refuge? You can buy our cows to feed to the bears.' Here are a few examples of comments on the Wyoming occupancy proposal: - 'There should not be grizzly bears anywhere; they are not needed.' - 'The [Game and Fish] department is sponsoring bears as terrorists.' - 'Grizzly bears outside [the] Primary Conservation Area should be considered predators and be killed.' - 'I will kill every bear I see as long as I live.' - 'The bottom line is they are trying to put grizzly bears in our County. This is where we need to draw a line in the sand.' (Scott Luther, Fremont County Commission Chairman.)"
- "FWS misinterprets another core message in Kellert's 1996 paper. Among those who harbor negative views about grizzly bears, including some rural residents and livestock producers, Kellert notes resistance to government regulations, such as access. But the delisting rule maintains that it will continue access standards and other restrictions on development. Thus, delisting does not address the factors most often cited for opposing grizzly recovery. Its efforts to placate bear opponents by promoting delisting will likely fail."
- "The legislative bodies of Idaho and Wyoming are openly committed to the destruction of any grizzly bear inside their jurisdiction outside of the PCA."
- "Let it be stated here for the public record that the majority of the government cooperators have signed--somewhat illegal and certainly unethical--resolutions in their counties banning grizzly bear occupation. And these people will do what ever they can to keep bears from occupying the habitat necessary for critical expansion."
- "The paring back of acres to a 'primary conservation area' leaves grizzlies unprotected in lands owned by people often hostile to bears. I fear more loss via the local mentality of 'shoot, shut up, & shovel.'"

306 – WILL DECLINE OR GO EXTINCT WITHOUT ESA PROTECTIONS

Many respondents maintain it is only a matter of time before grizzly bears in the Greater Yellowstone Area go extinct if they are not protected by the Endangered Species Act. Similarly, many respondents feel that, at the very least, the Yellowstone grizzly bear population would decrease significantly if delisting occurred.

- “Delisting without a Federal plan to maintain the recovery will only lead to a significant reduction in the current population and compromised habitat.”
- "If we delist them, we will once again put them in danger of low numbers and history will repeat itself."
- “Management directives that have no way of enforcing compliance are whimsy, and I am convinced that delisting as per the proposed rule will bring decline if not eventual extinction of GYE grizzlies.”
- “Bad idea they will be destroyed in 5 years.”
- “The bottom line is, once they are removed from the Act, their end is near....and there will be no undoing it.”
- “If the grizzly bear is taken off the endangered list it will just be a matter of time until they will have to be put back on. Man’s greed will see to it.”

307 – AGAINST DELISTING FOR VALUE-BASED REASONS

Many respondents who oppose delisting phrase their comments in moral, spiritual, or ethical terms. They express what grizzly bears mean to them personally and why the USFWS should or should not move forward with the delisting proposal. Respondents do not draw a distinction between delisting, extirpation, and extinction. They often state their objection to local extirpation of grizzlies in the GYA, or more generally to their range-wide extinction, but the term “delisting” is not necessarily used in the value-based sentences of their comments. Nevertheless, value-based statements appeared in emails or letters that left no doubt that most of the respondents oppose delisting.

- “It is noble to protect grizzlies and it is our moral duty.”
- “God gave us stewardship of the earth, we were not supposed to destroy its creatures.”
- “Since man has taken over dominion of this planet we have a duty to be responsible stewards of the other species we share this earth with.”
- "Grizzly bears, like the eagles, cougars, turkeys and other animals are not only the symbol of our country, they are the very fabric of our environment that we so greatly need... and abuse. Do something right, protect all wildlife."
- “The Yellowstone grizzly bear is an irreplaceable part of America's natural heritage, a symbol of the independence that defines the American character and an icon of all that is wild and free.”
- “They deserve more than this from us. They deserve a right to live without fear of eradication”
- “God never meant for bears and people to live in the same neighborhood”
- "What must change is our attitude toward nature in general. We must stop our encroachment on all forms of nature and develop our civilization in a more consolidated and ecologically harmonious

manner. The pressure to eliminate 'inconveniences' such as the Grizzly and other large predators must be reversed and viewed as 'a point of guidance', instructing us that we must eliminate our adverse impact on all natural things by changing our goals and methods of civilization."

- "Remember that the Book of Genesis requires us to safeguard creation."
- "Animals, fish, and birds were placed on this earth by God, and man is removing them from the earth"
- "It's immoral and Un-American to expose God's creation to exploitation and destruction."
- "...A grizzly bear has significance in and of itself, an intrinsic value that is not manifest simply because humans are witness to it. A grizzly bear has a right to pursue its own good in its own way unrelated to humans."
- "At the most fundamental level the issue of whether to remove protection for the few remaining grizzly bears in the GYE is a moral issue. Will these magnificent animals be respected and allowed to live and (hopefully) increase in numbers, or will they be consigned once again to destruction so that they can become rugs on floors or ornaments on walls and their habitats can be exploited? Can't FWS rise above the killing mentality and provide these bears with the continued protection that they need and deserve? Do moral values really mean anything to this Administration, as so frequently stated, or are those moral values, even if meaningful, inapplicable to our precious wildlife that is struggling so hard to survive?"
- "It is obvious that the Grizzly bear is the latest target for those who believe man has dominion OVER nature."
- "It is becoming more and more difficult as we humans continue to encroach on their habitat. Our family practiced living with and beside nature without taking more than our share."
- "No person has the right to put their financial or personal safety before an endangered species."
- "My wife and I want our grandchildren -- and yours, too! -- to have at least as much opportunity as we do to enjoy nature and all its varied and wondrous wildlife all over the world. Fortunately for us, we can afford that kind of travel, but no amount of money can replace what has already disappeared or been destroyed. The world simply cannot afford to lose any more of its marvelous creatures or their precious habitat."
- "Until the grizzlies roam the Great Plains again and freely hunt antelope and bison (as they once did prior to European destruction of all native ecosystems in North America), we should offer continued protection to ensure they will continue to grow."

308 – POPULATION SIZE AND HISTORICAL RANGE

Most respondents contend that the estimated population size to allow delisting is too small compared to historical population sizes. Many respondents also commented on the historical distribution of the grizzly bear and maintain that because grizzlies in the lower 48 are confined to just 1-2% of their historical range, they cannot be considered recovered. One respondent believes that the reason more bears have been sighted in recent years is because there are more people in the GYA available to observe them. A few respondents say that the size of the grizzly population is uncertain, in spite of all the research that has been conducted to estimate it. Several question whether 600 bears is an adequate number to remove grizzly bears from the endangered species list.

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

One respondent states that the USFWS has not demonstrated that the purported increase in population size over the past 30 years was due to improved management. If the population did actually increase, it could have been due, for example, to temporarily favorable food supplies.

Another respondent says that even though the population of bears will never go back to Lewis and Clark's days of 50,000 bears, there is a viable population in the Greater Yellowstone Area.

- "I realize that grizzlies have grown in numbers during their time as 'protected' status and they have been a nuisance to area ranchers, but the grizzlies still need protection"
- "Until significantly larger amounts of habitat are significantly more protected none of these animals and plants have the possibility of approaching their historical levels of population."
- "Still, grizzlies today remain at only 1 percent of their former population levels in the American west. According to experts, current numbers of 500-600 bears in Yellowstone National Park, and 1,00-1,500 in the lower 48 states are still too low to ensure that the bear will be alive for future generations to experience."
- "An isolated grizzly bear population of 500-600 bears is not a biologically recovered bear population. In order to withstand regional-scale stochastic events and to provide for genetic diversity, a population of 2,000-3,000 bears is needed. The grizzly bears are currently listed as a threatened species throughout the lower-48 states. Recovery efforts should focus on reconnecting Yellowstone-area bears to bears in the Glacier Park/Bob Marshall area and a stable population in central Idaho in order to achieve metapopulation dynamics and promote long-term recovery."
- "If there were thirteen hundred 'Griz' instead of six hundred, then perhaps it would be time to think about delisting."
- "600 bears isn't enough to take them off the endangered list"
- "The FWS needs to conduct a viability analysis to determine the minimum number of bears needed to sustain a population. Most experts agree that without at least 1,000 bears, long-term prospects for survival are not good."
- "In their 30 years of protection under the ESA, the number has increased to only about 600 in the GYE. I repeat - only about 600, when at one time there were tens of thousands. This, to say the least, is hardly a success story, despite the self-laudatory claims by Secretary of Interior Norton and some FWS personnel to the contrary."
- "How pathetic an argument the U.S. Fish and Wildlife Service raises in saying that the 600 bears the population is now fully recovered and able to live without protection"
- "Thirty-one years after the Endangered Species Act (ESA) was enacted, the government has decided to remove grizzly bears from the list, even though there are only 600 bears nationwide"
- "...the reason that so many are sighted is human encroachment."
- "With less than 1% of the former grizzly population remaining and less than 2% of the original land base occupied, we feel that it is too soon to delist."
- "A population, to be considered recovered, should be a source of bears. In other words, bears should be spilling out of the area seeking new habitat to occupy. This has not yet occurred in the greater Yellowstone ecosystem."

- "While the population of bears is not and will never be back to Lewis and Clark's estimated 50,000 bears, there is a viable population inhabiting the Greater Yellowstone Area (GYA)."
- "While the Yellowstone bears have been the subject of many studies and research, their number is uncertain."

309 – ABILITY OF STATES OR FEDS TO MANAGE DELISTED POPULATION

Respondents commenting on the ability of the states or the federal government to manage a delisted grizzly population are overwhelmingly distrustful of the intent or abilities of Wyoming, Idaho, and Montana to manage grizzly bears. Those state governments are viewed by many as being unduly influenced by in-state money and in-state issues. Numerous respondents are opposed to state management because, historically, people in those states actively pursued extirpation of predators. Several respondents also point to the failure of the States of Idaho and Wyoming to develop management plans for the wolves. These respondents feel this is not a good indication of how the grizzly bears would be managed after delisting.

Several respondents take exception with the State grizzly bear conservation strategies, particularly with the use of the term "biologically suitable and socially acceptable." These respondents view the term "socially acceptable" as having no basis in law as a recovery criterion and feel it interjects a significant element of political bias into the recovery process.

A few respondents doubt the ability of the federal land management agencies to manage the habitat of a delisted bear population, and one respondent doubts the ability of the National Park Service to manage Yellowstone National Park.

Some local respondents feel that the states are entirely capable of managing a delisted grizzly population.

- "Wyoming officials made ample public statements during the past year that grizzly bears would be aggressively managed and hunted to reduce the population both in number and in range. Certain Wyoming counties have also passed ordinances prohibiting grizzly bears within their borders. We are concerned that without federal oversight, Wyoming and perhaps the other states may lack the authority and commitment to maintain grizzly bear mortality at or below sustainable levels."
- "Recognizing that differences between state approaches could undermine grizzly bear recovery, FWS established an ecosystem-wide approach to manage population and mortality limits at the time of listing. Now, under pressure from Wyoming, the agency is reversing this approach, adopting one that will increase the difficulty in maintaining allowable mortality limits. If the process is so vulnerable to political manipulation in Wyoming now, what will happen after delisting, when the state is in charge and federal oversight is removed?"
- "The ESA is a proven and valuable conservation tool, and the GYE grizzly bears are one of its signature success stories. At this point it would be a travesty to toss the fate of this recovering species to states that have not yet demonstrated the fiscal or long term conservation commitment to preserving the recovery of the Yellowstone grizzly."
- "In my opinion, Idaho will never be a safe place for grizzly bears. Even with the current ESA protections grizzly bears are illegally shot and killed each year. Fremont County in eastern Idaho continues to live in an alternate reality by essentially refusing to enact any sort of regulation governing garbage and bear proof containers. At any one point during the summer season, up to 30,000 people can be found in Island Park, ID, yet county commissioners refuse to take seriously the presence of grizzly bears in this important area. I am convinced Island Park will always be a dead zone for grizzly bears unless ESA protections continue to be in place and the USFWS actively works to protect the bear within this geographic unit."

- “Wyoming is attempting to change the rules to kill more bears before the ink is dry on the delisting rule. Such behavior demonstrates why federal oversight on grizzly management is still necessary.”
- “The governors of Montana, Idaho, and Wyoming in 2001 appointed a 15-member citizen roundtable to review the Draft Conservation Strategy for the Grizzly Bear in the Yellowstone Area developed by the interagency Grizzly Bear Committee. One of the recommendations of the panel, echoing the language of the Conservation Strategy, was to ‘support the expansion of grizzly bears beyond the PCA, into areas that are biologically suitable and socially acceptable’ (italics added). This language: ‘biologically suitable and socially acceptable’, was subsequently incorporated into the State grizzly bear conservation strategies of each of the States. In our reading, there is no equivalent language in the ESA: recovery criteria are entirely based upon biological criteria, and rightly so. This language, particularly the phrase ‘socially acceptable’ has no basis in law as a recovery criterion, and we feel that it interjects a significant element of political bias into the recovery process.”
- “Finally, the past action of the surrounding states regarding grizzly bear management left much to be desired. Wyoming’s Game and Fish Department, for example, allowed bear baiting with carcasses and other bait on the very borders of Yellowstone. Has such bear baiting been prohibited?”
- “The state of Wyoming needs to accept the fact that it is no longer necessary to kill grizzlies on sight. The stock-growers in that area also need to come to that conclusion. It is the 21st century...not the 19th century.”
- “The failure of Wyoming to produce an acceptable wolf management plan leads me to believe that there is a good possibility the grizzly population will not be protected in Wyoming and will decline sharply and rapidly if delisting is allowed.”
- “The three states where management plans will be developed (Idaho, Wyoming, and Montana) may not manage the bears in a reasonably similar way. The States of Idaho and Wyoming have been regressive in their plans to manage wolves, and they will probably do the same for the grizzly bear, which would then hasten their being re-listed on the Endangered Species Act.”
- “In our assessment of the State Conservation Plans we concluded that they were adequate for the preservation of the grizzly bear in the GYE---if implemented as stated. We share concerns of some opponents of delisting, however, about the political future of bear management. It is troublesome that the States are anxious to reclaim legal authority to manage grizzly bears, but continue to look to the Federal government for funding of the effort. This highlights the basic conflict between views of bears at the local level (town, county, and state) versus the national view as expressed by Federal actions through the ESA (Clark et al. 2005). It is difficult to manage in the context of a conflict between authority and responsibility. Furthermore, it is difficult to justify compelling a State to fund a program that favors a national view over a local one. This disconnection between who pays and who benefits is a thorny one for the management of Yellowstone grizzly bears.”
- “The biggest unknowns include the respective agencies’ long-term commitment to sustaining the grizzly population outside the PCA, and that ability to adequately fund the state management programs.”
- “Another issue is the long-term commitment of the adjacent national forests to manage their lands in a way that is compatible with sustaining an expanding grizzly bear population.”
- “I strongly support the de-listing of the grizzly bear and allowing the local states to manage this natural resource as they best determine. The less federal government we have involved, the better long term prospect the bears have for protection.”

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- "I do not trust the states of Wyoming, Idaho, and Montana to take over adequate protection. Protection should remain a federal function."
- "The individual states will never come up with coherent or consistent policies for managing wildlife, let alone at risk wildlife, and the federal government must ensure that these species are protected from further threat of extinction."
- "I agree that the grizzly bear should be taken off the endangered species list in the Yellowstone region and that each state in the region will be able to adequately protect the bear."
- "States are too heavily influenced by local money and politicians and cannot deal with a situation that must be considered as a whole and not separate."
- "I am fully aware of the economic forces that generally guide BLM and Forest Service land management activities. Until I see strong evidence on the part of these agencies that they will continue to give top priority protection to the designated Grizzly Bear Habitat with the bears removed from the ES list, I must oppose the delisting."
- "National forest 'guidelines' are just that. USFS managers can easily rationalize deviations from them, as I have seen time and again over the past 2 decades. Recent federal rules allow Forest increasing latitude to set aside standards and environmental reviews. Furthermore, words that seem to mean something plainly can be re-interpreted by forest managers, e.g., 'annual monitoring' could mean spreading the effort out over 10 years so that only a tiny bit is done in any given year."
- "While the WWF realizes there is a diversity of opinions as to whether or not Grizzly Bears should be delisted, we believe that the State of Wyoming, and other states wherein Grizzly Bears occupy habitat, are committed to ensuring the long term viability of this dynamic animal."
- "There are not enough safety measures in place to ensure that management by the states is adequate to ensure this fragile continuation of the grizzly survival."
- "I used to belief in our parks but lately with the slaughter of our bison without there being any brucellosis tests or spring counts, or any protection just load um' up and kill um', that I'm now angry at the Yellowstone officers, and now the bears have no place to go, surrounded by people and all their goods, they're barely hanging on as it is."
- "FWP is firmly committed to the success of this recovery effort, and it is FWP's intent to not only maintain a recovered population, but provide for ongoing increases."
- "the effected states are more than capable of effectively managing the population with in their respective states."
- "The primary reasonability of caring for and protecting grizzlies will be transferred to the States of Wyoming, Montana and Idaho. Considering the hostility that these state governments have always shown toward grizzlies living within their boundaries some would say that the henhouse is being turned over to the care of the foxes. None of these states has ever shown an interest in or willingness to invest the resources necessary to monitor and safeguard grizzly bears. In fact, the record shows the exact opposite."
- "In the current anti-environment, pro-business climate, people can't be trusted to do the right thing."
- "Let the states take care of it and the bears will continue to prosper."
- "Idaho and Montana are no different than Wyoming when it comes to the killing of wildlife. Idaho decided a year or two ago that all wolves should be 'removed' from the state and made a comparable

decision more recently. Montana, as a matter of policy, allows the killing of bison that dare to step outside Yellowstone National Park even though there has never been a proven case of brucellosis transmitted by bison to domestic cattle."

- "If grizzly bear management is shifted to the states the adoption of a program is now in the hands of state governors and state legislatures where special interest groups have deeply rooted influence. This flies in the face of the science which recognized habitat zones which cross state boundaries. The federal government should be the 'hammer' regarding interstate issues."
- "At the rate the Bush Administration is going in destroying every safe-guard set in place in the last 50 years for animals and land preservation nothing much will exist in another 50 years. When will someone step forward and say enough is enough to the petroleum interests, the cattle interests, the mining interests, and the recreation and hunting interests."
- "Your agency is involved with the state of Wyoming as to how to best manage wolves. Wyoming officials don't seem to be moving from their 'the Feds be damned' stance."
- "...as demonstrated by the Yellowstone wolves, managers in Wyoming are hostile towards predators and are not willing to sustainably manage endangered carnivores."
- "Further, robust populations of black bears and mountain lions in these and all surrounding states demonstrates the states interest, willingness and ability to manage large carnivores on a sustainable population basis in meeting their statutory responsibilities for the conservation of fish and wildlife within their borders."
- "I applaud your decision to return control of these animals to the respective states. This will be good for wildlife and humans in the area."
- "The state game departments on whose shoulders will fall the responsibilities for protecting the bears are not much better. Their history on this issue can only be described as one of hostility toward bears. State game departments tend to focus almost exclusively on 'hunnable' game species and either totally ignore non-game animals or actively persecute predatory species (such as wolves and grizzly bears) that kill game animals."

310 – DON'T TRUST MOTIVATIONS BEHIND DELISTING

Numerous respondents resort to frustrated name-calling to express their perceptions of the motivations behind delisting. Several respondents point fingers at other interests and various government agencies claiming they are exerting undue influence in support of delisting. Respondents who are distrustful of the motivations behind delisting feel that some level of the federal government is promoting delisting to please a political constituency or to obtain an economic advantage. They usually suspect this undue influence is related to resource extraction or commercial and residential development of grizzly bear habitat. Many respondents claim that the proposed action reflects the government's loyalty to extraction industries.

One respondent distrusts the motivations of federal agencies responsible for the development and use of the population estimation method based on unduplicated counts of females with cubs-of-the-year. Another respondent sees a link between the proposed rule and a broader effort to slow down the listing of more species.

One respondent whose views on delisting are unclear is suspicious of the motivations of local federal employees involved in grizzly bear recovery in the GYA.

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- "Now they (U.S. Fish and Wildlife) are going to cut and run after the damage to the ecosystem has become evident and Pandora's box has been opened and they have collected a government paycheck for promoting their own job so they could work on their own thesis and go hiking around in the Greater Yellowstone Area... These college-educated idiots can retire with a government pension now and the rest of us are stuck with their folly."
- "These government agencies are becoming very dictatorial control freaks. Many of the personnel have become a bunch of anti-business, granola-crunching, hippy dressing, and liberal leaning rag tag band of neo-environmentalists or closet environmentalists. National Forests in this area have completely forgot their roots as supporters of the National forest System to be a multiple use Agency with multiple uses on the National Forest Lands."
- "What have you got against these bears? They are a life worth saving, so why aren't you on the side of the Grizzlies? How much 'money' did it take to not side with them and did the honor you have suffer for it? Only you can answer that. Do be honest when you do, and when you do, look in the mirror."
- "This should not be about money or politics, but I see this as part of the administration's larger goal to weaken the ESA at the expense of the nation's wildlife."
- "Trust between government and the citizen is very important and if we cannot trust the government to keep its word in this case, trust in all matters will certainly be negatively affected."
- "We are concerned about the objectivity of the pro-development, pro-delisting Yellowstone Grizzly Bear Coordinating Committee (YGCC) which will be assembled after delisting to manage the grizzly. The committee will be comprised of people committed to the delisting agenda. No independent outside parties or representatives of national interests have been included. Their process will also be politicized, in part because three county commissioners are involved... In addition, there is also very little opportunity for the public to be involved in this process."
- "The FWS is finally succumbing to pressure placed on it to delist from ranchers and, more importantly, the deep pockets of developers committed to unchecked urban sprawl."
- "...the removal of animals from the list is a direct effort to turn over protected areas to developers and others that would abuse the environment and wildlife for profit and personal gain."
- "Is this yet another example of the Bush Administration ignoring science for political ideology? Will your agency buckle under, like so many others, to the corporate win-at-all-costs mentality, regardless of the harm to our environment and its wildlife?"
- "It is ridiculous to see those who are supposed to be protecting our parks and the wildlife that inhabit them turn on them; what do you think you will be remembered for? Trashing wildlife! We will see to that. Is that the kind of legacy you want to leave behind?"
- "Just who do you work for and who are you representing? You do not represent the majority of the people who live in Wyoming and you are denying us our Rights."
- "Included in our reasons for opposing delisting is the ardent belief that the bear is not a 'recovered' population. Though your agency may call it such, we believe you have made a pre-mature call in response to politicians and some of the ranching community."
- "You do not have to be a 'Biostitute for the Bush Administration. Best available science shows that the bears need more, not less protection!"

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- “The fact that Craig Thomas, Enzi and Larry Craig all Republicans used the occasion to call for reform of the Endangered Species Act should stand as a big red flag.”
- “I am a former biologist for the U.S. National Park Service. Having written numerous endangered species management plans for this agency, I know what it's like being subjected to enormous political pressures regarding one's management decisions. Maintaining professional and personal integrity can become a supremely difficult struggle in the face of such attempted coercion.”
- “Rather than consider Yellowstone delisting as part of a broader strategy for recovery, the current proposal seeks to prematurely downgrade protection for the population with the largest potential role in rangewide recovery. The argument that delisting will enhance rangewide recovery by redirecting resources to other recovery areas is specious, since the same political figures promoting Yellowstone delisting have blocked reintroduction of grizzly bears to central Idaho and thus would be unlikely to support effective recovery efforts outside the GYE.”
- “I thought your job was to protect our wildlife and not simply make it easier for the hunter to kill our Grizzly Bears. It seems to me that you are not representing the vast majority of the people who support the listing of the Grizzly Bear and that you are only representing the hunters and the ranchers.”
- “There is substantial reason to believe that delisting of the grizzly is being driven not by scientific data, but by economic interests such as ranching, oil and gas, and mining which desire increased access to areas now protected as grizzly habitat.”
- “Although obviously not given as reasons for grizzly de-listing by FWS, I can think of three other reasons that might be underlying FWS's de-listing proposal: 1. hunting...2. exploitation... 3. political pressure.”
- “The decision, announced by Interior Secretary Norton, once again shows how the natural resources of this country (which belong to ALL citizens of the country and not just rancher, oil, timber, and mining companies) have been hijacked by special interests under this Administration”
- “Of course, the desire of this administration to acquire grizzly habitat is a primary reason the administration wants them removed from the endangered species list.”
- “That Republican Senators, from the States of Idaho, and Wyoming are championing the change in the protective laws pertaining to Grizzlies, speaks volumes for the ethos behind this move”
- "There is no doubt that the current political climate has an influence on the move to delist the grizzly. The pressure to be a 'team player' is a powerful motivational factor, especially now when the mantra from the top says 'if you aren't with us 100% you are our enemy.' It is wrong to make the protection of an endangered species a political issue but that is what it has become."
- "Should anyone today trust the fate of the Yellowstone grizzly bear to the discretion of the states with a 'Conservation Strategy' to be enforced by this administration? -- Not after the taxpayers have watched an incessant assault on our forests, our wildlife, and even our national refuges and waters."
- “If grizzly bears are delisted they will be subjected to regulatory harassment not regulatory protection.”
- “It is clear that preventing grizzlies access to certain unoccupied areas beyond the PCA is driven by political pressure from Wyoming rather than rational thinking, analysis of bear needs, and a longer term view of what is possible.”

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- "Unfortunately, based on your track record, I know you will not change your mind. I wish you would some time (about ANY issue!). Please reverse your course."
- "The U.S. Fish and Wildlife is nothing more than a front for hunters and ranchers!"
- "In reviewing the present draft rules, the public is faced with a conundrum: What if the 'best scientific and commercial data available' is quite poor on an absolute scale, yet still the best available? And what if the reason that we do not have better data available is because of critical research design errors made by the very government agencies that now want to convince the public that the FCOY data is the best available? And what if these government agencies have repeatedly failed to institute better methods of estimating population size, even though they have known about these difficulties for some time (Fund for Animals vs. Babbitt)?"
- "Without the ESA, how can we trust Wyoming and other states to abide by the Conservation Strategy?"
- "The controversy over delisting of Yellowstone grizzly bears thus has broader relevance to the debate over minimalistic versus ambitious implementation of species and ecosystem restoration goals. A policy that limits large carnivores and other species with rigorous habitat needs to minimal recovery areas where populations must be sustained by intensive intervention is consistent with a broader and insidious effort to slow the listing of truly imperiled species and designation of critical habitat (Suckling and Taylor). Such policies, however, are entirely inconsistent with both the ESA's mandate and conservation science's awareness of the high value to humankind of the services arising from functioning ecosystems."
- "The current administration is delisting the bears in order to be released from the habitat protection barriers which are presently the only legal means of keeping the mining and petroleum industry from punching new roads into these federal lands"
- "Rumor has it that Bush and his gas and oil buddies want to take the Grizzly off the endangered species list, undoubtedly so they can push for drilling rights in Yellowstone Park."
- "You are in an extraordinary position to make this a reality by RETAINING Grizzlies on the endangered species list. Such an action may indeed put you and your loved ones at risk. It certainly appears, based on available evidence, that this administration will do ANYTHING to further their diabolical plans. But, as it has been said many times, with great power comes great responsibility; you have a chance to be remembered as one who stood for what was right and good -- over against what is mean-spirited and destructive."
- "More than three decades of work and expense have been invested in Yellowstone's grizzly population. I am outraged that at the slightest sign of recovery, the USFWS is willing to sacrifice that work to satisfy hunting and business interests."

311 – FOR DELISTING

Respondents who favor delisting are generally very brief in their comments. Some respondents who elaborate on their approval of delisting feel that failure to delist, after many years of effort, would diminish the credibility of the Fish and Wildlife Service among local residents.

- "I am in complete support of returning the management of the grizzly in the Greater Yellowstone and Rocky Mountain Region to state agencies. This move could free up funds for other much needed programs."

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- "...the USFWS has done an exemplary job of summarizing all of the information that supports delisting and we believe the agency should move expeditiously toward developing the Final Rule that initiates a change in status. Such a move would demonstrate to all concerned that collaborative conservation of our wildlife and their habitats can be successful, and the recovery and delisting of the Yellowstone grizzly bear is proof of the success of, and continued need for, the ESA."
- "We who live in Idaho have understood from the beginning of this recovery effort that when the Grizzly bear population was 'recovered', that the bear would then be delisted. While many of us here are opposed to living with these large predators in our back yards, we respected the law and accepted the decisions that were made with basic indifference to our positions. Now that the Grizzly Bear population in the GYC has reached and exceeded the population goal, it is prudent that the Grizzly Bear be delisted as promised. Failure to delist now will result in a severe loss of respect and credibility for the US Fish and Wildlife Service and for those who have been proponents of this effort."
- "I would strongly concur that once such a recovery goal has been obtained, removing Yellowstone grizzlies outside the park as a protected species is appropriate."
- "I was very happy to hear that the department of the interior was moving forward with the delisting of the grizzly bear. I feel that this move is long over due and appropriate. The grizzly is a modern day success species. Please move forward with this process."
- "If the grizzlies are no longer endangered remove them from the list. The endangered species list is important to protect animals that are in threat of going extinct. Keeping the bears on the list will diminish the importance of the list."
- "I am in favor of the delisting if it can assure that problem bears can be taken care of AND the population will continue to thrive."
- "Based on the scientific evidence presented it looks like it is time to delist the grizzlies."
- "...the reality is that there is a limited carrying capacity in this man made geographical island and grizzly bears have naturally large ranges."
- "I believe the recovery of the grizzly bear in the Yellowstone region is a great success story. Removing the bear from the protected list can be done with sound scientific evidence the bear and humans can cohabitate the area without further damage to the grizzly population"
- "I think that if all the objectives have been met and the goals have been met, then the bear should be taken off the list."
- "I agree with the proposal to delist this segment of the population, the Act worked and we can be proud to see this."
- "How wonderful to see that ANY species of ANYTHING is coming off the endangered species list!! So often it seems that we are 'spinning our wheels' trying to save everything that ever was identified on this earth without realizing that new species are being recognized as science becomes more and more sophisticated. "
- "Keep the numbers climbing and the protections on for the endangered, not for the ones that can survive with normal game restrictions."
- "It's time that these animals are finally removed from the endangered species list. It will allow more time and effort to be spent on others that need the resources instead of going to an animal that has reached saturation levels for their habitat."

- “I believe that delisting the grizzly bear in the area around Yellowstone Park is long overdue. The population has recovered significantly, and there is no immediate or likely threat to their population in the region.”

312 – FOR DELISTING IF NO HUNTING SEASON

A few respondents favor delisting only if sport hunting of grizzlies is prohibited. They object to hunting as morally objectionable, but also because they feel there are not enough grizzlies to warrant hunting them.

- “I agree the animal should be taken off the list if the pre-requisites to do so are in place. That means America has done its job in protecting the beauty and rarity of this creature. I do think all of the attempts to save the animal will be reversed and destroyed within a matter of years (or even months!) if hunting of the animal outside Yellowstone is legalized. Please don't let years of progress to save the grizzly end with the pull of a hunter's trigger. It is wrong and just very sad to realize humans cannot control themselves and will eventually hunt the creature into near extinction.”
- “I am opposed to hunting the grizzly as a means of controlling its population but if push comes to shove and it is the most feasible way then it may be necessary.”
- “A better alternative might be to remove endangered species protection, but to NOT allow so-called ‘sport’ killing of this animal for the foreseeable future.”
- “I support taking the bears off the list if hunting is not allowed until their numbers are quite numerous. More than 600 grizzlies is just not enough to accommodate hunting.”
- “If removing the grizzly from the Endangered classification hastens their being hunted then please do not remove them from the list.”
- “I think it would be all right to remove them from the endangered list, but never to allow them to be hunted.”
- “I think this is a good idea. I read that Alaska has more than 30,000 Grizzly Bears. There are also more than 600 in Yellowstone. However, I am worried about these bears being hunted. Maybe a law could be passed making it illegal to hunt these bears in any season. There are not quite as many Grizzly Bears as there are other animals for people to hunt.”

313 – EFFECTS ON TROPHIC LEVELS AND ECOSYSTEM

Many respondents commented on the ecosystem-level effects of delisting. They describe the grizzly bear as an indicator species or keystone predator whose role in the ecosystem is so vital that its removal would result in damaging disruptions. Some describe the ultimate result of delisting (or extirpation) of grizzly bears as causing a domino effect of negative results leading to catastrophic destruction of the ecosystem. Some believe that destroying the ecosystem will lead to the eventual demise of mankind.

- “This delisting would not only risk returning the bears to their old stature, which caused them to be nearly put into extinction, but it would threaten the entire ecosystem in and around the neighboring areas of Idaho and Montana.”
- “These keystone predators are essential for the continuing health of the entire Yellowstone ecosystem. Removing them will cause a domino effect of negative results throughout the entire local biome.”

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- “Grizzly bears have a huge impact on their ecosystem. If we take them off the endangered species list and their numbers drop, it will have an effect on the entire ecosystem.”
- "As you are aware, when a species becomes depleted it affects the entire biological balance. A few less of any species can be adjusted to by nature but to deplete the grizzly bear population even more than it has been will make an already threatened situation even worse. We will be creating worse problems than we currently have"
- "Legislators need to remember that taking away habitat from these bears and endangering their safety and well-being will not only damage them, it will damage the ecosystem (more than it is already damaged), and in turn devastate the human population."
- “The animal kingdom is an important factor in our humanity - don't let it be destroyed bit by bit or it will be our own demise.”
- “I feel strongly that grizzly bears have a place in the environment and that lowering their numbers will have a devastating impact on the ecosystem.”
- "My only hope is that if you do make the most sad and criminal choice of removing grizzlies from the endangered species list, that it will hurry the imbalance nature provides on her own and that people will become extinct that much faster."
- “...because it is so sensitive to development, the grizzly serves as a key indicator of ecosystem health, Yellowstone's version of the canary in the coal mine. The Great Bear is also a keystone species, which means that it plays a large role in maintaining ecosystem processes.”
- “It's called the Food Chain. More appropriately, it should be called the Food Web. Whichever you choose to call it, please recognize that neither can support the diversity of life on our planet if we allow the removal of links or strands. We are just one species and, like all the others, we ultimately depend on a healthy ecosystem. Perhaps it won't happen in your lifetime, but if we continue to support and encourage the deterioration of the ecosystems upon which our survival depends, we will lose more than Grizzly Bears.”
- “Protected grizzly habitat positively impacts other wildlife species and wild places that we all treasure.”
- “I'm committed to protecting Yellowstone's grizzlies because they're so important to the ecosystem. They help keep elk and buffalo herds healthy by taking out the weak and sick. They're a bellwether for other species. When the grizzlies are in trouble, so are a lot of other plants and animals.”
- “It is vitally important to protect the Grizzly because the bear is part of the natural habitat that supports all sorts of living things we don't yet understand. In our arrogance we see only a large animal and not part of the web of life.”
- “Their return from the brink of extinction nearly 30 years ago has led to a rebirth of the yellowstone ecological environment, and it is crucial that these bears continue to be protected by the endangered species act!”
- “Grizzlies are a keystone species, which have historically had a significant influence on the functioning of the Northern Rockies ecosystem... The ESA requires the consideration of the conservation of ecosystems. To accomplish this goal, researchers have suggested using the principle of ecological effectiveness (Soule, 2005). An ecologically effective population contains sufficient abundance and geographical distribution to re-establish a species' role in the ecosystem.”

- “With the loss of critical habitat wildlife managers face tough obstacles in efforts to sustain wildlife populations. When an unmanaged predator capable of decimating ungulate populations become part of the equation, the future of all wildlife, predator and prey alike, face uncertainty.”
- "I believe that grizzly bears of Yellowstone are an indicator species. Their status depends on the health of many other entwined plant and animal species. Removing grizzlies from the Endangered Species List leads to opening their habitat to human development thus destroying an entire ecosystem precious to our heritage."

314 – CONSERVATIVE OR PRECAUTIONARY MANAGEMENT APPROACH

Respondents who commented on the use of a conservative or precautionary management approach suggest a variety of ways to implement it. One respondent suggests that when recovery goals are based on estimated quantities (e.g., grizzly bear population size), the goal should only be considered met when the lower bound of the 95% confidence interval exceeds the recovery goal, rather than when the point estimate exceeds it. Another feels that the conservative approach would be to wait a few more years to better estimate the trend in the decline of whitebark pine. One respondent suggests the precautionary approach of lowering mortality limits and increasing habitat protections.

- “Given the vulnerability of island populations, we believe a precautionary approach is warranted.”
- “You appear to abandon conservative approaches, always to favor an appearance of 'more bears' and higher mortality limits.”
- “...the proposal should anticipate these potential encroachments on grizzly bear habitat and require that such habitat be withdrawn from oil and gas exploration and development.”
- “Lack of precautionary approaches. ---Often, the draft rules do not take a precautionary approach, though this is sometimes disguised:(1) For example, by basing the draft rules on the best estimates of population growth rate and population size, the USFWS is eschewing a precautionary approach, which would entail basing management decisions on the lower end of the 95% confidence interval. (2) In addition, some of the demographic and habitat-based recovery criteria are based on central parameter estimates, and make no reference to confidence intervals. Thus implicitly they do not employ a precautionary approach. (3) The draft rules pick only one of the estimates effective population size in Miller and Waits (2003), without any explanation for the selection. (4) The draft rules clearly do not take a precautionary approach to global climate change.”
- “After 31 years of recovery efforts for this population, it seems we could wait a few more to find out what this period of great change will hold for Yellowstone grizzlies, and work diligently to create opportunities for them to adapt to what will likely be a dramatically altered environment.”
- “An alternative, more conservative, approach to grizzly management is consistent with the intent of the ESA to recover species. It is vital to consider significant portions of the species' former range. Scientific research shows that grizzlies could be restored in significantly more habitat than what was included in the delisting plan. By adopting a more precautionary approach through expanding where grizzly bears can be, FWS would have a better chance of ensuring the future of the grizzly bear in the face of vagaries of future events.”
- "Similarly, Schwartz states: 'We suggest that a very stringent approach should be taken toward [long-term (irreversible) impacts to grizzly bear populations.] Id. at 81. The delisting proposal, however, fails to take that conservative management approach with respect to many of the threats to grizzly bear habitat."

- "The agency did not consider the option of providing improved protection for the Yellowstone grizzly bear by decreasing allowable mortality levels and increasing habitat protections. There was no reason not to evaluate a more conservative approach than what has been proposed by FWS."

400 – FACTOR A - HABITAT

Many respondents generally commented about the effects they feel delisting would have on grizzly bear habitat. Their comments most often express a concern that delisting would remove habitat protections that would lead to bear population declines. Many respondents fear that, once delisting occurs, there would be unrestricted access to grizzly bear habitat by private land developers, extractive industries, and motorized users. Some respondents feel that habitat degradation is ensured if grizzly bears are not a listed species, and they contend that the beneficial effects of conserving grizzly bear habitat would be lost for other species.

Other respondents concede that the bear population has increased in the face of declining habitat, but are concerned that habitat loss is a potential problem even if bear numbers are increasing.

A few respondents who favor delisting feel that existing protections for bear habitat should be removed, to allow sheep grazing and to remove restrictions on road density and ORV use. Some of those respondents favor livestock over grizzly bears and feel that any reductions in livestock grazing takes away management options for the Forest Service and the Bureau of Land Management.

- "...especially since removing the protection would allow development to erode the habitats they need to survive."
- "Protecting grizzly habitat also is helping to preserve many other animals and plants that may not be listed now. They are benefiting as a result of the grizzly listing."
- "Although some simplistic population viability analyses (PVA) predict low extinction risk for the Yellowstone population, these PVAs ignore likely future declines in habitat quality due to 1) land-use trends such as exurban development and road-building that permanently remove suitable habitat, and 2) long-term declines in food resources within otherwise protected habitat."
- "The removal of sheep and the restrictions on road density (including ORV use) will limit the agencies ability to control weeds, which will have the potential to lead to the total loss of a functional resource. This area is a tall forb plant community and sheep are the best tool we have to manage it."
- "Another part of the plan that I see a problem with is the lack of 'Wise Use' of public lands... The bear, even though it is delisted, gets priority over the livestock. This is counter productive, and forces the U.S. Forest Service and BLM to be derelict in their charge to manage the public land using all their management tools to improve range."
- "The current push to open forest habitat to additional roads, energy development and logging, as well as the lack of a solid plan for limiting the impacts of the current boom in new housing and other scattered development in grizzly habitat, pose dangers to the long-term viability of this population."
- "And while the grizzly population has rebounded over the last 20 years, their habitat here in the Greater Yellowstone is growing smaller and more tattered each year because of rapid population growth, recreation, and resource use."
- "by removing the grizzly from the aegis of the ESA, the Interior Department effectively removes the last barrier to corporate exploitation of regions of the West essential to the bear's range and habitat."

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- “Were the bears to be delisted, much habitat that is indirectly protected by grizzlies ESA status would, in effect, be up for grabs to the short-sited developers timber companies that are ravaging already the last of America's wild places.”
- "weakening current protections would damage the habitat that has allowed them and other animals to survive in our increasingly fragmented wild spaces"
- “Recovery of the grizzly is acceptable within the PCA, but to expand this recovery to the extent proposed is not. We cannot afford the defacto expansion of Yellowstone Park using single specie management and habitat restrictions via the ESA. The Park serves the function it was designed for. Let us not use the ESA to destroy the functionality of the public lands in the West that lie outside the National Parks. To do so will destroy what we all strive to protect, the sustainability and the rural nature of the western landscape.”
- “The delisting rule must fully and fairly disclose the level of development allowed in current occupied and suitable habitat, so the public can assess the appropriateness of delisting.”
- "However, many bears already live on land outside of the recovery zone. Development there has been restricted due to the bears' status. But once that ‘threatened’ label is removed, the Bush Administration can do little to slow down the collective resource development in those areas."
- “...development in the Yellowstone region is treading dangerously on grizzly bear population and habitat needs in a tyranny of small decisions on both public and private land. Yellowstone National Park and the public lands that surround it is not, in the context of grizzly bear needs, a large area. Acknowledged variability in available and critical foods including moth sites, pine nuts, and cutthroat trout, coupled with private and public land development, escalating motorized recreation and unbounded and increasing access surrounding the Park and it's boundaries embraced by government agencies is exposing grizzly bears to less that is natural and more of what is not.”

401 – PROTECT HABITAT OR MORE HABITAT

Many respondents request more habitat protections for lands outside of the PCA, particularly in the Wind River and Wyoming Ranges. Some respondents suggest that goal could be accomplished by expanding the boundaries outside the PCA to act as a buffer for potential fluctuations in carrying capacity within the PCA. Several respondents assert that habitat protections should be extended to all currently occupied grizzly bear habitat. Several respondents want protections established or increased in areas that could provide connectivity with other grizzly populations.

Many respondents contend that even within the recovery zone, necessary restrictions on roadbuilding and habitat destruction rely on U.S. Forest Service National Forest Plans for enforcement. Several people cite threats to major food sources as reason to extend habitat protections because grizzly bears will be roaming over larger areas in poor food years to meet their nutritional requirements. A frequent concern is the loss of the whitebark pine from the Yellowstone area. These respondents call for habitat protections for lands outside the PCA that will become necessary with the substantial reduction and loss of whitebark pine in the near-term future. Some respondents also recommend more meaningful protections in all habitat.

One respondent says that habitat protections within the PCA are insufficient and suggests that all public lands within the PCA should be made part of Yellowstone and Grand Teton National Parks. Another respondent calls for the government to “take back land from ranchers.”

- “Without improvement in habitat on federal lands, there will be no means of mitigating future habitat loss in other jurisdictions such as private and state land.”

- “We need to ensure their survival with a bigger habitat and landscape.”
- “Many lands currently occupied by Yellowstone-area grizzlies receive no protections under the delisting proposal because they are outside the designated recovery zone. Land necessary to connect Yellowstone bears to other populations are not protected. Even within the recovery zone, necessary restrictions on roadbuilding and habitat destruction rely on an enforcement mechanism – U.S. Forest Service National Forest Plans – that a recent Bush administration rulemaking has declared “nonbinding.” Thus, necessary habitat protections to achieve recovery or even maintain current population levels are not in place. During bad food years there will be nowhere else for grizzlies to go; managers need to allow for alternative habitat and food sources.
- “Wyoming and Idaho plan to exclude grizzly bears from many areas of suitable habitat, such as the Wyoming Range and the Palisades. Grizzly bears should be treated as other free-ranging wildlife, not limited to arbitrary administrative and political boundaries.”
- “Additional unoccupied but suitable habitat must be protected in order to mitigate the impacts that increasing human activities will have on the isolated Yellowstone grizzly bear population.”
- “FWS seems anxious to count these 200 grizzlies to claim a population of 600 and ‘recovery’, but the minute delisting takes place, these bears and their habitats are largely up for grabs. At a minimum, grizzlies must be protected where they already live.”
- “In order to help address potential future food shortage issues, the agency’s plan must also protect suitable and presently unoccupied habitat outside the recovery zone in areas such as the Wind River and Wyoming Ranges.”
- “The proposed rule contains no habitat protections for about one-third of occupied grizzly bear habitat. To sustain current population numbers, habitat conditions must also be maintained.”
- “...given the high likelihood of a reduction of whitebark pine in the core of the ecosystem, FWS should redouble protections of areas where whitebark pine will be more likely to survive, such as the Wyoming and Wind River ranges, and the eastern Absarokas.”
- “The proposal to limit the protection for the bears within a 9,200-square-mile area in the Yellowstone and Grand Teton national parks will not ensure the grizzlies’ safety. Many of the grizzlies wander and 10% to 30% live beyond those limits.”
- Commitment of large expanses of contiguous high quality habitat should be a prerequisite for delisting and a major thrust of the CS.”
- “Because of the existing threats to habitat effectiveness in the PCA, such as the decline in availability of traditional grizzly bear food sources, future decreases in the carrying capacity of the PCA are foreseeable. It is equally foreseeable that the long-term viability of the grizzly bear population will depend on the availability of secure habitat outside the PCA to compensate for decreased food productivity within the PCA.”
- “Also, the recovery zone needs to be expanded to over two million more acres of suitable habitat. More additional habitat needs to be protected!”
- “GYC feels that... similar protections from roadbuilding and development should be extended to all suitable grizzly bear habitat in the GYE.”
- “The current proposal does little to ensure that enough suitable habitat will be available and protected to support grizzly bear recovery. This deficiency is especially troubling in light of predicted declines in key grizzly bear food sources and the impacts of global warming. It will be imperative in the future

that Greater Yellowstone's grizzly population be given as much flexibility as possible to adapt to such changes. Most importantly, Great Yellowstone's grizzly bears will need access to as much suitable habitat as possible.”

- “The Wyoming Range has one of the highest densities of whitebark pine in the ecosystem. All of the benefits of abundant whitebark pine, like improved birth rates and decreased human-grizzly conflicts are available. Grizzlies should be given access to it. In addition, with the pattern of spread of whitebark pine blister rust - spreading from the northwest - this southern part of the ecosystem likely will retain abundant whitebark pine when there is heavy loss in the more northerly reaches. Biologically, the Wyoming Range is very well suited to grizzly bear occupancy.”
- “In addition to restoring and protecting habitat areas and bear populations adjacent to the Yellowstone population for the purpose of maintaining connectivity, we also believe it is important that unprotected areas outside the PCA do not become population sinks for the GYA population (Merrill 2005, Nielsen et al. 2004). Typically, lands surrounding isolated populations are especially vulnerable to the negative impacts of human developments and activities.”
- “...both Wyoming's and Idaho's management plans exclude bears from large areas in the Greater Yellowstone Ecosystem, such as the Wyoming Range and the Palisades areas. Indeed, some of the areas excluded under these management plans are already being used by grizzly bears. ... The delisting plan only protects lands inside the six million acre recovery zone, and leaves out over two million acres of suitable habitat. Much of these lands are vulnerable to development, especially energy development in Wyoming.”
- “Grizzly habitat is seriously threatened by subdivision development, increased recreational pressure, especially OHV traffic in the back country, logging road building, and, especially oil and gas development, which has been aggressively carried out during the Bush Administration.”
- “...the lack of habitat standards outside the PCA threatens the long-term survival of grizzly bears in the GYE by exacerbating the source-sink dynamic between areas inside and outside the PCA.”
- “By foregoing active management and protection of grizzly bear habitat outside the PCA, the FWS and the responsible state agencies treat grizzly bears as an ordinary species and turn their back on one of the most important factors in the long-term survival of the grizzly bear - habitat availability.”
- “Projects that lead to significant loss of habitat security or quality outside the PCA may pose a long-term threat to the bear's viability, even if such projects do not have an immediate effect on demographic measures. Erosion of this habitat base following delisting will be seen as an agency failure to follow through on the commitment to long term bear recovery, will jeopardize public and NGO support for a delisted bear population and could jeopardize the bear population itself.”
- “The FWS and other agencies acknowledge that meaningful habitat protection is essential to the persistence and recovery of the Yellowstone grizzly bear population. Recovery is as important outside of the PCA as it is within the PCA. The designation of the PCA excludes more than one third of the habitat occupied by grizzly bears in the Yellowstone area. It also excludes important linkage habitat necessary for re-connecting grizzly bear populations.”
- “Breaking down potential habitat destruction into its component parts, the results are not any better for the future of the grizzly population. About 458,000 acres (25%) of occupied habitat (year 2000) outside of the PCA is available for surface occupancy, and another 432,000 acres (24%) are currently under a suspended decision, and likely will be developed in the future. Approximately 854,000 acres of occupied habitat in the year 2000 (47%) are in the annual saleable quantity of timber. Finally, approximately 620,000 acres of occupied habitat outside of the PCA (34%) that currently are not affected by roads are available by administrative prescription for roadbuilding.”

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- “The grizzly bear was listed in 1975 as a threatened species in part due to the population crash associated with the closing of Yellowstone National Park dumps. A similar population crash is the likely result of the loss of whitebark pine in the Yellowstone area. Based on this well-established scientific data, we can expect a significant increase in grizzly bear mortalities and substantially reduced carrying capacity of the Yellowstone area. FWS should be assessing how to address this impending population crash by providing increased habitat protections for lands outside the PCA that will become necessary with the substantial reduction and loss of whitebark pine in the near-term future.”
- “Given the magnitude of expected fluctuations in demographic and environmental factors, management of grizzlies after delisting does not ensure sufficient habitat beyond the PCA to act as a buffer for potential fluctuations in carrying capacity within the PCA.”
- “No matter how high the number rises for this population, if the habitat is not protected, the population will ultimately be in peril.”
- “Recovery will never truly be achieved unless bears are allowed to expand their range. Bears should be allowed to expand into the Wind River and Wyoming ranges.”
- “Due to the isolated nature of the bear population, there is little room for error and we conclude that maintaining extensive areas of secure and high quality habitat outside of the PCA is the best safeguard against unforeseen changes in habitat quality within the PCA.”
- “In particular we do not think that grizzly habitat has been adequately protected; and this in turn leads to conditions that do not meet recovery criteria including population viability, genetic variability, adequate management after delisting, and the effects of environmental change.”
- “The US Forest Service must guarantee habitat protection for all grizzly habitat on Forest lands within the PCA (recovery Zone): either the Forest Service or the IGBC should ask Congress to give all public lands in the PCA permanent legal habitat protection, or ask that they be added to Yellowstone and Teton National Parks.”
- “Furthermore every attempt should be made to expand the bear recovery zone and take back lands from ranchers.”
- “Beyond the PCA buffer zone the proposed rule effectively creates a secondary zone where grizzlies will be managed at lower densities by the States or prohibited completely even though these are primarily Federal lands containing a large amount of suitable grizzly habitat. This is not a reserve design sufficient to accommodate the stochastic and deterministic changes in habitat and carrying capacity anticipated in the future.”
- “Proponents of Delisting completely dismiss massive die-offs of whitebark pine (a major hyperphagic bear food being killed in tens of thousands of acres by primarily mountain pine beetle and by a lesser extent white pine blister rust) by stating that the bears are adaptable and will find other foods. This may well be true if we give the grizzly adequate additional secure habitat to forage in but we are proposing to do just the opposite. There is in fact significant potential for increasing bear numbers in presently unoccupied biologically suitable habitat and if the Yellowstone Grizzly is to ever achieve a recovered, self-sustaining population it is essential that all such habitat be occupied by bears.”

402 – SECURE HABITAT, ROADS, AND MOTORIZED USE

Many respondents object to Off Road Vehicle (ORV) use in the GYA, stating that ORV’s should be banned from public lands in the area. Some also feel that the USFWS did not give enough consideration to the increasing use of ORV’s in the GYA. Many others oppose the building of new roads in the GYA

and recommend the closure or obliteration of existing logging roads, suggesting that those goals be accomplished through revision of the Forest Travel Plans. One respondent suggests restricting the definition of "secure habitat", which currently means those areas greater than 500 m from a road, to only those areas greater than 500 m from a road that also have demonstrated habitat value to grizzly bears. Some respondents also object to the USFWS's definitions of secure habitat and acceptable road densities because they were not based on demonstrated habitat use by female grizzlies.

A few respondents lament the loss of access to traditionally open roads, and one of those also expresses apprehension that currently open roads providing access to private in-holdings would be closed.

- "Use of ORVs is exploding and already the snowmobile debate is a contentious issue in Yellowstone National Park. Pressure for increased use in this and other areas will only continue. It is important that standards be set in this plan to guide future decisions on ORV use that will protect grizzlies, especially in their den sites and spring search for food."
- "The delisting plan lacks binding motorized access management standards to protect habitat. The 1993 Grizzly Bear Recovery Plan and scientific research have demonstrated that roads kill bears. The delisting plan downgrades current access management standards on National Forest lands from a management standard to a monitoring tool. This is not adequate to maintain grizzly bear habitat."
- "In addition, the proposal is built on the questionable assumption that habitat quality can be reduced in one area, and improved in another without adversely affecting bears. This assumes that grizzly can effectively respond to these management changes. In the study on the South Fork of the Flathead, Rick Mace (1993) found that there can be a significant delay between the time that roads are closed, and the time that bears, especially females with cubs, respond by utilizing the habitat again. And in its 1993 biological opinion on Shoshone oil and gas development, FWS also recognized that road closures may not compensate for construction of new roads, depending on the value of the habitat to bears."
- "'Permanent changes to secure habitat' says that a project may permanently change secure habitat, provided that replacement secure habitat of equivalent quality would be provided in the same grizzly subunit. This overlooks the fact that if replacement habitat is in the same subunit, it's probably already being used by the displaced grizzlies and, therefore, the habitat loss isn't mitigated with new, unused, habitat. It also assumes that grizzlies can be moved about like pawns on a habitat chessboard, with no consequences to feeding, breeding, raising young, or survival - an obviously false conclusion."
- "ATV use allows more people to get further into the backcountry faster. Grizzly bears have survived in those few areas where they have been able to find security from human-grizzly bear conflict. As more people are able to motor into formerly secure grizzly bear habitat, increased grizzly mortality is known to follow."
- "My final remark is that in no manner, shape or form should management of the grizzly bear interfere with access rights and existing roadways to private property within national forest lands; and all in-holders should continue to have full right to maintain existing roadways for vehicular use."
- "I suggest you cancel road building projects and use these funds to rehabilitate (eliminate) numerous duplicate and intrusive road routes, including old logging and exploration roads and all ORV/ATV routes."
- "The Amendments note that ATV/OHV use on GYE forests is expected to increase by 9% by 2010 - with clear implications for grizzly mortality, habitat fragmentation, and enforcement."
- "We are concerned that 50 CFR Part 17 contains an ingrained bias against motorized roads and trails that will prevent possible findings from new science from being used... Secure habitat as defined

does not consider, for example, adequate food sources or water. Thus in the revised 1997 Targhee Forest Plan, 433 miles of road were decommissioned to 'secure' grizzly bear habitat in spite of the fact that most of this area is barren of water or food sources. Secure habitat, as above defined and exemplified, is a political construct that does not fully consider the needs and well-being of the bear."

- "The 1993 Grizzly Bear recovery Plan notes the damage that excessive road densities can do to grizzlies and their habitat, and says that the management of motorized access is one of the most important tools to balance bear/human needs. Yet none of the federal recovery documents have numerical, bear-based, motorized access management standards to provide secure habitat. Instead, access management has been downgraded to a 'monitoring tool', and whatever access densities were present in an arbitrarily chosen 1998 are deemed OK - with no basis in demonstrated grizzly bear needs."
- "Roads are inconsistent with grizzly habitat. It will be much harder to close roads in the future than to prevent them in identified grizzly areas now. To allow road building in areas that are clearly used as grizzly habitat is inconsistent with any long term recovery and will potentially put public land managers in conflict with road users over grizzly recovery in the future."
- "In the Greater Yellowstone region, the FS concedes that ATV use needs to be much better regulated, but has been slow to revise management plans in response. Transportation plans, such as the Gallatin and Beaverhead/Deerlodge plans are not yet complete. Meaningful regulations that limit ATV and snowmobile use to designated areas, away from core grizzly habitat in each national forest in the Greater Yellowstone Ecosystem are a necessary prerequisite for FWS to consider delisting the Yellowstone grizzly bear population."
- "In defining 'secure areas' for grizzlies (often called Core), the Amendments say that these are areas more than 500 meters from a road, and at least 10 acres in size. While the 500 m buffer does correspond to areas where bear mortalities are often the highest, it suggests that virtually any habitat beyond this distance is automatically secure/core grizzly habitat, regardless of whether it has any demonstrated habitat value to grizzlies or not. To be biologically sound, real security core must also include adequate feeding, breeding, denning areas as demonstrated by actual home range use and preference of GYE grizzlies."
- "The Gallatin National Forest could re-double efforts to close roads on federal lands, to compensate for the excessive access on adjacent private land... Such an approach has been pursued elsewhere by the Forest Service. For example, on the Lolo Forest, the Forest Service increased efforts to close roads to restore security for elk habitat security, due to excessive habitat degradation on adjacent Plum Creek lands. The Gallatin should adopt a similar approach."
- "According to the proposal, approximately 50% of the suitable habitat in the GYE is outside of the PCA, without the protections that the PCA affords. 70 Fed. Reg. at 69,870. Of that suitable habitat, approximately one-third is open to permanent or temporary road density changes. Id. at 69,871. The only consideration grizzly bears will be given in such roadbuilding projects is through the NEPA process----a purely procedural process that does little to consider the cumulative impacts such projects have on the ecosystem's bears."
- "'Temporary changes to secure habitat' allows one active project per Bear Management Unit (BMU) subunit at a time, and says that active projects will not exceed 1% of the acreage in the largest subunit within that BMU. The catch is that, 'The acreage of a project that counts against the 1% limit is the acreage associated with the 500 meter buffer around any gated or open motorized access route or recurring low level helicopter flight line.' FWS would have us believe that clearcuts, mines, and oil and gas wells don't detract from secure habitat - just the transportation routes to them."

403 – MAJOR FOODS

Many respondents believe the uncertainty of the continued abundance and distribution of the four key bear foods pose threats to the Yellowstone bear population. Several respondents are concerned that the four major foods used by grizzly bears in the GYA have been declining, in the absence of alternative foods of equal energetic value. Some respondents want an increase in the available habitat, through regulatory protections, to mitigate the declines in major foods.

A few respondents suggest that problems on private lands may be exacerbated by declines in key bear foods. When food is scarce bears roam more widely in search of alternatives. This brings the bears closer to areas of human activity and substantially increases the risk of human-caused mortality

One respondent feels that the decline in major foods would be so catastrophic that nothing could be done to compensate for their loss, and that delisting should be precluded for that reason. Another respondent contends that declines in the four major foods have not yet been significant, and that predictions of future declines are speculative. One respondent also takes exception with the USFWS statement that when it comes to seeking out alternative food sources the “grizzly bears are notoriously resourceful omnivores.” This respondent claims that is an assumption not based on any scientific data, and therefore does not support delisting.

- “Until and unless significant declines in these foods actually occur, it is impossible to predict the degree to which grizzly bear demographics and density will be affected. It would be inappropriate to delay delisting grizzly bears in anticipation that such changes in foods might occur and this would be a prescription for perpetual listing regardless of current conditions.”
- “In addition, research shows that nutrition level effects both female fecundity and cub production (Mattson and Jonkel 1990). A decline in these foods represents a decline in the carrying capacity of Yellowstone's habitat, yet FWS has no thresholds to trigger action; no plan to protect additional habitat; and no plan to mitigate losses.”
- “The current proposal does little to ensure that enough suitable habitat will be available and protected to support grizzly bear recovery. This deficiency is especially troubling in light of predicted declines in key grizzly bear food sources and the impacts of global warming. It will be imperative in the future that Greater Yellowstone's grizzly population be given as much flexibility as possible to adapt to such changes. Most importantly, Greater Yellowstone's grizzly bears will need access to as much suitable habitat as possible.”
- “Problems on private lands may be exacerbated by declines in key bear foods. Under conditions of food scarcity, bears roam more widely in search of alternatives, bringing them closer into areas of human activity, and substantially increasing the risk of human-caused mortality.”
- “Yet, the proposed rule fails to address the dire cumulative and synergistic impacts of global climate disruption on grizzly bear food sources nor the associated effects on grizzly bear survival rates in the Yellowstone ecosystem.”
- “As a consequence of whitebark pine mortality from mountain pine beetle, the current carrying capacity for the grizzly bear is now precipitously diminished, even as the proposal for delisting was being written. Although the proposal notes that grizzly bears are notoriously resourceful omnivores, and that other food sources have taken the place of whitebark pine seeds in the NCDE, some facts challenge this interpretation. The NCDE and northwestern mountain ranges have a maritime climate, supporting an abundance of woody, fruiting species. There, a large proportion of the grizzly bear diet consists of fruit and other vegetable matter. However, the continental climate of the GYE does not support either the diversity nor the density of fruiting shrubs. The question is whether the grizzly bear really does have adequate alternative foods. This is a critical question.”

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- “There are no other native alternate food sources in the GYE that can provide grizzly bears with the caloric value of these four threatened food sources. While there are alternative foods available to bears in the GYE such as ants and wasps, mushrooms, gophers, voles, yampa, biscuitroot, and other forbs and grazed foods, none comes close to cutthroat trout, army cutworm moths, and ungulates in the amount of digestible energy they can provide to grizzly bears.”
- “Of particular importance to Yellowstone's grizzlies are four major foods. All of these foods are threatened, and some are in decline. The loss of these key foods will lead to increased human-bear conflicts, mortalities and the loss of carrying capacity of the ecosystem.”
- “The assault on their food sources - like the introduction of lake trout reducing the cutthroat runs, the dwindling moth population due to pesticides, and the loss of pines due to unanticipated environmental changes - assures that the grizzly will remain endangered”
- "In the near term, shortages of high-quality natural foods will likely increase bear-human conflicts and human-caused bear mortality. Mattson, et al. (1992); Mattson, et al. (1998); Pease and Mattson (1999); Schwartz, et al. (2005). In the longer term, such shortages will reduce reproductive success 'because of older age at first reproduction, longer between-litter intervals, decreased litter size, and lower cub survival.' Reinhart, et al. (2001) (citing Boyce, et al. (2000) and Mattson (2000)); see also Schwartz, et al. (2005). Ultimately, carrying capacity for Yellowstone grizzly bears will be substantially, perhaps catastrophically, reduced in coming years."
- “Although the CS outlines the monitoring for these four food types it does not address their future productivity trends or specific management actions for their increase if needed.”
- "Conifer disease outbreaks, cutthroat declines, elk herd declines have occurred over a very short time frame, not 'decades' and 'generations'. What are the forbs, fungi, etc that can replace the major foods that are now at risk. Where are they located? Are they in areas that will be projected? What size grizzly population can they support?"
- “Moreover, there are no alternate food sources that begin to match whitebark pine seeds and army cutworm moths as a source of dietary fat for female grizzly bears. As discussed above, efficient accumulation of adipose reserves is critical to reproduction success in female grizzlies... In short, there are no alternative food sources that can adequately compensate for the loss of key food sources that now sustain Yellowstone grizzly bears.”
- “The proposed rule glosses over, and in several cases omits mention of, the severe threats due to decline and loss of grizzly bear food sources. Decline of food sources will induce grizzlies to travel greater distances to find food, and to turn to human sources of food; both behaviors will result in significantly increased mortality. At the same time, lower calorific intake will reduce grizzly bear survival and reproduction rates.”
- “The proposal does nothing to plan for the potential reduced carrying capacity of the ecosystem due to declines in grizzly bear food sources. Instead, it simply provides that the food sources will be monitored...”
- "Despite existing and foreseeable threats to each of the grizzly bear's primary food sources, the FWS has concluded that such threats will not impact survival of the Yellowstone population because 'grizzly bears are notoriously resourceful omnivores.'... This assumption, however, is not based on any scientific data, and therefore cannot support delisting."

404 – SNOWMOBILING

Many respondents maintain that snowmobile use in grizzly bear habitat negatively impacts the bears and that the USFWS has not adequately analyzed the potential impacts of this type of motorized use on grizzly bear population dynamics and persistence. These respondents favor restricting snowmobile use in denning areas and in those areas bears are likely to use in the spring.

- “We recommend that the plan set a standard for snowmobile use with guides, and that known den areas and spring grounds be closed to snowmobile use during denning season inside and outside of the PCA.”
- “While the plan considers impacts of snowmobile use on den sites, it does not take into account the effects of late season snowmobile use. In some areas like Cooke City, snowmobiles are active in grizzly habitat in July - three months after den emergence.”
- “Inside the PCA we see that 32% of grizzly bear denning habitat (712,000 acres) is open to snowmobiling, while outside the PCA, 65% of denning habitat (1,570,000 acres) is open to snowmobiles (Amendments, P: 76). An obvious question is why would the Service sanction a 2.3 million acre intrusion into grizzly denning habitat, and how does this further or maintain a recovered population?”
- “If the U.S. Government permits those noisy, gas burning, fume producing snow machines in beautiful Yellowstone, can't there be something to affect such a disgusting ruling? Like saving one of nature's species?”

405 – DEVELOPED SITES

The few respondents who address developed sites in their comments object to their proliferation or expansion. Those respondents object to recent expansion of developed sites in Yellowstone National Park and the potential construction of new developed sites outside of the Primary Conservation Area.

- “The Forest Service, for instance, has already anticipated that, because there are no developed site restrictions outside the PCA, ‘the number and capacity of developed sites would likely increase outside the PCA [under the Conservation Strategy].’ See Forest Plan BA at 79. Indeed, even with the existing level of developed sites outside the PCA, the Forest Service expects grizzly bear-human conflicts to increase as bears continued to expand their range outside the PCA. See Forest Plan BA at 79.”
- “Limiting further site development within the Recovery Zone to 1998 levels appears to be mythical. Yellowstone National Park has installed large new trailer-home developments at Lake and Canyon for concessionaire employees and contractors...”

406 – HABITAT-BASED POPULATION VIABILITY ANALYSIS

Respondents discussing a habitat-based population viability analysis (PVA) in their comments feel that the USFWS should have developed one. They contend that the ability of the habitat-based PVA to predict the amount and distribution of habitat necessary to support a viable grizzly bear population is highly desirable. One respondent suggests that the lag-time between decline in habitat and decline in bear numbers, as identified in a previous modeling exercise, should be tested using the PVA.

- “In light of these critically important lag time issues, FWS must develop a principled assessment regarding the full extent of habitat necessary to maintain a viable population---including consideration of lag effects---and then develop regulatory measures to protect that habitat.”

- “At no time has FWS ever developed and finalized a scientific analysis detailing those areas needed by grizzly bears to attain and maintain a biologically recovered population.”
- “No true spatially based demographic analysis of the Yellowstone grizzly bears is available. Schwartz, Harris and Haroldson (2005) does break the population into three spatial segments (national park, outside park but within recovery zone, and outside recovery zone). But their analysis does not compute the rates of flow (i.e. rates of movement across space) between these three zones. For a population with a source-sink structure, without knowing the rate of flow, one cannot compute the population growth rate. And without knowing the population growth rate, one cannot estimate probability of extinction.”
- “The FWS needs to conduct a viability analysis to determine the minimum number of bears needed to sustain a population. Most experts agree that without at least 1,000 bears, long-term prospects for survival are not good. Once the minimum number has been obtained, FWS should determine how many acres of habitat are needed to sustain this population. Then you should go about protecting the amount of habitat that is required to grow the grizzly population to the number of bears determined to be required through the viability analysis.”
- “There has been no attempt in any of the delisting-related documents to explicitly link demographic and habitat data to produce a habitat-based population viability assessment. Such an assessment should include projections of different possible future scenarios, based on variations of birth and death rates and habitat conditions.”
- “A number of studies have demonstrated that it is possible to link demographic and habitat data to establish reserve designs to ensure the survival of wildlife populations (Noss et al., 1996). Preliminary efforts were made to do this for grizzlies in the GYE by Troy Merrill and by Carlos Carroll. The Merrill study demonstrated that a meta-population of 3,000 or more bears could be achieved in the lower-48 states by connecting grizzly ecosystems and restoring bears to central Idaho. This study was based on a peer-reviewed model that evaluated habitat productivity, roads and developments, and home range sizes. Certainly, with the resources FWS has available, it could do a comparable analysis.”
- “...we see that FWS has still refused to draw a PCA based on a scientific analysis of the quantity, quality, and arrangement of habitat that will be needed to ensure long-term viability - despite the requirement to develop Habitat Based Recovery Criteria (HBRC, 2000) that do exactly that. Instead, the Service has arbitrarily declared that the old RZ/PCA is, by their definition sufficient, and has gone about fixing the data around that conclusion.”
- “The species should only be removed from the endangered species list at a time when objective scientific population data demonstrate that the Federally protected habitat is ample to sustain population numbers that will ensure their long-term survival.”
- “Also missing from agency calculations is the recommendation of Boyce et al. (2001) that a habitat-based PVA from individual-based models be developed.”

407 – LIVESTOCK ALLOTMENTS, GRAZING, AND RANCHING

Many of the respondents commenting on this issue favor the elimination of grazing on public lands, and some also call for the elimination of livestock loss compensation programs. Many respondents express animosity toward the ranchers themselves because they believe ranchers want to kill all grizzly bears and that they benefit from government subsidies.

A few local residents oppose the elimination of grazing allotments on public lands, and feel that responsible land stewardship can be achieved through grazing. Some respondents contend that large ranches are more compatible with grizzly bears than large subdivisions and housing tracts.

- "I live in the Rocky Mountain west and understand the mentality of the average rancher. 'If a bear even looks at my livestock, I will shoot it. Better yet, I will hunt down any bears in my region so that I don't have a problem.' While this quote is fictional, it demonstrates the attitude of my local ranchers."
- "End public-land grazing WELFARE."
- "You must be out of your minds! I own property in the Greater Yellowstone area and I see maybe one grizzly bear every couple of years. If people don't want the bears around, have them move out of grizzly country and have them take their damn cows too!"
- "While agencies, private citizens and NGOs have accomplished a great deal to reduce grizzly bear/sheep conflicts, livestock allotments within bear habitat remain a concern. This is recognized in the Conservation Strategy as well the proposed rule. For this reason, we do not understand why the proposed rule states that 'any use of vacant allotments will only be permitted after an analysis is completed to evaluate impacts on grizzly bears.' 70 Fed. Reg. at 69867. We strongly feel that the opening and use of vacant allotments within the PCA should not be permitted under any circumstances, and that vacant allotments should be closed permanently for the benefit of grizzly bears and other wildlife."
- "The many ranchers that live near the Yellowstone National Park are excited to have an opportunity to shoot one of these great animals."
- "Doing so will also give many ranchers who are squatting on my public lands the green light to exterminate bears in the name protecting their precious cattle."
- "Also Montana, Wyoming, and Idaho are among the least productive lands for agriculture. So since ranching and farming are not close to being profitable without government subsidies it is not a valid excuse to take away protection from Grizzlies for a few hundred welfare ranchers."
- "If cattle barons would not graze on OUR public lands then they wouldn't lose money when bears try to survive by preying on cattle. Ranchers are a bunch of 'whiners'."
- "The ranching and outfitting businesses have been adversely impacted; as a banker I would tell you that the economic impacts to this community and the State of Wyoming have been felt. I know this is of absolutely no consequence to people outside of Wyoming, but surely you must be able to empathize with us."
- "Leave them on the endangered species list. And if the ranchers don't like it, then maybe they should not be using federal land to graze their cattle. After all, they're making a profit on the backs of the people of this nation."
- "I suggest you suspend the grazing allotments of any rancher found to be harassing or harming grizzlies. I suggest you move allotments in migration corridors or use areas"
- "Instead of reducing grizzly populations, try reducing the numbers of cattle in grizzly range."
- "Let us all remember, the grizzly was there first, placed there by God and on land owned by the tax payers, not ranchers. This 'cult' of 'goons' have no right to dictate life or death to any species, regardless how much money they pay to lobbyists and political leaders."

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- “As for the ranchers...we all have to take the good with the bad, reimbursing them is a stupid idea anyway, tell them to deal with it! As a rancher's lease runs out put a clause in the new lease where the rancher is informed that the possibility exists their cows may be killed by bears, wolves, or hunters. Ranchers WILL NOT be reimbursed by the USFW...no more imaginary or overgrazing cows being killed.”
- “And, domestic sheep, a major cause of grizzly-human conflicts and grizzly mortality, continue to graze on 127,000 acres of currently occupied grizzly bear habitat.”
- “In addition, FWS claims that compensation programs improve public attitudes toward bears, despite evidence to the contrary. FWS discusses state and NGO compensation programs for livestock losses to grizzly bears. The agency appears to assume that such programs improve public acceptance of bears. This is not the case. For example, in a review of Defenders of Wildlife's compensation program, the organization found that public values of grizzly bears did not improve with compensation. Experience in the GYE and elsewhere has shown that successes involving resolving grizzly bear conflicts do build social support.”
- “FWS states that the Wyoming, Salt River, Palisades and southern Wind River ranges will be excluded from grizzly bear occupancy because of high mortality risk and incompatibility with domestic sheep. In this assessment, FWS fails to evaluate the option of phasing out domestic sheep allotments.”
- “...it is noted that outside the PCA within the DPS, there are roughly 150 active cattle allotments and 12 active sheep allotments. MSGA and MPLC feel very strongly that any delisting proposal, must not dictate the closure or removal to these grazing allotments. These grazing allotments are connected to livestock operations that have provided extensive habitat for grizzly bear recovery. As these ranches are kept in tact and active in the livestock industry, they will continue to provide habitat for the recovering bear population.”
- “One of the biggest disadvantages to reducing grazing on Forest Service lands is the chain of events that are set into motion when a rancher is displaced from public lands. Because the majority of land in Idaho is owned by the government, Idaho ranches are dependant upon public lands grazing. Without these grazing permits, ranches are not economically viable. All too often, the only recourse for ranchers is to sell their ranch, which is typically the most ecologically valuable land. The end result is the subdivision of these lands and habitat fragmentation.”
- “The delisting proposal should allow land managers the ability to work with permittees to develop grazing plans that provide for the least amount of wildlife conflicts alongside the maximum amount of AUMs. Under no circumstances should the FWS or Forest Service attempt to encourage or persuade permittees to ‘sell out’ because of grizzly bear conflicts.”
- “Livestock producers cannot economically survive with all these land use restrictions. They will be forced to sell to the highest bidder, development.”
- “The most important aspect to society of viable working ranches in the West is to maintain an open and rural landscape. This is something that cannot be legislated or litigated. It can only be accomplished by supporting the economic viability of private landowners.”
- “Sheep are not an endangered species, and can live almost anywhere in the United States. Grizzlies, on the other hand, have a very limited range in just four states in the Northern Rockies. In areas where grizzly bears are native, and where they have a reasonable chance of surviving, strong efforts should be made to accommodate them on that habitat.”

- “Planning for the future should include phasing out all livestock allotments in or adjacent to the PCA over time, to allow bear expansion to occur. Grizzly use in this core area should always trump livestock use.”

408 – FISH AND WILDLIFE SERVICE DEFINITION OF SUITABLE HABITAT

Numerous respondents feel the amount of suitable habitat outside the Primary Conservation Area should be increased and protected. Some respondents take exception with the Fish and Wildlife Service’s definition of suitable habitat because they believe it excludes areas that are degraded by other land uses such as grazing; it excludes areas where bears may be killed or removed due to management decisions; it excludes areas in open country where grizzly bears need to be protected from poachers; and it excludes areas where grizzly bears used to prey on bison traveling outside the boundaries of Yellowstone National Park.

Other respondents contend that the USFWS has not been up-front in expanding the definition of suitable habitat to include areas with low mortality risk. They feel this moves beyond biological parameters and into the socially based arena. One respondent suggests dividing suitable habitat into three new categories.

Some respondents point out that the delisting rule enlarges suitable grizzly habitat in Wyoming rather than holding the bear to biologically suitable and socially acceptable habitat. These respondents contend the Wyoming Grizzly Bear Management Plan was submitted to and approved by the USFWS and clearly delineates where grizzly bears are acceptable, but the proposed delisting rule ignores that input.

Several respondents provide specific habitat areas they feel should have been included in the USFWS definition of suitable habitat.

- “The federal draft delisting rule enlarges suitable grizzly habitat rather than holds the bear to biologically suitable and socially acceptable habitat. The inconsistency needs to be addressed.”
- “Significant portions of the proposed DPS have few or no bears, and thus by definition the grizzly bear is not recovered in those areas. Rather than analyze the threats to grizzly recovery in these areas, the proposed rule disingenuously considers the threats as rendering the areas inherently unsuitable for grizzly bear - thus clumsily attempting to evade the Endangered Species Act’s requirements that such threats be obviated in all significant portions of a threatened or endangered species’ range. The proposed rule’s definition of suitable habitat excludes areas where habitat has been degraded by such land uses as grazing of domestic livestock, which reduces grizzly bear food sources. The definition also excludes areas where management decision to kill or remove bears is likely to prevent grizzly occupancy - also including public lands grazed by domestic sheep and the areas immediately adjacent to them. It also excludes areas in open country where grizzly bears need additional protection from potential poachers. And the definition excludes areas affected by the ongoing management decision to kill bison at a rate that precludes their re-occupancy of regions outside of Yellowstone National Park in which grizzlies originally preyed on bison.”
- “Most people assume that ‘suitable habitat’ is determined by purely biological parameters such as sufficient food availability, potential den sites, and low road densities. And yet, for the purposes of this proposed rule, FWS broadens that definition to include areas with low mortality risk, which we would consider a more socially-based construct. While we recognize that mortality is a major concern for grizzly bears, we feel that FWS should be clear up front that the definition of ‘suitable habitat’ is not solely based on an evaluation of the grizzly bear’s resource needs.”
- “Particularly along the northwestern tier of the DPS, there are significant areas - some presently occupied by grizzly bears - that have been left out of the suitable habitat base. There are no sheep allotments in Tobacco Roots (Mark Petroni, personal communication), and no sheep allotments in Snowcrest Range, although sheep are driven through there for a few days in July. Some maps

erroneously indicate sheep/goat allotment in the Snowcrest, but this allotment is vacant. The Snowcrest Range already is under food storage regulations and may already support resident grizzlies, as evidenced by reliable sightings (J. Connors, personal communication) and a possible den (S. Primm field notes; contact me for photographs).”

- “Your description of grizzly bear habitat is of great concern. It appears you have declared the east side of the Gravelly Mountains, the Greenhorn Mountains and BLM lands within two miles of Virginia City as suitable for grizzly bears. It also appears that if Virginia City, the Madison County seat and tourist destination, loses four residents it will have only 128 people per square mile. That will qualify it as federal grizzly bear habitat and we may have grizzly bears at the candy store.”
- “Also suitable habitat is available in greater portions of the Wind River Range and the Wyoming Range and the Bighorn Range. The analysis within the Wyoming Recovery Plan should not use domestic sheep allotments within these areas as the primary reason for not planning on including these areas for permanent grizzly bear occupancy. There should be a component in the plan indicating a plan to convert these public land allotments to cattle and discontinue the practice of grazing sheep, because they are vulnerable to all predators. There should be a commitment by the USFS to use their discretion during permit renewals or transfers to convert to cattle.”
- “Substantial suitable, but currently unoccupied habitat, including connective habitat to central Idaho, also lies outside of the PCA. The delisting proposal leaves much of that habitat inadequately protected.”
- “The proposed rule and DPS habitat designation excludes habitat areas that are intrinsically suitable, but currently exclude bears due to discretionary public land management practices. For example, sheep allotments in portions of the Bridger-Teton and Targhee National Forests were used to justify precluding those areas as suitable habitat for grizzly bears. Those areas once functioned as suitable grizzly habitat, and they could do so again if discretionary management policies gave priority to grizzly conservation.”
- “The cursory discussion of suitable habitat is premised in part on an incomplete description of how grizzlies were extirpated from the majority of their range... It was not just persecution by private individuals that extirpated grizzlies, but a systematic poisoning, trapping and shooting program by the U.S. Bureau of Biological Survey (predecessor to the Fish and Wildlife Service) that eliminated the species from vast areas... In short, the grizzly bear would have been able to survive in many regions despite the killings by private individuals if not for federal control. Thus, areas lacking hiding cover, or those with domestic sheep grazing, should not be automatically considered unsuitable habitat, because mortality rates in these areas are not a function of the habitat itself, but of land-use decisions on it.”
- “Based on its restrictive definition, the proposed rule concludes that only 24% of the DPS is suitable habitat. It does not compare the extent of this area to historic range within the DPS or evaluate the adequacy of currently suitable habitat in meeting the ESA's recovery goals.”
- “Wyoming appropriately excluded from its suitable habitat designation the southern portion of the Wind River mountain range. Your proposed delisting rule, apparently based solely on biologic criteria, has included this area within the suitable habitat range.”
- “To clarify the debate over recovery goals, suitable habitat might be divided into three categories: 1) areas that can be occupied despite current human impacts and anticipated habitat loss; 2) areas that are unlikely to support grizzly bears even with substantial habitat restoration or policy change; and 3) intermediate areas where long-term recovery might require proactive conservation measures (e.g., road removal and restriction of sheep grazing).”

- “The Wyoming Grizzly Bear Management Plan that was submitted to and approved by your agency clearly delineated where grizzly bears are acceptable but the proposed delisting rule ignores that. Instead, the federal draft delisting rule enlarges suitable grizzly habitat in Wyoming rather than hold the bear to biologically suitable and socially acceptable habitat.”

409 – TIMBER HARVEST

Many respondents feel that timber harvest is a threat to grizzly bears, but those comments were usually embedded in sentences containing lists of other contentious land uses. One respondent opposes timber harvest in the Greater Yellowstone Area, objecting particularly to the acreage of the Forest Service’s timber base that can be harvested within the Primary Conservation Area. Conversely, one respondent objects to the U. S. Fish and Wildlife Service’s restrictions on road building and the number of projects allowed in management subunits, feeling that those restrictions would preclude timber harvest that is beneficial to ecosystem health.

- “De-listing opens the door for logging, mining and other degradation to public lands around Yellowstone, which would be damaging to bears as well as a host of other species and ecosystems.”
- “FWS apparently assumes that future timber harvests will reflect the levels over the last few years, which averaged about 1,500 acres annually. The agency appears blind to the Bush administration’s ‘healthy forests’ initiative and other proposals, which are aimed at escalating annual timber harvest on public lands. From participating in meetings, where this loophole was established, the motivation was clear: certain forests, especially the Targhee, were insisting on having more ‘management flexibility’ so as to be able to harvest more trees and build more roads. If FWS is to maintain 1998 conditions, it must stand up to the development pressure of the Forest Service. Under current forest plans, 744,000 acres inside the PCA are in the Annual Saleable Quantity for timber harvest. An additional 271,000 acres could be logged for ‘ecological purposes.’ Timber harvests, and the roads that accompany them, are a very real threat to maintaining habitat quality for grizzly bears inside of the PCA.”
- “It would be devastating to see that this species who is just about to turn around the corner take such a brutal blow which could result in construction and loggers shrinking it’s habitat and putting them back on the endangered list in combination with hunters looking for the latest item to kill”

410 – OIL AND GAS DEVELOPMENT AND MINING

Most respondents commenting on oil and gas development believe it poses a threat to grizzly bears in the GYA, and a few respondents made similar comments about mining. They are largely concerned that oil and gas leasing and development will increase greatly in the Greater Yellowstone Area if delisting occurs. Several respondents feel the current administration is applying political pressure on this proposal in order to promote oil and gas development and mining.

- “Pressure on grizzly bear habitat from oil and gas development---especially in the southern portion of the ecosystem---is of special concern. The proposed rule would allow oil and gas development on 552 square kilometers of secure habitat inside the PCA. 70 Fed. Reg. at 69,868. Outside the PCA, all bets are off.”
- “...delisting the grizzly bear population in the Yellowstone Recovery Zone could pave the way for irresponsible oil and gas development, which could negatively impact the grizzly bear population in the zone...Off-site mitigation or compensatory actions are risky, since such efforts are not guaranteed to fully compensate for losses in areas where development would occur.”

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- “threats to their habitat have only amplified, and sprawling development, oil and gas drilling, logging, roadbuilding, and off-road vehicles are crowding grizzly bears out of the last pockets of wilderness they need to survive”
- "...the proposed rule states that 19% of the suitable habitat outside the PCA is open to surface occupancy oil and gas development). The pressure to develop oil and gas reserves has reached a fevered pitch. The Energy Policy and Conservation Act Amendments of 2000 now require the Secretaries of Interior, Energy, and Agriculture to identify the 'extent and nature of any restriction or impediments to the development of [oil and gas] resources' on general lands.' 42 U.S.C. 6217. Yet, the proposed delisting rule, and underlying plans, do little to specifically prohibit or limit oil and gas development on suitable grizzly bear habitat. This is a serious shortcoming that could undermine grizzly bear recovery efforts in the years to come."
- “Energy development is escalating in the southern portion of the ecosystem; indeed, a lease sale is planned in April, 2006 in suitable bear habitat on the Bridger-Teton.”
- "The only thing the Bush Administration seems interested in, is satisfying the interests of the oil and gas industry so they can get their hands on more and more public lands to develop for their own selfish interests. This looks like another one of their schemes to get more lands."
- “Already, some grizzlies may be adversely affected by such drilling as Wyoming's Bridger-Teton National Forest has agreed to lease 175,000 acres of its land for oil and gas development. Such loss of habitat will be disastrous for the grizzly population.”
- "Millions of acres of grizzly bear habitat in the GYE is still open to oil and gas development. The roadbuilding, noise, and human intrusion which would occur if exploration and production happened on these lands would drive grizzlies out of this otherwise suitable terrain."
- “...FWS ignores the substantial political pressure under this administration to develop oil and gas resources. As noted in a recent Washington Post article, BLM biologists in the southern portion of the GYE are being muzzled if they try to document the true impacts of development. A recent survey of EPA employees by the Professional Employees for Environmental Responsibility shows an unprecedented level of pressure to support development under Bush administration policies (PEER, 2004).”
- “with the upcoming Schweitzer Economic Development Initiative to increase Montana's production/harvest of natural resources (i.e. coal) I fear greatly for the habitat of many species, including the Yellowstone grizzly.”
- “The agency also places unwarranted faith in analysis under the National Environmental Policy Act to address oil and gas threats. A cursory look at the explosion of oil and gas development on BLM lands in the upper Green River area in Wyoming, and the impacts on habitat important to big game and sensitive species, demonstrates the inadequacy of NEPA by itself to curb harmful activities, especially in the face of political pressure to develop.”
- "Allowing oil and gas explorations and drilling would fragment what precious little remains of grizzly habitat and provide negligible gains for energy supplies compared to more important energy conservation and alternative fuel initiatives that should be pursued."
- “Please, don't act like your president; all he wants is to drill. You know, money-money-money.”

411 – HUMAN POPULATION, RECREATION, AND PRIVATE LAND ISSUES

Several respondents contend the delisting rule fails to thoroughly evaluate the available data on human population growth or its consequences on grizzly bear mortality, habitat quality and security. Many respondents are concerned about human population growth and land development particularly near the boundaries of public lands. Most feel that increases in residents or recreationists in the GYA will lead to more grizzly-human conflicts. They believe that human population growth should be slowed or stopped before grizzly bear delisting occurs.

Private land development and the patterns of private land development in rural or ex-urban areas are of particular concern to many respondents. Several contend that land development threatens the connectivity with other grizzly populations.

Several local residents are concerned that management of the grizzly bear will interfere with their access rights and the maintenance of existing roadways to private property. One respondent takes offense with the USFWS statement encouraging citizens to become involved in private land management, and feels that authority remains with the private land owner.

- "...the plan fails to consider the effects of rapid human population growth in a region which is among the fastest growing in the country, and where some counties are doubling in population every ten years. This development is occurring most rapidly near the boundaries of public lands in key habitat for bears and other wildlife (Johnson, 1998)."
- "I am especially concerned that kicking grizzlies off the Endangered Species List would allow the majestic bears to be hunted, open grizzly habitat to large-scale real estate, logging and energy development, and increase the likelihood of bear-human conflict."
- "Sprawling development threatens to block off any chance of connectivity with other grizzly bear populations."
- "the area around Yellowstone is being developed at three times the rate of the national average. The bears have no where else to go."
- "The delisting plan fails to fully consider the adverse effects on grizzly bears as a result of escalating development on private lands, as well as human population growth in the region. While the plan generally acknowledges the relationship between the number of humans and the level of human-caused mortality, it fails to give a complete picture of the current situation and future trends, and to evaluate its implications. Further, it relies on local planning and zoning regulations to protect important private lands, despite evidence that such regulations have had limited impact on growth (Hernandez, 2004)."
- "According to the Wyoming Department of Administration and Information (<http://eadiv.state.wy.us>), Teton County will expand by another 30% in the next ten years, while Park and Sublette Counties expand by 5% and 11%, respectively. What is alarming about this growth trend is not only the population increase, but where those people are expected to reside. In each of those three counties in Wyoming, half of the new migrants will reside outside of established urban boundaries... The associated problems of grizzly bear-human conflicts will therefore continue to increase."
- "The delisting rule fails to thoroughly evaluate the available data on human population growth or its consequences on mortality, habitat quality and security. FWS states that existing secure habitat will remain as it was in 1998, but fails to evaluate the impacts of private lands development that abut secure habitat."

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- "Increasing private land development brings more people, and the detrimental impact of more people on grizzly bears is documented in Merrill et al. (1999), Mattson and Merrill (2002), Merrill and Mattson (2003), and Mattson and Merrill (2004) and Woodroffe (2000). The draft rules do not seriously consider the possibility that sheer number of people (and also road density) are the root causes of grizzly bear mortality..."
- "The delisting proposal does not adequately assess the human population bomb that is exploding in the GYE. Some counties are doubling in size every few years. Two new 'towns' are planned for Teton Valley--with 2200 units, they dwarf existing towns, and those are just 2 of many proposed development projects. Grand Targhee, on a new private inholding in the Targhee NF, plans for 900 housing units. I think USFWS is rushing to get bears delisted before the full brunt of such explosive human presence can be understood."
- "In her 1998 report, 'Rural Residential Development Trends in the Greater Yellowstone Ecosystem Since the Listing of the Grizzly Bear, 1975-1998,' author Vanessa Johnson demonstrated mounting development in the twenty counties in the GYE. She found that development is concentrated in important wildlife habitat, particularly along streams, adjacent to public lands and away from towns."
- "My final remark is that in no manner, shape or form should management of the grizzly bear interfere with access rights and existing roadways to private property within national forest lands; and all in-holders should continue... to have full right to maintain existing roadways for vehicular use."
- "Sprawling development threatens to obstruct any chance of connectivity with other grizzly bear populations."
- "...the number one threat to grizzlies here in Yellowstone Country today remains rapid population growth and unplanned housing. Private ranch lands that provide prime grizzly habitat are disappearing and being converted into subdivisions at a rapid pace. Without plans to slow this development, which will inevitably lead to great grizzly mortality, the move to de-list the grizzly is premature."
- "The GYE has one of the highest human population growth rates in the U.S., due in part to immigration of people attracted by the region's scenic and recreational values. This has stimulated widespread development of biologically-important habitat, such as riparian areas, and impacted recovery of the grizzly bear."
- "We also recommend that trails in roadless areas of bear habitat be monitored and if conflicting uses become a problem to bear survival, trails should be closed on a seasonal level."
- "Private development (some of which has already been approved) that will follow delisting will increase fragmentation of habitat, isolation of the Yellowstone grizzly bear population, and bear/human conflicts that result in bear mortality."
- "As residential development of lands adjacent to public land increases, the feasibility of finding new areas of replacement habitat will continue to decrease. It makes sense to protect as much habitat as possible now rather than to try to create habitat later..."
- "I feel that a major concern in this area, and others in the greater Yellowstone ecosystem, is the influx of human population. In some areas it may be more population growth through subdivisions. But more so in my area, it is through the extended use of National Forest by those who do not necessarily live in the area, but frequent it often, due to the growing population in the proximity of these places."
- "The matter of population growth as a deterrent to delisting should be scientifically approached through modeling projections to give decision-makers and the public a better grasp of this crucial factor."

- "...private land development in the GYE can be anticipated to continue apace. Without more stringent standards placed upon state wildlife agencies than are present in the proposed rule and underlying plans, it is doubtful that grizzly bear conservation efforts on private lands will continue to have the same level of success afforded under the ESA."
- "Also, the plan reads, 'Citizens will also be encouraged to be involved in private land issues associated with grizzly bear management. This may include sanitation ordinances, conservation easements, developing private land management plans...' Does this mean you are calling on anyone in America as 'citizens' to help do these things on our private property? Does the same apply to, 'Citizens will be encouraged to participate in land management decisions at the project level?' So-called 'citizens' should not be making decisions about what happens or does not happen on private land - only the private land owner has the authority to do that."

412 – IMPROVE DEGRADED HABITAT

A few respondents commented on the need to restore degraded habitat. One respondent suggests that habitat degradation on private lands adjacent to public lands could be mitigated by additional road closures on the public lands. Another points out that degradation of habitat outside of the Primary Conservation Area, but near its edge, could diminish the quality of habitat inside the PCA.

- "The Gallatin National Forest could re-double efforts to close roads on federal lands, to compensate for the excessive access on adjacent private land... Such an approach has been pursued elsewhere by the Forest Service. For example, on the Lolo Forest, the Forest Service increased efforts to close roads to restore security for elk habitat security, due to excessive habitat degradation on adjacent Plum Creek lands. The Gallatin should adopt a similar approach."
- "The plan fails to ensure necessary improvement in degraded bear management subunits on the Gallatin Forest. The plan concedes that the Gallatin National Forest has excessively low levels of secure habitat in several bear management sub-units, due to motorized access... But, none of the delisting documents, including the delisting plan, the revised travel plan for the Gallatin Forest, and Forest Plan amendments set goals for improvements of these units. Rather the plan dismisses the issue, claiming that much of the access occurs on private lands and that the FS is in discussions with landowners about possible future protections on private lands."
- "Not only does the Conservation Strategy fail to protect the areas currently occupied by grizzly bears outside the PCA, but the lack of habitat standards outside the PCA also threatens to degrade the habitat within the PCA. In particular, the development or fragmentation of secure habitat immediately outside the PCA can degrade the quantity and quality of secure habitat within the PCA through 'edge effects.'"

413 – 1998 HABITAT BASELINE

Many of the respondents who commented on the 1998 habitat baseline object to the selection of 1998 as the baseline year. They contend that the choice of 1998 was arbitrary, and that habitat conditions have already changed since 1998. Another respondent suggests that when mitigation takes place on areas outside the PCA for management activities inside the PCA, the new mitigation areas should be added to the PCA. Some respondents suggest that other threshold conditions should be added to the 1998 habitat baseline. Those other threshold conditions include level of losses of key foods, human population growth, and habitat development and uses such as off-road vehicle use.

One respondent suggests that timber management guidelines are too restrictive and that more of the habitat base should be opened to management activities.

- "At several critical junctures, the draft rules argue that, to prevent grizzly bears from going extinct in the future, it is sufficient to maintain certain critical management variables at the levels they were during a purported increase in the Yellowstone grizzly bear population... The generic error with the logic ... Is that they fail to explicitly recognize that any increase in grizzly bear populations in recent years might be caused either by (1) improvements in grizzly management, and satisfactory control of human-caused grizzly mortality, (2) a favorable 'run' of good whitebark pine years, (3) some other cause or causes (known or unknown), or (4) some combination of these causes."
- "The third problem is that the Application Rules allow mitigated effects to exceed the 1998 baseline so long as secure habitat is compensated in adjacent subunits, in nearest subunits, or in areas outside the PCA adjacent to the subunit impacted. See Forest Plan DEIS at 28. If the FWS is going to allow areas outside the PCA to compensate secure habitat for mitigation of projects within the PCA, then the FWS must simultaneously change the status of those areas to be included in the PCA. Otherwise, changes to secure habitat within the PCA would be justified by mitigation efforts in areas that have no long-term guarantee for security. The net effect would be to degrade habitat inside the PCA without any guarantee that mitigation measures will serve their purpose in the long-term."
- "Astonishingly, the delisting plan calls for maintaining habitat conditions as of 1998 when conditions on public and private lands have changed significantly since that date and will continue to change. The Service states that it chose 1998 because 'levels of secure habitat and development remained relatively constant in the 10 years preceding 1998,' 70 Fed. Reg. at 69866. The Service then reaches the astounding conclusion a recovered grizzly population can be maintained based upon conditions that are nearly a decade old and no longer exist."
- "In comments on the Conservation Strategy and other related delisting documents, a number of suggestions were made to FWS about habitat thresholds that could be used, such as: a. levels of loss of whitebark pine, cutthroat trout, bison and other key foods; b. human population growth; and c. habitat development, and uses such as off-road vehicle use. These suggestions have been ignored by FWS."
- "The selection of 1998 levels is flawed for a number of reasons, including the failure to account for lag effect and the failure to acknowledge the Yellowstone grizzly bears' extensive use of habitat by outside the PCA throughout the 1990s. In addition, FWS conducted no analysis of habitat needed or used by the Yellowstone grizzly bear in 1990s, instead FWS continued to rely on its fundamentally flawed recovery zone."
- "Nowhere does FWS demonstrate why 1998 was selected rather than 1990, 1995, 2000 or any other year. There is no analysis whatsoever of alternative years, grizzly population levels and habitat conditions in those years, or the implications for selecting any particular year as a recovery standard. This is the height of arbitrary decision making."
- "This delisting plan ignores the magnitude and rate of habitat change and its impact to grizzly bear recovery. It calls for maintaining habitat conditions as of 1998, but 1998 conditions have already and will continue to change significantly."
- "Using a 'one project, one percent' Guideline may be appropriate for subunits with limited security habitat, but for subunits with abundant security, more flexibility could be allowed while still minimizing the potential for long-term conflicts to develop between humans and grizzly bears. With eighty-seven percent of the security habitat considered to be long-term secure and 13% allowing for management activities that may temporarily or permanently reduce the amount of security habitat, it seems more flexibility could be provided with minimal impacts on maintaining a recovered grizzly population."
- "...some of the Standards being considered in the forest plan amendments regarding timber management are more restrictive than the Guidelines used from 1978 to the present. We question

the need to now implement Standards for timber management that are more restrictive than the Guidelines used during the successful recovery process. The old Guidelines did not place a limit on the number of projects per year or the acres involved. They did not require the closing and decommissioning of a road constructed for timber sales to be completed within one year after it is constructed. The Guidelines only had restrictions on season of activities and restricting use of the road to the timber operators. Several projects could occur in a BMU subunit under the Guidelines where only one can occur under the new Standard."

- "The year 1998 was also chosen as the baseline for levels of secure habitat and developed sites that were supposed to be maintained - but this was immediately compromised by allowing 1% 'habitat degradation loophole' in perpetuity for every Bear Management Unit (BMU) in the primary Conservation Area (PCA). According to the Draft Forest Plan Amendments, this would amount to allowing 29,000 acres of formerly secure habitat to be 'temporarily' compromised at one time, with only the roads to a 'project' and their 500m buffers counted against the 1% - not the 'project' itself. Outside the PCA, the delisting proposal notes that nearly 1.8 million acres would be available for such habitat destruction."

500 – FACTOR B - OVERUTILIZATION

Respondents whose comments are grouped in this category expressed general concern about the killing of grizzly bears, but did not identify any other specific categories (e.g., hunting, poaching, human-caused mortalities).

- "Delisting would only lead to a brand new slaughter by misguided people."
- "Please stop killing our Animals!"
- "Why do they have to kill the bears? Is Yellowstone going condo?"
- "The bear has the right to thrive in this country and not become the victim of bloody thirsty idiots. We need you to respect nature and not put a commercial price tag on it."
- "I am afraid, if they are de-listed, that grizzlies will be killed, not because they pose a threat, but because people who belong elsewhere are scared."

501 – HUNTING

Numerous respondents commenting on hunting find sport-hunting of grizzly bears to be morally objectionable and contend that bear populations will decline. Numerous others say they are not against hunting for meat but are opposed to trophy hunting. Several respondents believe hunting and hunting interest groups have had beneficial effects on the number and distribution of the bears. Several respondents contend that a delisted bear population would be subject to intentional additional bear mortalities associated with proposed hunting seasons. Many feel that if grizzly bear management is taken over by state agencies grizzly bear hunting seasons and drastic reductions in grizzly populations will follow. One respondent suggests that grizzly bear mortality would increase in Wilderness and other remote areas if sport-hunting is reinstated, rather than in front country areas where grizzly/human conflicts are most frequent.

A few respondents object to bear-baiting for black bears because of the potential for mistaken-identity deaths of grizzlies. Some also view bear-baiting as unethical and that this practice takes away from the fair chase of ethical hunters.

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- "After all, if it were not for hunter interest groups, many game animals would be extinct and the numbers would be extinct and the number would not be what they are today."
- "...a delisted bear population would be subject to intentional additional bear mortalities associated with proposed hunting seasons. For a relatively small population, any additional deliberate human-caused mortalities will have significant population impacts."
- "Unless the grizzly bear is a threat or not able to survive because of over-population, they should not be available for hunting."
- "To remove the Yellowstone grizzly's 'threatened' designation would establish trophy hunting seasons (under state management plans), which the species cannot sustain."
- "I am not against hunting, but I am not for the 'trophy hunting' that this would be. People only hunt grizzly bears for the sheer thrill of hunting them down and killing the biggest on they can find to kill. They do not want it for meat, only for the fur or to stuff and put in some room somewhere."
- "It is paramount to a healthy population of any wild species to properly manage them. I don't believe that there would be more than 5-10 'once in a life time' licenses issued a year to harvest these animals"
- "Bear-baiting for black bears on the Bridger-Teton needs to be stopped immediately. Grizzlies are known to use these areas and mistaken kills happen every year. Bear-baiting is unethical and not fair sport for bears. The Shoshone stopped the practice years ago without protest and black bear hunting continues in the area."
- "While hunting grizzly bears outside of Yellowstone NP is reasonable, I strongly oppose stripping Yellowstone's grizzly bears of endangered species protection."
- "A number of unresolved uncertainties - ranging from social to behavioral ecology - must be addressed before the FWS can turn grizzly bear management over to state agencies that unequivocally intend to permit grizzly bear hunting. These uncertainties render delisting of the grizzly bear at this time improper."
- "Which brings about a somewhat tangential question, 'why the hell hunt Grizzlies?' This is nothing more than a testosterone bolstering activity, which has very little benefit to humanity. As a meat-eater, I have nothing against hunting for food, but I am vehemently opposed to sport hunting."
- "Bear-baiting is a disgusting form of 'hunting' that continues in WY and ID, practically unregulated due to few wardens and active poachers. This will continue to habituate grizzly bears and to lead to their deaths. The state game departments cannot tell the scope of this problem because they have no data and no intention to collect it."
- "...considering the discrepancies between estimated costs of implementing grizzly bear management programs and available state budgets, as discussed below, states have an incentive to increase grizzly bear harvest quotas as a means of generating revenues for wildlife management programs. These incentives contribute to the risk of over-harvesting."
- "The risk of over-harvesting calls for a particularly cautious approach outside the PCA, where the population trajectory is already negative and where additional mortality caused by hunting only contributes to population decline."
- "I was taught never to kill anything unless I intended to eat it."

- “All three state plans allow for potential that grizzlies may be hunted at some point. All the plans specify that any hunting that occurs will occur at a level that does not result in harvests in excess of sustainable levels. The three states have agreed to the process developed by the Grizzly Bear Study Team (USGS) for determining sustainable mortality levels based on best available science. This process incorporates both reported and an estimate of unreported mortalities. Any hunting that might occur will also protect females accompanied by offspring and these offspring. Further, given what will certainly be a very small, if any, surplus available for hunters under the sustainable mortality limit, it is clear that any hunting would have to be done on a limited permit basis. Under these circumstances, we are not concerned that hunting would cause a decline in grizzly bear numbers in the Yellowstone ecosystem.”
- "It is bad enough that we have Deer and Duck season, now if the bears are taken off the list 'Bear Killing Season' will be added to that bloody list..."
- “Federal resources have not been dedicated to the conservation and recovery of the grizzly bear for the past 31 years just so that over-harvesting by states can once again threaten grizzly bears with extinction.”
- "I was quite surprised to read that somehow the State of Idaho was going to be responsible to manage any grizzly bear that 'wanders west of Interstate 15.' I would suggest if such wandering does in fact happen and can be ascertained with a degree of certainty, then the State should have a special Drawing and limited Hunt for those that are willing to pay for the privilege. So rather than paying for illusory management, let's turn real management over to some hunters and let them control growth in Idaho."
- “Finally, the past action of the surrounding states regarding grizzly bear management left much to be desired. Wyoming's Game and Fish Department, for example, allowed bear baiting with carcasses and other bait on the very borders of Yellowstone. Has such bear baiting been prohibited?”
- “The Rule indicates any hunting would be compensatory mortality, replacing the need for management removals. However, a spatial analysis of grizzly bear mortalities in the Yellowstone Ecosystem (Bader 2000) found that following the cessation of hunting seasons, grizzly bear mortality shifted from wilderness and park secure habitat to non-wilderness and non-park habitats.”
- "Opening hunting limits on grizzly bears is the right thing to do. Setting tag quantities based upon population and population growth trends is good wildlife management. I believe Dr. Ann Causey states it very well in her book, 'On The Morality of Hunting', when she wrote, .. 'The advances made in game management techniques and ecological science during the past half century enable us to regulate hunting so that it does not excessively upset ecological balances or put species in danger of extinction.'"
- “The state management plans do not contain adequate regulatory mechanisms for ensuring that a grizzly bear hunt will be consistently enforced and coordinated throughout the tri-state region, or that the hunt will remain limited.”
- “NY which is the state I live in, allows hunting black bears during the big game season. We still have an abundance of black bears in our woods but we do not have the type of problems that NJ has with its ever increasing bear populations and no form of natural predator to control the population”
- “I believe that grizzly bear should be maintained at desirable levels and that hunting can be one of the management tools. Whenever populations fall below desired levels, hunting can be stopped.”
- “While Yellowstone to Yukon's policy is to support hunting traditions, in this case we are concerned about whether the grizzly bear population can sustain additional mortality from hunting, given the many other pressures.”

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- “Yes, hunting may occur, but remember, wildlife is a renewable natural resource, and when properly managed, along with its habitat, their long term survival is not in jeopardy.”
- "Place a large hunting license fee on the harvest of a few animals per year and let the hunters that can afford to shoot then, hunt them. Lets keep the bears alive by conservatively controlling the numbers and let the ones that want ‘trophies’ have the trophies."
- “Before delisting, the state agencies must articulate the details of a proposed hunting program, such as the methods for determining the proper hunt limit in each state, the timing of the hunt, the enforcement protocols for ensuring take limits are not exceeded, penalties for hunting without a permit or outside the season, and measures required to be taken to minimize accidental killing of female bears. Any post-delisting management plan must at least include specific, well-defined population thresholds and other biological criteria detailing the conditions under which grizzly bear hunts are appropriate.”
- "I'll add that hunting is a valuable tool of conservation and offers a high ‘value added’ incentive to protect a species."
- “Furthermore, the prospect of a grizzly bear hunt has already raised political expectations, particularly in Wyoming. As indicated elsewhere, Wyoming Game and Fish Department's John Emmerich has stated that he wants to manage the population down to 500 bears, and hunt perhaps 50 grizzlies per year. FWS should discourage this kind of rhetoric, which will create unnecessary pressure to maintain a hunt at the highest level possible.”
- “I'm not from any of the states involved with habitation by grizzlies, but I'm absolutely in favor of states controlling grizzly populations by hunting techniques. I've never heard of any animal becoming extinct or endangered because of modern controlled hunting. Deer, elk, and turkeys are only three of many good examples to look at.”
- “There is no scientifically valid reason to allow a hunt, nor have any been proposed. Why isn't there a transition period being proposed to see how the GY population fares prior to opening a season on them?”
- “Let hunters manage the population and take the money from the licenses and preserve the habitat”
- “Hunting will likely be an important tool for building local support for grizzly bears and managing populations that are sharing habitats with people and human activities.”
- “Implementing a hunting season is directly at odds with the need to minimize human-bear conflicts. Hunters will enter grizzly habitat as a direct result of the grizzly hunting season. Indeed, grizzly bear hunting will encourage hunters to invade even the most secluded areas of grizzly bear habitat. See Albert, D.M., et al. Effort and Success of Brown Bear Hunters in Alaska, 29 WILDLIFE SOC'Y BULLETIN 501 (2001) (indicating that hunter success in Alaska increased with access to remote locations). This can only increase human-bear interactions and accordingly contribute to grizzly bear mortalities and the potential for human injury.”
- “FWS fails to provide a convincing rationale for a grizzly bear hunt. It states that the goal of such a hunting season is to reduce grizzly density in areas of high grizzly bear/human conflicts, so that future management actions would be reduced. This reasoning is inconsistent with other parts of the plan that recognize that ongoing conflicts will occur if attractants are not managed properly. Hunting will not resolve conflicts as long as bears are drawn into an area because of availability of food.”

502 – HUNTING WILL MAKE GRIZZLIES WARY OF HUMANS

Some respondents contend that hunting grizzly bears makes them afraid and wary of humans, and keeps them away from human developments. One respondent feels that hunting would not allay any dangers from grizzly bears.

- "When I was a young man, and worked on trail crew and for various outfitters, most grizzly encounters had the grizzly leaving the area as fast as his legs would carry him. They were scared of humans and for most part kept their distance. Allowing limited hunting, personal and livestock protection, may once again cause the grizzly to have a sense of fear of humans. Which would be better for both."
- "Regulated hunting may also reverse habituate bears to people (e.g., to fear and avoid humans). This should help limit the number of nuisance bears that must be taken."
- "I have been threatened several times by grizzlies and they need to be hunted to restore a fear of man!!!!"
- "Bears seek hunter killed game, and show no fear of people. That loss of fear results in most grizzly deaths. Once grizzlies are afraid of humans, fewer bears will die, and people will be safer."
- "those bears that wander out of the parks and back into the parks and are hunted will very quickly learn to stay away from humans and will increase their survival instincts while greatly lessening the human - bear encounters"
- "Our bears are used to being protected and have lost all fear of man...Delisting the grizzly bear will allow for scare tactics, including hunting, to be used to make the grizzly cautious of man."
- "Also the hunting of these bears would make them more afraid of human contact. Too many people think of these animals as domesticated pets."
- "allowing hunting outside the borders of Yellowstone and Teton National Parks will not allay any danger to humans"
- "The benefit in hunting that I have seen living on the edge of the Pecos Wilderness for the last 9 years is this; the bear develops a natural fear of humans. Usually figuring out where the 'safe areas' are."

600 – FACTOR C – DISEASE AND PREDATION

Respondents whose comments appear in this category are concerned about grizzly mortality resulting from diseases. A few respondents are concerned about diseases that, while unanticipated now, might arise in the future. Some feel there is a threat posed by new diseases exacerbated by the current low levels of genetic diversity in the Yellowstone grizzly population.

- "Delisting will expose the bears and their habitat to increased pressure that is very likely to diminish their population under the best of conditions and a drastic reduction under conditions of disease or sustained drought."
- "Disease, drought, poor berry/nut season and human conflict could easily take a tremendous toll on such a small population."
- "Because any organism is susceptible to viruses or disease and prone to death by chemically triggered inputs from pollution, the grizzly bears are at risk."

- “The draft rules focus on diseases endemic to the Yellowstone grizzly bear population, rather than on epidemic diseases that might arise in the future... Considering the diverse possible diseases (Murray et al. 1999), and the possibility of an emerging RNA virus (Cleaveland et al. 2001), the draft rules are overly optimistic in believing that disease epidemics will not be a problem in the future. The threat posed by new diseases is exacerbated by the current low levels of genetic diversity in the Yellowstone grizzly bear population.”
- “A virus could kill that population quickly, just like the great apes of Africa are dying right now from Ebola and other viruses.”
- “Absolute levels of genetic diversity in the Yellowstone grizzly bear population are too low, even today. About 40% of the allelic diversity in the Yellowstone has been lost, as compared to the nearby NCDE. This puts the population at risk for disease epidemics, due to a likely considerable reduction in allelic diversity at MHC loci.”
- “Witness the virus currently sweeping through the Yellowstone wolf packs. If a similar virus attacked the grizzly population, it would be disastrous for the bear population. So while things seems to be headed in the right direction for the grizzly population right now, it would only take one bad turn of events for the population to crash.”
- “Cubs are also dying of diseases and lack of food prevents many cubs from making it to adulthood.”
- “Although the proposal states that no bear disease event is anticipated, how would such an event involving the bears be managed should it occur? Was the virus now affecting the wolf population similarly unanticipated?”

601 – WOLVES AND CONSPECIFIC PREDATION

A few respondents state that grizzly cub mortality is often the result of predation by adult males. One respondent suggests that one effect of reduced ungulate and cutthroat trout availability would be increased intraspecific predation on cubs resulting from increased use by adult males of food sources traditionally used by females with cubs.

- “You shouldn't take Grizzly bears off of the endangered species list because cubs and mother bears are getting killed by older male bears.”
- “Female grizzlies more often lost accompanying cubs when they made greater use of high protein foods, including ungulates, probably owing to conspecific predation (Mattson 2000).”

602 – HUMAN-CAUSED MORTALITIES

Many respondents believe that human-caused mortalities will increase if grizzly bears are delisted. Some contend that federal regulations are necessary to prevent the general killing of grizzly bears by local residents. One group of respondents are particularly concerned about discussions over disproportionately allocating bear mortalities to states whose stated desire is to decrease bear numbers. Others say that declines in the four major foods will induce grizzlies to travel greater distances to find food and to turn to human sources of food; both behaviors will result in significantly increased mortality. A few respondents believe that human-caused mortality is restricting expansion of grizzlies to currently unoccupied areas.

- “Although Grizzly's are ‘thriving’ now, they will be quickly hunted to extinction outside Yellowstone.”

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- "It doesn't seem as though 500 bears is enough considering that the surrounding ranchers will probably declare their own open season on them."
- "The delisting plan fails to address issues associated with high, ongoing human-caused grizzly bear mortality. Most of the grizzly bears that die in the Greater Yellowstone Ecosystem die of human causes, and most are avoidable."
- "Problems on private lands may be exacerbated by declines in key bear foods. Under conditions of food scarcity, bears roam more widely in search of alternatives, bringing them closer into areas of human activity, and substantially increasing the risk of human-caused mortality."
- "Short of any critique that says otherwise, NPCA believes that the revised mortality limits summarized in the proposed rule are based on sound science. However, we ask for assurances in the final rule that clarify that allowable mortalities will not be 'allocated' across Greater Yellowstone. NPCA believes that management-related bear mortalities should be an act of last resort, and should not be subject to political influences that are not science-based. We are particularly concerned about discussions over disproportionately allocating bear mortalities to states whose stated desire is to decrease bear numbers. We feel that any such consideration is an abuse of the reason for mortality limits in the first place, and should actively be discouraged by all agencies involved with bear management."
- "Once the Grizzly is off of the Endangered Species Act listing these ranchers will make all out war on the grizzlies."
- "The Bush Administration just declared open season on grizzly bears. Ranchers will now openly kill bears instead of killing and burying them surreptitiously."
- "There are not yet enough numbers to withstand the additional killing that is sure to go on if/when they're removed from listing."
- "rest assured that most grizzlies within the Yellowstone Ecosystem, but outside the park will end up dead."
- "Grizzly mortality increases when the whitebark pine crop fails. ---Grizzly bears mortality is almost double in whitebark pine non-mast years, as compared to mast years (Mattson et al. 1992ab, Pease and Mattson 1999). In addition, in years where the whitebark pine crop fails, the rate of habituation of grizzly bears to humans increases dramatically, causing a dramatic increase in the mortality rate of such habituated bears in subsequent years (Pease and Mattson 1999)."
- "Delisting would only lead to a brand new slaughter by misguided people."
- "Adequate systems are in place to resolve human-bear conflicts and avoid unnecessary mortalities. Given the current high number of grizzlies killed, 18-20 bears annually, it is clear that much more needs to be done to prevent bears from dying unnecessarily. These remaining problems can easily be solved, as Yellowstone National Park has successfully demonstrated with garbage management."
- "Decline of food sources will induce grizzlies to travel greater distances to find food, and to turn to human sources of food; both behaviors will result in significantly increased mortality."
- "The failure of the plan to address hunter-caused mortalities is of particular concern. According to IGBST data, 62 grizzly bears have been killed in hunter-related conflicts since 1989. Since 2002, hunter-related mortalities have average four per year. In a recent assessment of hunter-caused mortality in Wyoming, IGBST found that 56 grizzlies had been killed by hunters since 1992. In its analysis, IGBST found that a vast majority of these conflicts occurred around hunter camps, or when bears came into contact with a carcass that had been left in the field for some time. These are

manageable problems. In Alaska, for example, deer hunters on Kodiak are required to promptly remove carcasses, and avoid shooting late in the day, so as to ensure game retrieval by dark. This practice has proven to reduce conflict. This suggestion has been made to FWS and to Wyoming Fish and Game, but has been ignored.”

- “Compounding the issue of habitat loss and/or degradation outside the PCA is the increased probability of mortality in these regions following delisting. Even as a listed species, the primary source of grizzly bear mortality in the GYA is human-associated (Knight et al. 1988). All indications are that these impacts will worsen after delisting. Already, county commissioners in Wyoming, Idaho and Montana have passed resolutions that forbid grizzly bears from living in their political jurisdiction, and state agencies have announced their intentions to reinstate grizzly bear hunts.”

603 – POACHING

Respondents commenting on the issue of poaching are concerned that poachers have been responsible for more grizzly deaths than have been recorded by the USFWS. Many feel that grizzly deaths from poaching would increase if grizzly hunting is allowed. They claim this is in direct contrast to the prediction expressed in the proposed rule that local tolerance for grizzlies would increase.

Lack of enforcement for poaching crimes is a frequent concern of respondents. They doubt that state and local law enforcement will investigate and arrest anyone killing a grizzly. They also doubt that enforcement would be adequately funded.

One respondent states that local residents will “tackle the problem” of grizzly/human conflicts, whether the grizzlies are delisted or not.

- “It is widely known in Wyoming and Montana that grizzlies are routinely killed by ranchers with no repercussions. Lifting their protection will only compound this problem.”
- “I would venture a guess that the number of bears killed each year by the ‘shoot, shovel and shut up’ group is higher than what the management agencies are admitting to.”
- “And regardless of claims, no amount of ‘wildlife management’ has proven effective in controlling illegal bear kills even inside park boundaries.”
- “And as your own estimates show, for every known grizzly killed, at least another bear was killed illegally.”
- “In its delisting plan, FWS fails to evaluate the potential for increased poaching in grizzly bear habitat, as the result of oil and gas development on the periphery in communities, such as around Pinedale. This is a significant oversight, especially given the pace of development in Wyoming, and its proximity to bear habitat.”
- “As a research biologist working in the field, I see what occurs. The poaching is rampant. So will it be if you allow hunting of the grizzly.”
- “A major problem with the removal of the bears from the Endangered Species List is that it ignores the 21 bears that have been poached in Montana this year.”
- “Actually whether the bears and wolves are ever delisted is a moot point as most everyone I know will tackle the problem listed or not. I do believe though delisting will result in some control and fewer animal shot.”

- “Another problem is enforcement. It is unlikely that state and local authorities will vigorously investigate all grizzly bear shootings and make arrests where illegal shooting take place. It is more likely that they will just accept at face value claims by ranchers and others that dead grizzlies were attacking either people or livestock and killed in defense of life or property.”
- "In addition, the Rule notes that effective management removal of nuisance grizzlies will ‘promote tolerance’ and lower illegal killing. First, neither the Service, nor any other federal agency has documented, peer reviewed, science to back up this claim that killing bears, promotes tolerance for bears. Second, in the NCDE, where there is an excellent state program of conflict resolution, and the removal of problem animals as recommended here, the number two cause of dead grizzlies is still illegal killing. In 2005, it was number one. In the real world, it appears that agency control measures don't necessarily ‘promote tolerance.’"
- “Your agency itself willingly states that for every known grizzly killed, at least one other bear was killed illegally. So, are actual mortality rates going to be more like 18%? Your proposal fails to account for this, and stands by its 9% without acknowledging a likely increase in poaching, especially if hunting is once again allowed.”
- “...the FWS simply assumes, without any apparent basis, that vandal killing will not significantly increase if the delisting is finalized. Id. The FWS has not cited to any studies or evidence to support its statement that allowing a limited hunt of the grizzly bear will not increase vandal killing... the FWS should recognize the possibility that a hunting season could decrease public regard for grizzly bears by diminishing the public's sense of the urgency for grizzly bear protection, by altering the perception of the governmental tolerance for killing grizzly bears, and by removing the deterrent effect of federal prosecution.”
- “The delisting proposal assumes that state laws will be adequate to prevent poaching, and the law enforcement capability will be sufficient to respond to poaching incidents. However, law enforcement capability at the state level is much more limited than at the federal level. And, state penalties for violations of grizzly management rules are far less severe than federal penalties.”

604 – ACCIDENTAL DEATH

No comments were received specifically on the topic of accidental deaths of grizzly bears. Although some respondents mention vehicle collisions as a source of grizzly bear mortality, these comments are usually made in the larger context of human-caused mortality and are summarized in that category.

605 – GRIZZLY BEAR/HUMAN CONFLICTS

Many respondents address the problem of grizzly bear/human conflicts in their comments. Some of those comments are highly personalized with few common threads. Several respondents advocate for more geographically extensive sanitation regulations within the Greater Yellowstone Area. Some respondents believe that sanitation issues such as removing attractants and increasing public education should be addressed before delisting occurs.

A frequently expressed sentiment is that residents of the GYA will simply have to become accustomed to having frequent contact with grizzlies. Some people feel that the reason there is such conflict between grizzly bears and humans is because bears do not fear humans. One respondent urges the Fish and Wildlife Service to increase surveillance of the bears that leave the PCA and also advocates using non-lethal force in areas when grizzly/human conflict cannot be avoided

One respondent states that the existing sanitation regulations are too restrictive. A few respondents object to the criteria for determination and control of nuisance bears, feeling that protection of human life was not sufficiently considered.

- “The grizzly bear does not fear humans, this in itself creates a problem.”
- “Adequate systems are in place to resolve human-bear conflicts and avoid unnecessary mortalities. Given the current high number of grizzlies killed, 18-20 bears annually, it is clear that much more needs to be done to prevent bears from dying unnecessarily. These remaining problems can easily be solved, as Yellowstone National Park has successfully demonstrated with garbage management.”
- “Sanitation also remains a significant challenge for bear recovery. While Yellowstone Park and some communities outside the park have gone to enormous measures to remove grizzly bear attractants and reduce conflicts, others have not. Conflicts have been mounting on the periphery of the ecosystem, especially in Wyoming, where sanitation and education efforts are less developed. According to FWS data, a disproportionate and increasing number of mortalities and conflicts are occurring outside the PCA, and are related to the availability of attractants.”
- “We also urge you to support building a solid public/private partnership with local community volunteers who support grizzly protection to resolve bear/human conflicts and keep accurate counts of bear populations and mortality throughout the state.”
- “When allowable mortality levels are raised and resources for conflict resolution are reduced after delisting, mortality of food-habituated bears will only escalate. Because problem bears are a human safety problem, it makes sense to resolve these critical sanitation issues in the area before delisting.”
- “If they are delisted, there would need to be professional law enforcement and funding to make sure the program is handled properly.”
- “The Strategy also states ‘In circumstances that result in a nuisance bear situation outside the PCA, more consideration will be given to existing human uses,’ and that ‘state management plans will govern how nuisance grizzly bears are handled.’ Without sanitation plans in place, the occurrence of nuisance bears is already guaranteed.”
- “While it is important to not let any species become extinct, there are way to many bears for humans to still visit these areas also.”
- “I understand the ramifications of human bear conflicts in the towns within the Greater Yellowstone Ecosystem. But I would argue that this is one of the concessions those people make for the right to live on the edge of a wilderness area”
- “The Grizzly continues to expand its range and eventually will move into cities and towns, already that has happened in some cases.”
- “If the Primary Conservation Area cannot be extended another change that I urge you to make is the increased surveillance of the bears that have left the PCA and advocating the use of non-lethal force in the areas when Grizzly/human conflict cannot be avoided.”
- “We believe income from the issuing of hunting licenses should be used to compensate ranchers for loss of livestock from bear attacks, and thus be used to sustain the Conservation Strategy. This will reinforce the value of the conservation program to different stakeholders in the Yellowstone area.”
- “With more building that will happen, more human-bear contact will happen if they are removed from the endangered species list.”
- “Many Wyoming residents who hunt, fish, and recreate in grizzly populated areas know the risks, and take appropriate steps to deter a bear encounter. However, there are residents and non-residents who fail to come prepared or make fatal errors, leaving them vulnerable to maulings, camp

destruction, or other encounters. We believe the WGFD and USFWS should require all hunters to carry bear pepper spray and hang their meat immediately following a kill. Bear-damaged big game carcasses are not a reason for a bear's death. Instead, WGFD should permit affected hunters an additional opportunity to harvest another animal."

- "Bears displaying natural aggression are not to be removed, even if the aggression results in human injury or death.' This makes bears more important than human life - on public or private land."
- "Moreover, the plan does not adequately address sanitation problems that can be expected to accompany human development. Bear-human conflicts resulting from bear-attracting materials and improper sanitation are unnecessary and can be managed. The Conservation Strategy says some communities have begun to properly manage landfills and garbage collection. The bear should not be delisted until it can be shown that all communities in the area are properly and consistently managing bear-attracting materials."
- "This relationship between hunting and grizzly bear mortalities is an increasing problematic one: 'While the number of hunters using the PCA has not increased significantly, the number of grizzly bear known and probable mortalities due to interactions with hunters increased in the last decade.' See Conservation Strategy at 53. It is foreseeable that this trend would only increase with the implementation of a grizzly bear hunt."
- "The hunting camps in the national forests just South of Yellowstone have been infamous for years for not requiring that hunting guides and their clients clean up their camps so that bears will not become accustomed to foraging for food there. Has this been corrected?"
- "The bears are not dangerous; they are protective of their homes (i.e., their forests), their cubs and themselves. Should that be held against them? Shouldn't they be expected to protect their homes, their cubs and themselves when their homes are invaded? When the bears wander into populated areas, they should be dealt with on an individual basis, with protection and relocation, not killing, as the first option."
- "If the same level of bear recruitment is followed in the upcoming decade as is expected we will see a huge increase in the number of bear/livestock/human conflicts. This is unavoidable and should be accepted by the FWS."
- "Opening protected lands to developers and industry will reduce the grizzly's much needed natural habitat and increase unwanted grizzly encounters with humans"
- "Decline of food sources will induce grizzlies to travel greater distances to find food, and to turn to human sources of food; both behaviors will result in significantly increased mortality."
- "...Grizzly bears have become so over populated that they are being forced out of their traditional habitat and into areas that involve people. For example grizzlies visiting garbage sites at dude ranches in the valley, eating off peoples porches inside of the city limits of Dubois, and also a sow with a cub walking right past our County Library where our children go to read and learn."
- "And for those who say Grizzly's are dangerous and that they endanger and kill people, I point out that 100% of attacks occur when humans go into Grizzly habitat"
- "The bear food storage regulations placed in two Wyoming National Forests over opposition from thousands of people, five counties and three towns have been and are now being forced on our area. We got these very restrictive, highly intrusive, and federal power grabbing nonsensical rules in 2004 on the Beaverhead/Deerlodge National Forest. We did not even get a chance to comment on their bad points and can be jailed for six months and/or be fined \$5000.00 for breaking these extremely poor rules. Why the MT FWP would want to expand them to all black and grizzly bear habitat in the

state is beyond comprehension. Likewise your support for these extremely poor rules is going to face much grass roots opposition in the future.”

- "I am not in favor of the wording in Appendix 3 regarding the criteria for nuisance Grizzly Bear determination and control within the PCA. 'Bears displaying natural aggression are not to be removed, even if the aggression results in human injury or death, unless it is the judgment of management authorities that the particular circumstances warrant removal.' We live in a nation that mandates safety and regard for human life, and demands recompense for the taking of human life. The statement (in appendix 3) makes it perfectly clear that the US Fish and Wildlife Service and other Grizzly Bear proponents place Grizzly Bear life above that of humans."
- "FWS should redouble its efforts to reduce anticipated human-caused mortalities associated with attractants. It only makes sense to resolve remaining sanitation problems in the ecosystem before delisting, especially since problem grizzly bears pose a human safety risk. Primary areas of focus should be areas where sanitation related conflicts are occurring or the potential is high, such as the North and South Forks of the Shoshone, Dubois, Moran/Buffalo Valley, West Yellowstone, Gardiner, Cooke City and Island Park."
- "I am from Wyoming, born and raised in a ranching family. I still have family with ranches on the South Fork of the Shoshone as well as a family lodge on the North Fork. I personally own land on the Clarks Fork River. We never lost more than we could withstand to predation. In fact most predation was due to illness or physical incapacity."
- "According to the Wyoming Department of Administration and Information (<http://eadiv.state.wy.us>), Teton County will expand by another 30% in the next ten years, while Park and Sublette Counties expand by 5% and 11%, respectively. What is alarming about this growth trend is not only the population increase, but where those people are expected to reside. In each of those three counties in Wyoming, half of the new migrants will reside outside of established urban boundaries... The associated problems of grizzly bear-human conflicts will therefore continue to increase."
- "The health, safety and welfare of the citizens of Park County is affected when Grizzly Bears spill out into populated areas and threaten people, pets and livestock. Cody area residents are leaving their favorite recreation spots in Shoshone Forest to recreate in the big Horn Forest in order to get away from the danger of Grizzly Bears."
- "While I sympathize with the concerns of those living in grizzly bear habitat, I strongly believe that this should be an accepted way of life if one chooses to live in any area where bears roam. There are many measures one can take to greatly reduce the possibility of an encounter with bears, and I believe that if people would take the time to learn effective ways of preventing unwanted encounters, both the grizzly and people living within its habitat would both prosper."
- "Food storage regulations are an example of fundamental measures to reduce human-bear conflicts that should be implemented at a minimum in all potential grizzly habitat areas throughout the GYE, whether state, federal or private. The FWS cannot delist the bear based on statements that Montana 'will seek' to implement those regulations or that private landowners 'should be encouraged' to do so. Rather, the FWS must ensure that basic programs such as food storage regulations are firmly established on state and private lands within the tri-state region before even considering the propriety of delisting the grizzly bear."
- "If people don't want these bears as neighbors, they should live and/or recreate elsewhere."

700 – FACTOR D – ADEQUATE REGULATORY MECHANISMS

This category represents the comments of respondents who judge the existing regulatory mechanisms to be either adequate or inadequate. The most popular debate is federal versus state management control and regulation.

Many respondents object to the loss of federal management after delisting. Most of those respondents are concerned with the ramifications of what will happen to the grizzly bears and grizzly bear habitat under state management. Some feel that state laws are inadequate to protect grizzlies from unregulated or legalized killing. A few contend that the States have current laws and statutes that entail a “license to kill” and are incompatible with conserving a recovered grizzly population after delisting. A few also contend the proposal lacks measures to enforce compliance at both the state and federal levels. Those respondents question whether the state plans, the Conservation Strategy, and grizzly bear mortality limits are adequate regulatory mechanisms, because they are not legally enforceable.

A few respondents believe that the regulatory mechanisms as outlined in the proposal are adequate and look forward to the states taking over management control. Another respondent believes that “Local Plans” dealing with the management of the grizzly bear developed by elected officials, using public comment and acting in accordance with state law, must be accorded the same standing as state plans.

A few people comment on what they deem inadequate federal measures to protect grizzly bears and grizzly habitat. Those include: National Environmental Policy Act (NEPA) procedures; Forest Service sensitive species management policy; annual monitoring reviews by the Yellowstone Grizzly Coordinating Committee; and habitat standards in the Conservation Plan. Another respondent contends this proposal cannot satisfy the Endangered Species Act’s requirement that existing regulatory mechanisms need to be adequate to prevent Yellowstone grizzlies from becoming imperiled again in the foreseeable future.

Several respondents maintain that National Forest plans should be published with a final record of decision prior to issuing any proposal to delist the grizzly bear in the GYA. They assert the public has a right to comment on and see documentation that protections from the U. S. Forest Service will be in place and will be enforceable.

One respondent says the Fish and Wildlife Service should recognize the importance of both of the tribes in the document. That respondent also notes that these tribes plan to work with the FWS office in Lander, Wyoming to craft a grizzly bear management plan.

- “Too much government is not what this country was founded on, the states themselves should be able to manage their populations as they see fit.”
- "Outside the PCA, the proposed rule relies on similarly ineffective measures to protect grizzly habitat, specifically: NEPA compliance, a rescinded Forest Service ‘viability’ regulation, and unenforceable ‘sensitive species’ guidance."
- “The bears should not be delisted until they can be regulated under federal law with clear-cut goals beneficial to the bear population.”
- "Just as the bald eagle is no longer endangered they are protected by federal law to ensure their continued healthy status as a species. No such special legislation has been put forward on behalf of the Grizzly. The bear's status could easily slip back into endangered without continued protection. I would therefore lobby for continued protection to ensure a viable breeding population to preserve this magnificent animal in the lower 48."
- “My experience as a Forest Service biologist and wildlife and fish program manager is that wildlife in general, and more specific to future grizzly bear management, sensitive species habitat and population needs are commonly ignored in agency line officer decision-making. Professional biologists who act to uphold agency provisions identified in the agencies' manual direction (FSM

2600-2700) are systematically undermined in agency decisions affecting both budgets and applied principles of wildlife management. Land management resource activities consistently uphold a priori effects determinations that pose adverse affects to wildlife. Specifically to sensitive species policy, agency decisions do little to prevent eventual listing, the stated purpose of USDA policy [USDA 9500-4] on which Forest Service sensitive species management policy is based.”

- “The proposal lacks measures to enforce compliance at state or federal levels. Regulatory guidelines to be used by the Forest Service and by state wildlife agencies are laudable, but methods for enforcing compliance will be necessary to maintain animals as controversial as grizzly bears. Similarly, annual monitoring reviews by the Yellowstone Grizzly Coordinating Committee will be informative, but effective conservation will also require enforcement.”
- “If agencies greatly reduce restrictions that do not adequately protect grizzly bear habitat the public does not have the opportunity for litigation to ensure agency compliance with standards.”
- “In light of the Bush administration's rollbacks in national forest planning requirements and roadless area protections, there is no assurance that the habitat standards of the Conservation Plan will be adopted and enforceable in national forest plans in the Great Yellowstone Ecosystem. Without such assurances, the existing regulatory mechanisms are inadequate and, therefore, Defenders of Wildlife opposes delisting at this time.”
- “Until adequate laws, stiffly enforced and costly penalties are in force and demonstrated for bear/human (human caused) confrontation (such as poaching, inadvertent shooting of bears, improper human lifestyle in bear habitat)...the bears will do nothing but lose ground.”
- “At the same time, the factors that had led to their decline have strengthened in the intervening years, so the bears' removal from the list must be augmented with tough, enforceable laws governing their management.”
- “The MCD further believes that Local Plans dealing with the management of the grizzly bear developed by elected officials, using public comment and acting in accordance with State law, be accorded the same standing as State Plans.”
- “Inadequate regulatory mechanisms are another threat facing the bear that have not been adequately addressed in the de-listing proposal. Indeed, for this reason alone the proposal should be scrapped and National Forest plans should be published with a final record of decision prior to any proposal to remove protections. The public has a right to comment on and see documentation that protections from the USFS will be in place and will be enforceable.”
- “The agency also places unwarranted faith in analysis under the National Environmental Policy Act to address oil and gas threats. A cursory look at the explosion of oil and gas development on BLM lands in the upper Green River area in Wyoming, and the impacts on habitat important to big game and sensitive species, demonstrates the inadequacy of NEPA by itself to curb harmful activities, especially in the face of political pressure to develop.”
- “The MCD insists that the statement ‘Outside of the PCA, grizzly bears will be allowed to expand into suitable habitat’ (Federal Record, page 69860) be amended to read ‘Outside of the PCA, grizzly bears will be allowed to expand into suitable habitat according to the provisions of State Plans.’”
- “Aside from the procedural guarantees of a NEPA analysis, the FWS has not articulated any substantive regulatory mechanisms that would prevent habitat fragmentation, especially in areas outside the PCA.”
- “The FWS must also provide substantive, enforceable standards and regulatory mechanisms that ensure the grizzly bear will be managed upon delisting for its long-term survival. Part of those

assurances should take the form of threshold criteria that trigger more stringent management protocols tailored to safeguard the long-term survival of the grizzly bear.”

- "By restricting regulatory mechanisms to just two thirds of the occupied range, the proposal amounts to management down to the minimum. Rather than a program for recovery, that is a recipe for eventual extinction. Real 'recovery' requires protection of all occupied habitat and unoccupied suitable habitat."
- "We do need legislation to create a list and methodology for monitoring and protecting species transitioning off of the Endangered Species List."
- "All three state management plans 'recommend' and 'encourage' land management agencies to maintain or improve habitats that are important to grizzly bears and to monitor habitat conditions outside the PCA. See Conservation Strategy at 38. In a similarly vague fashion, the FWS rationalizes the lack of habitat standards outside the PCA by relying on the Forest Service's 'commitment to managing National Forest lands in the FYA such that a viable grizzly bear population is maintained.' See Delisting Proposal, 70 Fed. Reg. at 69,871. Recommendations and encouragement, however, do not constitute substantive standards. Without enforceable standards, there is no guarantee that federal and state land management agencies will respond to recommendations or encouragement."
- "Given the likely future importance of tribal lands to grizzly bear conservation, FWS should recognize the importance of both of the tribes in the document. It is also noteworthy that these tribes plan to work with the FWS office in Lander, Wyoming to craft a grizzly bear management plan in the near future and recently received a sizeable federal grant for that purpose."
- "In the event of delisting, state laws will provide the only binding and enforceable limits on human take of Yellowstone grizzly bears. Yet there are no existing laws in Montana, Wyoming, or Idaho that protect grizzly bears from over-hunting and legalized killing to prevent private property damage, including livestock depredation."
- "In short, none of the three states within the DPS has a legal framework in place to prevent excessive grizzly bear mortality. Nevertheless, in its promotional materials supporting grizzly bear delisting, FWS informs the public that state laws are sufficiently protective."
- "...largely unregulated killing of grizzly bears is currently possible under the laws of all three states. Moreover, the Service's assurance that 'mortalities count against the mortality limits set in the Conservation Strategy' is cold comfort. Regardless whether the killings are 'counted,' they are still legal under state law, and the Service has no means of controlling excessive mortality short of re-listing under the ESA. This cannot satisfy the ESA's requirement that existing regulatory mechanisms be adequate to prevent Yellowstone grizzlies from becoming imperiled again in the foreseeable future."
- "First, compliance with NEPA does not afford any substantive protection to grizzly habitat because it is a purely procedural statute. Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 558 (1978) ('NEPA does set forth significant substantive goals for the Nation, but its mandate to the agencies is essentially procedural.')
- "As written, the delisting proposal and the underlying Conservation Strategy and state management plans encourage management practices that could easily create an isolated reserve within the PCA, beyond which grizzlies will likely be removed if they venture into habitat in Idaho or Wyoming. Given the threats to grizzly bears from environmental factors, the management of grizzlies contemplated in the state management plans after delisting does not provide sufficient protections for grizzly bears outside the PCA to ensure the specie's continued recovery."

- "...the inadequacy of existing regulatory mechanisms'; Not only are the regulator mechanisms inadequate, they're non-existent, thanks to new Forest Plan rules (USFS 2005) which do away with all enforceable standards, and, therefore, with any 'regulations.' In addition, the failure to challenge ant-grizzly County resolutions; endless cycles of monitoring and status reviews in place of action; and weak or missing regulatory documents outside the PCA, all mean that this factor is violated at multiple levels. The problem is compounded by the Service's willful refusal to disclose the raw data that serve as the basis for many agency claims."
- "Montana further allows any person to kill a grizzly bear if 'the grizzly bear is in the act of attacking or killing livestock.' Id. 87-3-130(1). This statutory license to kill is incompatible with conserving a recovered grizzly population after delisting. In 1999, FWS stressed that delisting could not go forward absent changes to an earlier version of the same statute, which permitted any person to kill wildlife, including grizzly bears, when discovered 'molesting, assaulting, killing, or threatening to kill...livestock.' Mont. Code Ann. 87-3-130 (1999)... Montana never amended its laws to limit grizzly mortalities associated with livestock conflicts...Just as the existing regulatory mechanisms in Montana were inadequate in 1999, they are still inadequate to support delisting in 2006."

701 – ADEQUACY OF THE CONSERVATION STRATEGY

Many respondents object to the non-binding character of the Conservation Strategy (CS). They relate that the proposed inter-agency CS is simply a "handshake agreement" with "no legal teeth" and that there is no reliable source for its future funding. They feel that the signatory agencies should be legally compelled to adhere to the management provisions of the CS. Some feel the Conservation Strategy fails to ensure that the Yellowstone grizzly bear population will not become threatened or endangered in the foreseeable future by virtue of inadequate regulatory mechanisms alone.

A few respondents request additional representation on the Yellowstone Grizzly Coordinating Committee. They feel a representative of a nongovernmental conservation organization and a wildlife biologist not employed by one of the implementing agencies would be of merit. They note that previous requests for representation have been denied. A local respondent says the Conservation Strategy does not say specifically that the agencies will work with private landowners.

One respondent states the Conservation Strategy does not provide a buffer zone to protect the edge habitats of the PCA from degradation. The contention is that without a buffer zone, the habitat area that is supposed to be protected under the CS is actually less than the area managed under the Recovery Zone. Another respondent says the Conservation Strategy fails to provide protections against road building and other activities within inventoried roadless areas.

A few respondents are satisfied with the Conservation Strategy in its present form. Others contend that the CS is too restrictive and effectively eliminates multiple use activities on Forest Service lands inside the Primary Conservation Area.

- "Further, because the Yellowstone Grizzly Coordinating Committee is given ultimate responsibility in ensuring that the Conservation Strategy is implemented, we believe there should be additional voting members of that committee who are not representatives of agencies tasked with implementing the strategy. A representative of a nongovernmental conservation organization and a wildlife biologist not employed by one of the implementing agencies would be important additions."
- "The currently proposed conservation strategy appears to be well-planned and provides protective measures to ensure that the population will not be threatened in the future."
- "The 'Conservation Strategy' we've seen thus far is sadly deficient for habitat protection needed desperately by our endangered species. Putting the bear's future in such a risky situation is completely unacceptable."

- "Additionally, the proposed inter-agency 'Conservation Strategy' has no legal teeth, i.e. there is no assurance that this strategy will ever be implemented or maintained into the future."
- "The delisting proposal allows the Forest Service to degrade one percent of each bear management sub-unit, as long as this impact is mitigated by road closures and restorations elsewhere in the same bear management unit (BMU). FWS underestimates the potential significance of this change, which would allow 29,500 acres of development activities per year in perpetuity within the PCA."
- "Under the Recovery Plan, these edge effects were mitigated by creating a 10 mile buffer zone around the perimeter of the Recovery Zone. See Conservation Strategy at 25 (noting that management and monitoring under the Recovery Plan extended 10 miles beyond the perimeter of the Recovery Zone). The Conservation Strategy, however, provides no such buffer zone to protect the edge habitats of the PCA from degradation. Without a buffer zone, the habitat area that is supposedly protected under the Conservation Strategy is actually less than the area managed under the Recovery Zone."
- "...the CS is a handshake agreement only and not legally binding...If violations occur under the ESA, citizens can challenge the decision. This will not be the case after delisting."
- "Although the CS encompasses many important issues for the bears' survival, the existing draft recommendations may not adequately ensure the permanent existence of a viable wild population in the Greater Yellowstone Ecosystem (GYE). A major concern is that the draft document seems to ignore that the GYE is under threat from anthropogenic forces to an unprecedented extent, of which, the impact on the bears is unknown."
- "...it is our opinion that the agreed upon Conservation Strategy developed by all of the cooperating agencies will provide a secure future and ongoing success of this grizzly population. FWP is committed to continuing to implement the successful programs in place as well as additional efforts outlined in the Conservation Strategy."
- "...the Conservation Strategy is not an adequate regulatory mechanism for the additional reason that there is no reliable source for its future funding---\$3.5 million annually in perpetuity, not accounting for inflation."
- "I support delisting the Yellowstone grizzly from the list of threatened and endangered species. I do NOT support the proposed Conservation Strategy/Management by the U.S. Fish & Wildlife Service. It has nothing to do with the grizzly, and everything to do with taking away rights in the name of the grizzly.... Your strategy completely does away with multiple use on public land. It gives the grizzly bear power over people, livestock and responsible recreation on public land. No animal should have that much power - including the grizzly bear. In your plan, all public grazing sheep allotments are 'phased out.' No action will be taken for grizzlies preying on sheep. Also, 'Adjustments have been made on cattle grazing allotments...to protect grizzly bears.' Also, 'no new cattle grazing allotments will be available, more cattle cannot be added to an allotment without analysis, and if chronic depredation occur cattle grazing will be phased out', according to the USFWS proposed plan."
- "Nowhere in your strategy does it say that agencies will work with private land owners. The strategy gives 'citizens' (environmentalists and people who know nothing about the land and have no connection to it) as much say as landowners who have purchased land, made improvements and who pay taxes."
- "Additionally, the draft rule glosses over the fact that even within the PCA, the Conservation Strategy itself fails to provide bottom-line protections against road building and other activities within inventoried roadless areas. The Strategy, in fact, provides no prohibitions on activities not requiring

road construction within secure habitat, including snowmobiling, off-road vehicle driving, helicopter logging operations, and ground-based logging operations that rely upon existing roads.”

- “Despite repeated requests to managers, citizens representing conservation interests have not been allowed to participate in the Yellowstone Grizzly Sub-committee. County commissioners have been included in the committee, and they will have more authority after delisting. They have typically had a pro-development orientation.”
- “Aside from these physical concerns, there are also administrative concerns relating to this plan. Without an ESA in effect, there is no legally binding mechanism to force the states (i.e. Wyoming) to uphold the ‘Conservation Strategy.’”
- “FWS places great weight on the Conservation Strategy as a mechanism to preserve the Yellowstone grizzly bear population when the population crashes or habitat is rendered unsuitable for bears. Because the Conservation Strategy is not embodied in law or regulation, however, it is not enforceable and not a regulatory mechanism. Each state or federal agency is free to abandon its Conservation Strategy commitments with impunity. If for example, the state of Wyoming chose to establish a grizzly bear hunt and issue 500 hunting tags, there is nothing short of relisting the grizzly bear that could be done to control mortalities in that state. For these reasons, the Conservation Strategy fails to ensure that the Yellowstone grizzly bear population will not become threatened or endangered in the foreseeable future by virtue of inadequate regulatory mechanisms alone.”
- “Road-building in secure habitat within the PCA---regardless of the size of the roadless area---is also permitted, ‘provided that replacement secure habitat of equivalent habitat quality is provided in the same grizzly subunit.’ Strategy at p. 40. Such an activity is permitted regardless of the size of the roadless area, as the Strategy fails to differentiate between different sizes of roadless areas---under its provisions, a 50,000-acre roadless area is treated no differently nor given any level of heightened protection as compared to roadless areas as small as 10 acres in size.”

702 – U. S. FOREST SERVICE FOREST PLAN AMENDMENTS

Many respondents object to the unfinished state of the Forest Service’s Forest Plan Amendments and habitat management plans for six national forests in the Greater Yellowstone Area. Those respondents argue that it is impossible to determine whether the Forest Plans constitute adequate regulatory mechanisms and grizzly bear habitat protection until the plan amendments are finalized. One respondent suggests that the U.S. Fish and Wildlife Service should relist the grizzly bears if the Forest Plans fail to provide adequate regulatory mechanisms.

- “The proposed rule also improperly relies on habitat management plans which are not yet in place, including Forest Service forest plan amendments. The public should not be asked to comment on the adequacy of regulatory mechanisms after delisting without being able to examine those mechanisms.”
- “As a threshold matter, we note that since this amendment process has yet to be finalized, our ability to comment on its relative merits is limited. This fact is extremely problematic, especially in light of considerable uncertainty concerning the extent to which the Strategy will be incorporated into the Forest Plan amendments. For example, a biological assessment for the amendment process, released in July 2005, indicates that a ‘modified’ version of the Strategy will be selected as the proposed action/preferred alternative within the final environmental impact statement (FEIS). Moreover, there is nothing preventing the Forest Service from further modifying its preferred alternative to implement the Strategy, or even choosing a different alternative entirely, when it signs the Record of Decision (ROD) finalizing the amendments. In other words, it is possible that important facets of the Conservation Strategy may not be included in the Forest Plan amendments.”

- "If adequate regulatory mechanisms will exist with the package of Forest Plan amendments specified in the BA, the FWS cannot reasonably speculate about whether or not these will persist through rounds of scheduled plan revisions that will occur over the next decade. What the FWS can, and should, do is relist grizzly bears if future Forest Service actions create a situation where adequate regulatory mechanisms no longer exist."
- "Management plans for the National Forests surrounding Yellowstone, where many grizzlies find their homes, have yet to be finalized."

703 – 2005 FOREST PLANNING REGULATIONS

Many respondents who commented on the 2005 Forest Planning regulations are consistently opposed to the lack of enforceable habitat standards in the new regulations. In their view, the absence of enforceable standards makes the Forest Plans inadequate as regulatory mechanisms, and that makes the proposed rule to delist grizzly bears legally deficient.

- "The Endangered Species Act allows the Fish and Wildlife Service to take a species off the ESA's threatened and endangered list where it determines that adequate 'regulatory mechanisms' are in place to ensure that the species will not need to be relisted in the foreseeable future. Given this requirement, USFWS must assure that the grizzly bear amendments are binding and enforceable on the Forest Service. Without any such assurance, we believe that the proposed rule will be legally deficient."
- "The US Forest Service would limit habitat protections for grizzly bears to the Primary conservation Area (PCA), which encompasses about 66% of current grizzly bear range. These habitat protections are discretionary and non-binding and are thus subject to FS policy changes."
- "Forest Service management plans will no longer contain binding habitat standards but will be discretionary; regulatory mechanisms to maintain habitat after delisting are not adequate if requirements are no binding."
- "Because of the questions that exist concerning the authority to adopt binding standards and guidelines under the new NFMA rules, we believe the Forest Service must adopt the grizzly bear standards and guidelines as regulations through provisions set forth under 36 C.F.R. § 261.70(a)(4), in which Regional Foresters are authorized to issue regulations prohibiting acts or omissions for the protection of threatened, endangered, unique or vanishing species. Prior to the issuance of a final rule, the three Regional Foresters with authority over forests in the Greater Yellowstone should jointly issue such regulations. Without that legally binding assurance, we again state our deep concern that that proposed rule will remain vulnerable to legal challenge. In addition, without this assurance in place in the manner described, NPCA will find it difficult to offer our qualified support for delisting."
- "Further, the new planning regulations eliminate any standards from the new plans. Under the previous planning regime, standards represented binding, enforceable commitments by the Forest Service. The new generation of plans will contain only 'guidelines.'...Absent any method of establishing a binding, enforceable commitment for grizzly bear habitat protection, the LRMPs cited in the proposed delisting rule cannot qualify as 'regulatory mechanisms' under the ESA."
- "Even if the forest plan amendments are finalized prior to delisting, Forest Service management plans will no longer contain binding habitat standards... The Forest Service will enforce the rules if it feels like it. If requirements are not binding, regulatory mechanisms to maintain habitat after delisting are not adequate."
- "The proposed rule relies on a Conservation Strategy to protect the grizzly bears and their habitat in the future. This Conservation Strategy is premised on amending the Greater Yellowstone

Ecosystem's national forest plans to include enforceable standards to protect grizzly bear habitat. Since the Conservation Strategy was written, however, new federal rules remove the requirement that national forest plans contains such standards."

- "The next generation of LRMPs for the Greater Yellowstone Ecosystem National Forests will lack any method of enforcing compliance with grizzly bear habitat standards. Instead, they will be 'aspirational in nature,' rather than 'prescriptive.' Final Rule, National Forest System Land and Resource Management Planning, 70 Fed. Reg. 1,023, 1,031, 1,040 (Jan. 5, 2005). Thus, rather than the enforceable standards and commitments for grizzly bear habitat protection, these 'aspirational' forest plans will contain 'desired conditions', 'objectives', and 'guidelines.' Id. at 1,026. None of the components of a forest plan under the new rules 'is intended to directly dictate on the ground decisions which have impacts on the environment.' Id. at 1,031. These plans are neither commitments nor final decisions approving projects and activities. Id. at 1,025-26. Instead, a forest land manager will have 'the discretion to act within the range of guidelines, as well as the latitude to depart from guidelines when circumstances warrant it. Id."
- "...there is no longer any enforceable Forest Service regulation in place that requires the agency to ensure the viability of any species, including sensitive species... 'Sensitive species' designations solely implicate internal policies from the National Forest Service Manual, see Forest Service Manual 2670, and the courts have repeatedly held such policies in handbooks and manuals to be judicially unenforceable... Thus, '[a]bsent some method of enforcing compliance,' sensitive species designations do not amount to a regulatory mechanism under the ESA."
- "Under the Bush Administration's NFMA regulation rollback, forest plans are largely discretionary, making unenforceable the grizzly bear conservation strategy to be included in the forest plans. Additionally, the rollback eliminated the requirement for the Forest Service to ensure there are viable populations of native fish and wildlife species on our national forests."
- "It appears that delisting would occur without any federal requirement that forest plans contain enforceable standards to protect the grizzlies. This leaves the bears at the mercy of developers, hunters and the extractive industries."
- "Even if all aspects of the Conservation Strategy are indeed amended into the Yellowstone Forest Plans, however, these protections will soon be rendered unenforceable under the Bush administration's new National Forest Management Act (NFMA) forest planning regulations. Issued in 2005 as 'a paradigm shift in land management planning,' 70 Fed. Reg. 1024 (Jan. 5, 2005), the heart of Bush planning regulations is an effort---both illegal and ill-advised---to provide the Forest Service with complete 'discretion' to abide by or disregard Forest Plan provisions as it sees fit."
- "Even within the designated recovery zone, potential problems exist because of the recent government push to declare Forest Plans as non-binding documents that would merely serve as guidelines rather than as enforced standards. This change represents potential to negate all of the progress that has been made in protecting the grizzly bear habitat on National Forest lands that are essential to the grizzly bears' long-term survival."
- "Under these new rules, forest plans cannot qualify as adequate regulatory mechanisms under the Endangered Species Act (ESA). In the draft revision of the Beaverhead/Deerlodge Forest Plan, the first in the region to be adopted under the new rules, the FS makes it clear that the plan makes no management commitments. This is inadequate to ensure compliance with FWS habitat standards."
- "By law, delisting can only happen when there are adequate regulatory mechanisms in place to protect the bear and its essential habitat. However, due to the ongoing efforts of the Bush Administration to undermine forest planning regulations, it is not possible to count on these protections remaining in place for grizzly bear habitat in our national forest lands."

- "Bush administration changes to USFS planning regulations in 2005 cut-out previous 'standards,' which could be binding and enforceable, and replaced them with softer terms such as 'desired conditions', 'objectives' and 'guidelines.' How will the bears or their habitat be protected amongst these terms? Your agency has itself admitted that this is a problem that needs to be addressed. We argue that the problem should have been fixed before you proposed delisting."

704 – STATE MANAGEMENT PLANS

Many respondents characterize the state grizzly bear management plans as non-specific, inadequate regulatory mechanisms. Many feel there needs to be consistency between the three states' management plans. Others point out that the states lack authority to manage habitat on federal lands, that the states exclude grizzlies from some areas of suitable habitat, that the states do little to encourage connectivity with other populations, and that the states do not have uniform and explicitly stated grizzly bear hunting regulations.

On the other hand, a few respondents feel that the state plans are adequate regulatory mechanisms. Others ask that the proposed rule be changed to bring it into compliance with the provisions in the state plans restricting grizzlies from certain habitat. One respondent says there is some confusion whether expansion will simply be allowed or managed per State Plans. This respondent also says the final rule needs to be absolutely clear that "grizzly bear distribution outside the PCA will be managed according to the provisions of each State Plan as specified in the Conservation Strategy".

- "It is not acceptable for the FWS to delist the grizzly bear in reliance on state management plans that are non-specific, fail to provide enforceable standards or protocols for protecting secure habitat, and only provide a general picture of the state's intent. Statements of intent, without manifestation of that intent through substantive standards, do not provide assurances for the long-term survival of the grizzly bear."
- "In our opinion, the Montana management plan is by far the best of the three States but all three, in combination, provide a reasonable regulatory mechanism for cooperatively managing the Yellowstone grizzly bear population."
- "The state management plans do not contain adequate regulatory mechanisms for ensuring that a grizzly bear hunt will be consistently enforced and coordinated throughout the tri-state region, or that the hunt will remain limited."
- "The lack of standards and enforcement mechanisms in the state management plans expose state wildlife officials to intense pressure to manage for very low densities in areas outside of the PCA."
- "Indeed, practices outlined in state management plans would reduce potential connectivity."
- "By transferring management to three states in the Greater Yellowstone Ecosystem, a lack of uniform policies is evident."
- "The HSCFB insists that references to management of the grizzly bear outside the PCA be reworded so as to be in compliance with the language and intent of the State Plans."
- "While some state plans identify acceptable thresholds of mortality, the inclusion of language that gives equal or greater value to social acceptance and/or human use provides the foundation for disregarding grizzly bear conservation in a wide range of circumstances. Further, no states have included methods for enforcing compliance with the goals stated in their management plans."

- “The state management plans, which will govern the areas outside of the PCA, do little more than announce vague policies for grizzly bear management without any substantive commitment to specific standards.”
- “To summarize the State plans, we consider them to be adequate for managing grizzly bears in suitable habitat outside the Primary Conservation Area. The Montana Plan is quite good while the other two states are less comprehensive and detailed. All three plans commit to monitoring populations and habitats. They also allow for regulated hunting. Hunting will likely be an important tool for building local support for grizzly bears and managing populations that are sharing habitats with people and human activities. All three State plans have detailed criteria for proactively minimizing bear-human conflicts through education and outreach as well as aggressively managing nuisance bears with established protocols and priorities.”
- “The state management plans likewise increase the risks of habitat fragmentation by failing to identify habitat linkages and actively manage for habitat connectivity. Those plans do not encourage range expansion or facilitate expansion through natural dispersal. At best, the state management plans tolerate range expansion to the extent that active management or resource protection is not necessary and to the extent that bears do not alter the desired trajectory of development and behavior among residents of the states.”
- “The delisting proposal attempts to provide assurances that habitat outside the PCA will be protected under state plans. It cites states’ commitment to maintaining habitat, and recommendations for access management provided in Montana and Wyoming state plans. But, elsewhere in the delisting proposal, the agency clearly establishes that states lack management authority over federal lands. State recommendations are meaningless if federal agencies choose to ignore them. The story of the Brent Creek oil and gas leasing proposal on the Shoshone Forest in 2000 is a good example. Here, Wyoming Game and Fish vigorously objected to a Forest Service energy leasing proposal in bear habitat used by 18 grizzly bears. But, the Forest Service proceeded anyway. Game and Fish recommendations didn’t matter with the grizzly protected under the ESA; they are likely to matter less after delisting.”
- “Before delisting, the state agencies must articulate the details of a proposed hunting program, such as the methods for determining the proper hunt limit in each state, the timing of the hunt, the enforcement protocols for ensuring take limits are not exceeded, penalties for hunting without a permit or outside the season, and measures required to be taken to minimize accidental killing of female bears. Any post-delisting management plan must at least include specific, well-defined population thresholds and other biological criteria detailing the conditions under which grizzly bear hunts are appropriate.”
- “The Draft Rule states in five places (page 69860 last paragraph; page 69866, 3rd column, 1st full paragraph; page 69870, 3rd column, 1st paragraph; page 69876, top of 3rd column; page 69877, 3rd column, second full paragraph) that grizzly bears will be allowed to expand into suitable habitat or all suitable habitat, as defined by the Draft Rule. Without a qualification after each of these statements that expansion of bears in areas outside the PCA will be per direction provided in the Conservation Strategy and associated State Grizzly Bear Management Plans, there is some confusion whether expansion will simply be allowed or managed per State Plans. It is imperative that the final rule be absolutely clear that grizzly bear distribution outside the PCA will be managed according to the provisions of each State Plan as specified in the Conservation Strategy.”
- “We further note that if the states were to fail to follow through in implementing the regulatory mechanism specified in the state plans, the appropriate federal action would be to relist the species. There is no way the Service could or should factor such a speculative event into a decision to not delist. This decision must be based on a determination of whether the regulatory mechanisms in the state and other plans are adequate.”

705 – MONTANA MANAGEMENT PLAN

When comparing the three state management plans, several respondents feel the Montana Management Plan is the best of the three. Those commenting on the issue of the Montana Grizzly Bear Management Plan express a variety of opinions, including objections to the absence of a means of enforcing compliance with the plan, and objections to the maximum open road density allowed outside the PCA. One respondent claims the Montana Management Plan was written without adequate public input and is displeased with the lack of restrictions on grizzly bear occupancy outside of urban areas.

- “FWS fails to mention that under the Wyoming and Montana State Grizzly Plans (Montana FWP, Wyoming F&G 2002)), open road density (ORD) standards outside the PCA would be 1 mi./sq.mi. - on every square mile of habitat - far beyond the ability of any grizzly population to survive.”
- “The Montana Plan is quite good while the other two states are less comprehensive and detailed.”
- “In our opinion, the Montana management plan is by far the best of the three States but all three, in combination, provide a reasonable regulatory mechanism for cooperatively managing the Yellowstone grizzly bear population.”
- "In Montana the stated goal is ‘to manage for a recovered grizzly bear population in southwestern Montana and to provide for a continuing expansion of that population into areas that are biologically suitable and socially acceptable.’ Although the areas in Montana deemed socially acceptable are larger than in either Wyoming or Idaho, there is still no method of enforcing compliance.”
- “The 2002 plan by the state of Montana for grizzly management in seven SW Montana counties and beyond was lacking in participation by most of the Montana citizens affected and who are just now realizing the many bad points of the plan. For example we are not happy with the fact that grizzly bears can roam anywhere except in urban areas. We are not happy that the grand plan seems to be to overrun our private lands, outstanding fishing rivers, subdivisions and small towns with grizzly bears.”

706 – WYOMING MANAGEMENT PLAN

Most respondents commenting on the issue of the Wyoming Grizzly Bear Management Plan object to its exclusion of bears from areas of otherwise suitable habitat. They also suspect its intention is to manage the GYA bear population down to 500 individuals, the minimum allowed by the Conservation Strategy. They say this means that the estimates of current population growth rates in the proposed rule will no longer apply after delisting, but rather, the population will decline after delisting.

A few respondents contend that the proposed rule does not comply with the ‘socially acceptable’ designation in the Wyoming Plan. On the other hand, some respondents take exception with the Wyoming Plan placing large areas of biologically suitable habitat off limits to bears because they are ‘socially unacceptable’ areas for grizzly bears. They contend this raises serious questions about the Plan’s adequacy as a ‘regulatory mechanism’ upon which to support delisting.”

One respondent considers it a serious oversight that the Wyoming Plan fails to include the significant lands on the Wind River Reservation.

- “FWS fails to mention that under the Wyoming and Montana State Grizzly Plans (Montana FWP, Wyoming F&G 2002)), open road density (ORD) standards outside the PCA would be 1 mi./sq.mi. - on every square mile of habitat - far beyond the ability of any grizzly population to survive.”

- "The State of Wyoming has stated a management goal of 500 or more grizzly bears in the ecosystem. Wyoming's plan is written in such a way as to encourage management of bears down to that minimum number, rather than encouraging an increase in grizzly bear numbers and range. The plan states that the only constraint upon when and where Wyoming will 'apply the mortality of grizzly bears in order to meet this minimum goal is that Wyoming cannot exceed the overall human caused mortality threshold for the state.' Moody et al. (2005). This approach, combined with the fact that the Wyoming plan places large areas of biologically suitable habitat off limits to bears because they are 'socially unacceptable' areas for grizzly bears, raises serious questions about the Plan's adequacy as a 'regulatory mechanism' upon which to support delisting."
- "Wyoming and Idaho plan to exclude grizzly bears from many areas of suitable habitat, such as the Wyoming range and the Palisades."
- "Wyoming's 2002 (Amended 2005) Grizzly Bear Management Plan provides specific direction on how grizzly bear numbers and distribution will be managed in Wyoming outside of the PCA from a biologically suitable and socially acceptable perspective, and includes efforts to discourage dispersal and occupancy in the southern Wind River Mountains, an area considered suitable habitat in the Draft Rule. However, the State Plan does recognize that a grizzly bear could disperse into the biologically suitable habitat in the southern Wind River Mountains and could live there if it never caused any human conflicts."
- "The Wyoming management plan will result in the decline of the grizzly bear population. Wyoming plans to manage the grizzly bear population down to 500 bears, which will result in an estimated killing of 50 bears annually. This means that the estimates of current population growth rates in the proposed rule will no longer apply after delisting, but rather, the population will decline after delisting."
- "Both Wyoming and Idaho have made priority decisions to prevent the re-occupation of historic range should grizzlies disperse to those regions (Moody et al. 2005, Orme et al. 2002)."
- "Hot Springs County agrees that the Wyoming Grizzly Bear Occupancy Management Guidelines provide for continued expansion of YES populations into certain areas deemed suitable habitat; and that, the future expansion can be expected to increase range and populations of the great bears."
- "The Wyoming Game and Fish Grizzly Bear Occupation Management Proposal is flawed due to the fact that it is only to the benefit of one species the Grizzly Bear, it will ruin outdoor recreation as people used to enjoy it without being afraid for their lives any time they leave the relative safety of their auto, it will ruin ranching, it will ruin the environment and our culture as we know it as all the ranches and farms will be subdivided and sold for residential acreage and therefore a loss of wildlife habitat. It will ruin the Wyoming Game and Fish, as it now exists because all the time money and effort that will go into controlling the Grizzly Bear and the loss of revenue from the sale of hunting and fishing licenses due to the fact that there will not be any game to hunt on public lands in the National Forests and the fisherman will be too afraid to go fishing along any rivers or streams..."
- "The Wyoming plan could result in the decline of the Yellowstone grizzly bear population. John Emmerich of Wyoming Game and Fish Department has stated in public meetings on the Wyoming bear plan that Wyoming plans to manage the grizzly bear population down to 500 bears, and that the population could sustain hunting of as many as 50 bears annually. In addition, Wyoming officials have also discussed raising mortality limits above the 9% threshold recommended by FWS. Several officials have indicated that Wyoming plans to push for a mortality limit of 12% of the population after delisting, and a reduction of bear densities in the North Fork of the Shoshone and the upper Green River, both areas important to achieving recovery targets."
- "Failure to include the significant lands on the Wind River Reservation in the plan is a serious oversight."

- "Particularly troubling is the plans of Idaho and Wyoming to exclude the Grizzly from many historic ranges including the Palisades and the Wyoming Range. The latter is, from personal experience, prime habitat having significant Whitebark and Limber Pine populations, a food source for the bear. These particular habitats present an opportunity for the Grizzly Bear to expand its range and develop the genetic diversity to remain adaptable to human-imposed and climatic changes in the present Greater Yellowstone island population."
- "The State Plan governs ALL occupancy outside the PCA. Therefore, the current language of the proposed Rule is in conflict with the Wyoming Plan since occupancy may occur outside designated 'suitable' habitat."

707 – IDAHO MANAGEMENT PLAN

Most respondents commenting on the Idaho State Management Plan object to the policy of restricting grizzly reoccupation of otherwise suitable habitat when they come into conflict with people. Another concern is that the plan contains no method of enforcement compliance. Other respondents object to the plan not including a strategy to re-establish connectivity with other bear populations.

- "The other state plans have similar shortcomings. Idaho has a management goal 'to maintain grizzly bear distribution and occupancy within the PCA and to keep mortalities at low levels.' The plan contains no method of enforcing compliance, however, and declares large tracts of potentially suitable habitat off limits because they are not 'socially acceptable' areas for bears."
- "Idaho will also restrict the grizzly from critical habitat areas."
- "The Idaho Plan, for example, manifests threats to habitat linkages through its general management approach that on the one hand fails to implement measures to minimize human-bear conflict and on the other hand gives ""significant consideration"" to humans when grizzly bears come into contact with people or private property including livestock. See Idaho Plan at 16. Such a management approach, given that the plan does not otherwise provide for habitat protection or establish efforts to achieve natural connectivity, will inevitably erode opportunities for habitat connectivity."
- "Both Wyoming and Idaho have made priority decisions to prevent the re-occupation of historic range should grizzlies disperse to those regions (Moody et al. 2005, Orme et al. 2002)."
- "Particularly troubling is the plans of Idaho and Wyoming to exclude the Grizzly from many historic ranges including the Palisades and the Wyoming Range. The latter is, from personal experience, prime habitat having significant White bark and Limber Pine populations, a food source for the bear. These particular habitats present an opportunity for the Grizzly Bear to expand its range and develop the genetic diversity to remain adaptable to human-imposed and climatic changes in the present Greater Yellowstone island population."

708 – 2005 ROADLESS RULE

Nearly all respondents who mentioned the 2005 Roadless Rule in their comments are concerned with the withdrawal of a federal rule to protect roadless areas. They contend the roadless rule is important for maintaining secure habitat for grizzly bears. Others suggest entering roadless increases habitat fragmentation and interferes with linkages to other grizzly bear populations.

- "There are no longer any safeguards on roadless areas, which are critical for grizzly bear security."
- "Like the new Forest Planning rules, the draft delisting rule fails to adequately address the repeal of the roadless rule. While the draft rule estimates that 27 percent of suitable grizzly bear habitat outside the PCA is within inventoried roadless areas for which protections have been lifted, 70 Fed.

Red. At 69876, it does not attempt to address the effect this loss of protection will have on the Yellowstone grizzly bear population. For example, no attempt is made to address roadless areas that are specifically threatened, nor identify which formerly-protected areas are especially important to present and future grizzly bear conservation.”

- “Loss of protection for roadless lands as proposed by the Bush administration could also open the door to greater habitat fragmentation.”
- “Keeping in mind the need to maintain linkages and avoid fragmentation, roadless areas protection should be paramount.”
- “The Conservation Strategy assumes other protections will be in place to complement its regulations specific to grizzly bears, but we have no assurance this will occur. One clear example where this has not been the case is the withdrawal of a federal rule to protect roadless areas, which has outstanding importance to maintaining secure habitat for grizzly bears.”
- “The Conservation Strategy was being prepared at the time when the Clinton roadless rule was in place. The CS appears to assume that the status of roadless areas will not change; this assumption was reasonable at the time. But, this plan was not adjusted after the roadless rule was rescinded, and after the Bush administration pursued major projects in roadless areas in Alaska and the Pacific Northwest. If FWS intends for roadless areas to stay roadless, it must make this a requirement of its delisting plan.”
- “...much (59%) of all suitable grizzly bear habitat outside the PCA lies within secure habitat with minimal roads (including designated wilderness, wilderness study areas, and inventoried roadless areas) on national forest lands. In light of the recent change to the Roadless Rule, maintaining the habitat security of inventoried roadless areas remains a concern because state governors can petition for changes in roadless status.”

800 – FACTOR E – GENETICS, I&E, AND THREATS TO MAJOR FOODS

Most of the comments received for this general code are included with the summary for Issue 403 – Major Foods. One respondent does feel that the onset and spread of diseases to the major foods would be more rapid than the U. S. Fish and Wildlife Service anticipate.

- "You make the statement that ‘If there are reductions in any of these foods (trout and whitebark), they will likely be gradual reductions over decades, spanning generations of grizzly bears...’ (P. 69879 Fed Reg Vol. 70, No. 221). Have you failed to notice how rapidly disease outbreaks occur? This is a preposterous statement to those of us who know about catastrophic decline of cutthroat in the heart of Yellowstone, and who have watched mountainsides turn from green to red to gray in 2 years, as the big trees die."

801 – GENETICS AND IMPLICATIONS OF ISOLATION

Most respondents concerned with genetics and the implications of isolation object to the low effective population size in the Greater Yellowstone Area. They also object to the plan to genetically augment the GYA population through the translocation of two or more grizzly bears from the Northern Continental Divide Ecosystem (NCDE) during each 10-year period, which is intended to increase the effective population size. Those respondents prefer instead to increase the effective population size in both the GYA and the NCDE by restoring natural connectivity, and thus promote gene flow between the two populations. Several respondents also contend that the necessity for augmentation demonstrates that the GYA population is not recovered. They also allege that this level of intensive management is not what is meant by recovery as required by the Endangered Species Act

Several respondents are concerned that the genetic effective population size of 125 bears is much lower than the general scientific consensus of 500 or more for long-term persistence. They also contend DNA studies have documented that Yellowstone bears' genetic material is not as diverse as those of other grizzly bear populations in the lower-48 states. One respondent argues that the grizzlies in the GYA should not be delisted as long as they are genetically dependent, through augmentation, on a more genetically diverse NCDE population that is itself still listed as Threatened. Another respondent contends that augmentation would not be successful because the translocated NCDE bears would be too poorly adapted to conditions in the GYA to survive and reproduce.

One respondent suggests that before augmentation occurs the USFWS should determine which alleles are present in the GYA bears and which are rare and likely to be lost, and also which alleles in NCDE bears would be maladaptive if introduced into the GYA.

On the other hand, a few respondents believe that the current effective population size of GYA grizzlies is not alarmingly low, and that the augmentation plan is a reasonable solution in the absence of connectivity between the two populations. One respondent suggests that grizzlies from the GYA could be reciprocally translocated to the NCDE.

- "...we are concerned about the genetic isolation of the Yellowstone grizzly bear population. The FWS proposal to resolve this problem by artificial translocation from outside grizzly bear populations is an untested hypothesis, and this level of intensive management is not what is meant by recovery as required by the Endangered Species Act."
- "The ESA requires recovery of endangered populations in the wild; the Yellowstone grizzly bear population must be large enough to survive in the wild without chronic augmentation to address genetic concerns. In addition, if the Yellowstone population truly is a Distinct Population Segment due to unique genetic characteristics as the FWS claims, then introducing genes from other populations will destroy that uniqueness."
- "Regardless of the practical difficulties inherent in re-establishing connectivity, augmentation to achieve genetic health of a population is a poor second choice. Proactive management designed to maintain or re-establish connectivity between populations is always preferable to having to resort to mitigation measures that require translocation of bears or augmentation of populations."
- "The proposed relocation of two bears per decade would address genetic concerns somewhat. Nevertheless, this measure would not fully relieve the protracted genetic bottleneck, nor would it achieve the ESA mandate for recovering a self-sustaining wild population. Maintaining such large population abundances for grizzly bears requires connectivity to other regions, which is not addressed effectively in the spatially restrictive proposal."
- "The proposed genetic augmentation program, will import alleles from outside the Yellowstone population thus artificially attempting to modify the genetic character of the population and demonstrating unequivocally that a Yellowstone grizzly bear DPS is not viable as a stand-alone entity."
- "The proposed rule relies on genetic augmentation through importation of bears from other populations to avoid viability risks (e.g., inbreeding depression) associated with small populations. While this method has been examined theoretically (Miller and Waits 2003), the modeling exercise was based on the genetic variability within the NCDE remaining at current levels - which is not at all certain given current and future pressures on that region. Further, the success rate of translocations is uncertain into habitat that is already fully occupied by grizzlies."

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- “Translocation of bears from the nearest extant populations, which at an earlier time were connected by corridors, into the Yellowstone population is the only realistic approach in the short term, no matter what the long term prospects prove to be.”
- “This type of human-supported ‘recovery’ is not a basis to delist a species under the ESA. The ESA requires recovery of endangered populations in the wild; the Yellowstone grizzly bear population must be large enough to survive in the wild without chronic augmentation to address genetic concerns.”
- “With no contact to another population of grizzlies in the lower 48, the risk of the gene pool wearing thin is great.”
- “The still relatively small population remains subject to genetic difficulty. It is as if a family of siblings and second and third cousins were left to populate a desert island. Inbreeding is a serious threat to the genetic diversity of these animals.”
- “...designating the GYA population as a ‘distinct population segment’ (DPS), and subsequently considering this ‘island’ population viable in the long term, is inconsistent with primary tenets of conservation science.”
- “There are only about 500 Grizzlies around Yellowstone and that is hardly a self-sustaining population. They have to have sex with their cousins.”
- “The best estimate of the Yellowstone population effective population size is slightly more than 100, and the lower end of the confidence interval is considerably less than this. Inbreeding depressions are notoriously difficult to directly measure in small wild populations. Yet a large body of circumstantial evidence points to the likelihood that there the population is already suffering from inbreeding depression at its current effective population size, level of allelic diversity, and heterozygosity. At the very least, recovery means that there are no ongoing processes that will deterministically lead to extinction, as inbreeding eventually will. The proposed genetic augmentation program, even if it succeeds will import alleles from outside the Yellowstone population, demonstrating unequivocally that a Yellowstone grizzly bear DPS is not viable as a standalone entity. A population that is not viable is endangered.”
- “The proposal in the conservation plan to translocate two bears into Yellowstone every 10 years is not sufficient to offset the problems of isolation. The at least-one-migrant-per-generation (OMPG) rule of thumb that this is based upon assumes equilibrium (Mills and Allendorf 1996). Equilibrium is not a good assumption in this situation because of the recent decline in diversity in Yellowstone bears. In addition, OMPG assumes that introduced individuals are equivalent to resident individuals. It is likely that introduced bears will have a lower probability of survival than resident bears for some time after the introduction.”
- “...as a matter of logic, if the viability of the Yellowstone population depends on existence of the NCDE population, and the NCDE population is itself listed as threatened, then the Yellowstone population must also be listed. How can the Yellowstone population possibly be any more secure than the NDCE population, which itself is listed as threatened? Alas, this is precisely what the draft delisting rule implicitly argues.”
- “Scientific analyses have shown conclusively that the grizzly bear population in the greater Yellowstone area cannot be sustained indefinitely as an isolated population. For example, Allendorf & Ryman (2002) report that as many as 5,000 grizzly bears are necessary in any discrete population to preserve genetic integrity and diversity.”
- “Allendorf et al. (1991) suggested that effective population size for grizzlies was 25-32% of the total population. Paetkau et al. (1998) presented empirical data demonstrating relatively low genetic

diversity in the Yellowstone population. However, this level of diversity was not nearly as low as the clearly viable and healthy population of this species on Kodiak Island."

- "The above-mentioned papers stimulated a comparison of current and historic levels of genetic diversity in Yellowstone (Miller and Waits 2003). The historic measure of genetic diversity was based on samples obtained from museums and taxidermy specimens. This paper concluded that 'in our opinion, it is unlikely that genetic factors will have a substantial effect on the viability of the Yellowstone grizzly over the next several decades' and 'The viability of the Yellowstone grizzly bear population is unlikely to be compromised by genetic factors in the near future as we hypothesized based on modern samples [a reference to the Paetkau et al. (1998) paper mentioned above]' (Miller and Waits 2003: 4338). The Miller and Waits paper also concluded that 'current' levels of genetic diversity could be maintained by 1 effective migrant per generation and that NCDE levels of diversity could be achieved by doubling this."
- "Currently, the genetic effective population size (N_e) is about 125 bears (25% of 600 bears; Allendorf et al. 2005). This is much lower than the general scientific consensus of 500 or more for long-term persistence (Allendorf and Ryman 2002). An isolated population of grizzly bears would have to have at least 2,000 in order to achieve an effective population size of 500 in order to avoid harmful effects of genetic drift and inbreeding. Given that Schwartz et al. (2005) present results that suggest 500 to 600 bears are experiencing limits of the environment, a population of 2,000 is unrealistic. This highlights the need for either the creation of effective corridors, or translocation bears into GYA."
- "In Yellowstone, they exist today on an isolated habitat island that is relatively small, comprising 300-600 bears. Their current effective genetic population size is considered to be approximately 100 animals. This falls far short of the recommended effective genetic population size of at least hundreds of animals needed to prevent extinction (Whitlock, M.C., 2000). In addition, many scientists have recommended that a population of several thousands of animals is needed to prevent extinction due to environmental stochasticity and genetic impoverishment (Lande, 1995)."
- "An isolated population of 600 bears requires gene flow from other populations to maintain and increase genetic variability. Current estimates of the genetic effective population size (N_e) of the Yellowstone population range from only 13-65 (Paetkau et al. 1998) to slightly over 100 (Miller and Waits 2003), well below the level of 500-5000 recommended for preventing genetic impoverishment. The retained genetic heterozygosity is estimated at 75% which is less than zoos manage for and the inbreeding coefficient of grizzly bears in the Yellowstone population is estimated at 0.125 (Gilpin, pers. comm.. 2006): this is what one would get from a marriage of first cousins."
- "Lynch et al. (1995) report populations with N_e [less than] 100 and N [less than] 1,000 are highly vulnerable to extinction via a 'mutational meltdown' over approximately 100 generations (ten year generation interval for grizzly bears [Harris & Allendorf 1989] equals approximately 1,000 years). This lends further support for management of higher numbers over longer timeframes."
- "For example, Lande (1995) recommends genetically effective population sizes of greater than 5,000 (i.e., which translates to a census population of approximately 20,000 for grizzly bears; Allendorf et al. 1991) to avoid accumulation of deleterious mutations with resultant adverse effects on viability."
- "During the 1970's the grizzly bear population was at a low of approximately 200 bears. Their collective genetic diversity was also at an all time low. Each generation of bears after that experienced subsequent loss of genetic diversity. When this isolated population rebounded in numbers, genetic diversity did not rebound with it. Genetic impoverishment will continue to become worse, not better, as long as Yellowstone remains an island."
- "The current grizzly bear population is too small and isolated to ensure long-term viability. The size of the current population is about one-quarter of what is needed to maintain genetic variability over time."

Long-term health of the population can be assured by maintaining a population of several thousand individuals.”

- “The proposed rule relies on the importation of bears to address genetic problems. The plan requires the importation of two bears every ten years into the Greater Yellowstone Ecosystem to address genetic problems - an indication on its face that recovery has not been achieved. Yet adding a bear or two is not likely to provide necessary gene flow, considering the low success of transplants in habitat that is already occupied. Again, the long-term health of the population can be achieved instead by expanding grizzly bear populations and connecting grizzly ecosystems.”
- “Also, one or two translocated bears may not be enough. Typically, population geneticists refer to ‘effective migrants’, which is only those individuals that succeed in dispersing to a different population of conspecifics, breeding, and successfully rearing young to breeding age. In most any wild population, it is necessary to assume that effective migrants will be only a subset of the total number of migrants, because some are likely to die having failed to breed, or fail to rear offspring to independence. Thus, it may be necessary to translocate a large number of bears from the NDCE (Miller and Waits 2003).”
- “Since they are scattered across a few western states in isolated populations, there is no or very little cross-fertilization, causing a loss of genetic diversity and hence an ability to successfully adapt to a changing climate.”

802- INFORMATION AND EDUCATION PROGRAMS

Respondents commenting on Information and Education programs mostly feel that they have been beneficial and should be expanded. Several people feel there should be more efforts put toward educating the general public and hunters on reasonable sanitation/waste disposal practices. A few respondents say the State Management Plans have strong education/outreach programs that will lead to more local support. One respondent believes that federal and state agencies do not fund their I&E programs at sufficient levels. Several respondents point to the Yellowstone Park success story of reducing human-bear conflicts as a classic example of an approach combining regulation, law enforcement, and adequate resources.

One respondent says the “Living in Bear Country” workshops are well-done and should be continued.

- “All State plans have a strong education/outreach effort, which is probably a key issue for building local public support and sustaining grizzly populations outside the PCA.”
- “Because problem grizzly bears are a human safety problem, it only makes sense to resolve the ongoing sanitation issues in the ecosystem before delisting.”
- “these majestic animals can co-exist with humans so long as we continue efforts to educate the public and implement reasonable sanitation/waste disposal practices.
- “WWA urges that this plan establish food storage requirements in areas adjacent to all known grizzly habitats in the state. Every year, grizzlies are lost because of human/bear conflicts resulting from lack of a simple requirement for keeping human food away from bears. Providing economic sources of bear-proof containers, garbage cans and education would go a long way in protecting bears.”
- “Even with the millions of visitors who travel to Yellowstone National Park every summer, the chances of being hurt by a grizzly remain incredibly low. This is due, in large part, to the sanitation and education efforts of the National Park Service. However, too many bears are being killed needlessly in areas adjacent to Yellowstone Park. Adequate garbage management systems in many

communities outside the park are lacking. For the safety of people and bears, it only makes sense to resolve remaining problems before removing ESA protections.”

- “Most grizzly bear deaths are from human encounters that are avoidable. USFWS needs to do a better job of community education re: coexistence with grizzly bears.”
- “The most significant long term source of human caused bear mortality has and will continue to be related to big game hunting activities. Excellent progress has been made related to bears in hunting camps through efforts of Game and Fish, USFWS, and the Forest Service food storage programs and education. As supportive as representatives of the Wyoming Outfitters and Guides Association were for delisting at the hearing, you must be aware that this organization has gone on written record as opposing expansion of food storage requirements outside historical limits of current orders. In addition, progress related to conflicts over animal carcasses between bears and hunters, many of which are clients of outfitters, has been lacking. There is no reason to expect that situation and related bear mortality to decline or stay stable following delisting. Lack of full support from the Wyoming Outfitters and Guides Association for necessary food storage and carcass handling regulations in the entire primary conservation area and occupied habitats will haunt long term recovery into the future. Current levels of outfitting industry support for food storage and carcass management principles will collapse once the bait of delisting the bear is no longer dangled in front of hunting outfitters in Wyoming.
- “Public education is likely one of the most critical factors for sustaining grizzly bear populations, particularly outside of the PCA where most bear-human encounters will occur. We think that all three States have developed good education plans. State funding is a major issue and the management programs will only succeed if adequate funding is available.”
- “The data on chronic mortalities suggest that current I&E efforts are not adequate to address the problem. In its 2003 report on human-caused mortalities, FWS conceded this point; in fact, it placed as much weight on law enforcement efforts as on I&E efforts. The story of Yellowstone Park, which has more effectively reduced human-bear conflicts than any other agency, is a classic example of the effectiveness of an approach that combines regulation, law enforcement and adequate resources. (Gunther, 1994).”
- “...the agencies lack commitment to I&E efforts. Our efforts to partner with the agencies on producing television and radio PSA's have been frustrated by the failure of the Forest Service, in particular, to follow through with committed funds. Interest in I&E efforts is so low, in fact, that a handful of the NGOs have been dominating the I&E Committee, which has been poorly attended by representatives from agencies. I&E Chairman, Greg Losinski, has come to rely increasingly on NGOs for resources and ideas in the absence of a full commitment from other agencies.”
- “Living in Bear Country Workshops are good, and should continue. We could all benefit from learning more about being bear-wise.”

803 – WHITEBARK PINE

Most respondents addressing whitebark pine in their comments feel that the USFWS has underestimated the potential effects of white pine blister rust, mountain pine beetles, and global climate change on whitebark pine survivorship and seed production. These respondents claim the demise of whitebark pine ultimately effects grizzly bear survivorship and reproduction. Several respondents contend that the USFWS is too optimistic in its expectation that grizzly bears would be able to switch to other high-energy foods if whitebark pine seeds were reduced drastically by blister rust or mountain pine beetles. A few respondents state that grizzly bear populations increase in years of good cone crops and decrease in years of poor cone crops. A few contend the decrease in bear populations is due to higher human-caused mortality to the bears as they move to lower elevations to seek alternative food sources. Some

also contend there is a pronounced effect from decreased pine seeds on female grizzly bear reproduction including age of first reproduction and a decrease in litter size.

A few respondents mention the decline in seed production from cone-bearing trees other than whitebark pine, which are also affected by mountain pine beetle infestations. A few respondents feel the USFWS has underestimated the availability of seeds from other cone-bearing trees and that seeds from other species contain less energy. They say infestations can spread from other species such as lodgepole pine, particularly in lower elevation mixed stands. One respondent also states that recent forest fires along with construction projects in Yellowstone National Park (Dunraven Pass) have removed thousands of productive trees.

A few respondents feel the proposal to delist has failed to consider the current trends and effects to birds and squirrels that provide whitebark pine seed caches and dispersal. The species of concern reflected in the comments are the gray jay and squirrels.

- “Thus, the FWS cannot delist the Yellowstone grizzly bear population without attempting to quantify the extent of damage to whitebark pine that will likely be caused by mountain pine beetles over the next several decades.”
- “No delisting should occur until there is further study concerning the impacts of blister rust and mountain pine beetles upon the health of the whitebark pine and the effects of global warming upon this and other food sources.”
- “Squirrels are much more abundant in lower elevation, mixed stands that are not necessarily dominated by whitebark pine (Mattson and Reinhart 1997, Mattson et al. 2001)... Outbreaks starting in lodgepole stands may rapidly deplete those lower-elevation, mixed stand whitebark pines that provide the bulk of the pine seeds consumed by grizzly bears in the Yellowstone Ecosystem.”
- “The proposal to delist also fails to consider current trends affecting birds, such as the gray jay, which appear to be very susceptible to infection and death from West Nile virus. See http://www.nwhc.usgs.gov/research/west_nile/wnv_bird_id_text.html. The gray jay plays an important role in the long term survival of the whitebark pine and, in turn, the whitebark pine plays an important role in the long term survival of the bear.”
- “Mortality data from past years demonstrates that the Yellowstone grizzly bears do not shift in any substantial way to alternative food sources when the whitebark pine crop fails. Indeed, their mortality rate almost doubles in years when the whitebark pine crop fails (Pease and Mattson 1999), whereas we would expect no change in mortality if the bears were switching to alternative high quality foods in the face of reduced availability of whitebark pine nuts. These data on grizzly mortality and whitebark pine crop failure flatly contradict the draft rule's optimistic speculation that the grizzly bears will switch to an alternative food equal to whitebark pine when it declines in abundance.”
- “Because of the combined action of white pine blister rust, mountain pine beetle and global warming, coming years will likely see the loss or serious decline of whitebark pine. The draft rules are unjustifiably optimistic as regards how the Yellowstone grizzly bears will respond to the loss or serious decline of whitebark pine, an assumption flatly contradicted by empirical data: When the whitebark pine crop fails, Yellowstone grizzly bear mortality dramatically increases, indicating that they are not shifting to alternative foods. Moreover, known alternative foods to whitebark pine are nutritionally or energetically inferior, and/or less abundant.”
- “The plan also underestimates the pace and implications of the loss of whitebark pine, an important bear food, due to mountain pine beetles, blister rust and global warming. Recent studies show that whitebark pine loss is escalating from mountain pine beetle infestations - more quickly than US Fish

and Wildlife Service (FWS) estimates. Research has demonstrated whitebark pine's relationship to the reproductive success of females and to lowering human-caused mortality; there appears to be no substitute bear food in the ecosystem.”

- “There are several factors that contribute to the vulnerability of whitebark pine to beetles in the Yellowstone area. Among them are the increased stress and mortality caused by drought and forest succession, and the increasing levels of infection by white pine blister rust, all factors that make the trees more susceptible to beetle infestation. An even more pervasive and irreversible factor though, is the region's warming climate.”
- “I am familiar with whitebark pine forest systems in the GYE and have seen the decline in the health of this species accelerate over the past 15 years. This decline is most noticeable from the effects of the mountain pine beetle, in addition to occurrence of blister rust. There seems to be an overall decline of cone production (though this years seemed pretty good adjacent to YNP and in the Gravelly Range) during this period. Fires of 1988, and 2001 2003, and 2004, in addition to construction in YNP (Dunraven Pass) have removed thousands of trees from productivity.”
- “Blister rust is almost invariably fatal to seedlings...As for mature cone-bearing trees, blister rust most often kills the tops of infected trees well before the tree dies... Because the top of the tree is where the vast majority of the cones are produced, infected trees often contribute little to cone production and regeneration in a stand...Furthermore, a tree weakened by blister rust is more susceptible to mountain pine beetle attack.”
- “Whitebark pine is threatened throughout its range by the white pine blister rust, mountain pine beetle, and global climate warming. These are neither hypothetical nor distant threats; white pine blister rust is well established through-out the GYE (Merrill, 2006) and is continuously spreading (McDonald and Hoff, ch. 10, 2001). Whitebark pine forests in the northern 1/2 of their range have experienced 40% to 90% mortality (Kendall & Keane, ch. 11, 2001) from blister rust. Given the known distribution of blister rust it is inevitable all whitebark stands in the GYA will become infected although it is difficult to estimate how long that will take (Merrill, 2006).”
- “In contrast to blister rust, which gradually kills whitebark pine trees, mountain pine beetles can kill entire stands of whitebark pine in just one summer, which would have immediate impacts on grizzly bear demography.”
- “There is a pronounced effect of pine seed availability and consumption on female reproduction (Mattson 2000, pp. 110-115), including a decreased age of first reproduction, and increased frequency of 3-cub litters (see also Haroldson et al. [2005]).”
- “Scientists have documented the consequences of these two dynamics on Yellowstone grizzly demography: the population declines 5% in whitebark pine nonmast years and increases 7% in mast years. Pease and Mattson (1999). Thus, it is well established that a decline in whitebark pine seed cone production will have catastrophic consequences for Yellowstone grizzly bears... These research results dispel any notion that Yellowstone grizzlies can simply transition to other food sources when their traditional foods run short.”
- “...by narrowly focusing on whitebark alone and ignoring widespread and rapid conifer dieoffs in the GYE, USFWS ignores key biological issues and their linkages: squirrel caches are the primary means by which grizzly bears obtain pine seeds; squirrel populations depend on cone availability of not just whitebark but the other seed-bearing conifers within the PCA (e.g, mixed conifer stands in the high elevation zones); loss of mature conifer trees due to disease means a reduction in squirrels and their caches; reduction of squirrels and their caches means reduction of one of the most important food resources for grizzly bears. Lack of this food resource is very strongly correlated with human-caused bear mortality, as noted by published research.”

- “The loss of whitebark pine to mountain pine beetle infestations has also been documented by the IGBST. In the single year between 2003 and 2004, 17.6% of the whitebark pine trees monitored by the Study Team were killed, primarily due to mountain pine beetle attacks. 2004 IGBST Annual Report at 49. Since 2002, 24% (45 of 190) of the trees on the transects have died.”

804 – CUTTHROAT TROUT

Several respondents are concerned about the survival of cutthroat trout in the Yellowstone National Park. A few respondents note that the National Park Service lake trout removal program has not yet succeeded in reversing the decline in the number of cutthroat trout spawning in the tributaries to Yellowstone Lake. One respondent contends that the decline in availability of spawning cutthroats has forced more grizzlies out of Yellowstone National Park, where they might be at greater risk of human-caused mortality. Another respondent states that whirling disease and drought, in addition to predation by lake trout, have been responsible for the long-term decline in cutthroat trout abundance.

One respondent asks that the U. S. Fish and Wildlife Service refrain from delisting grizzly bears until the pending status review of the cutthroat trout is completed.

- "A petition to list the Yellowstone cutthroat trout as a threatened species has been pending since 2001. See Ninety-day Finding for a Petition to List the Cutthroat Trout as Threatened, 66 Fed. Reg. 11,244 (February 23, 2001). The Delisting Proposal notes that a '12-month status review is currently underway' and that the FWS 'will consider the results of the status review fully when making a final decision on this proposed delisting.' See Delisting Proposal, 70 Fed. Reg. at 69,878. Due to the impact that any finding may have on this proposal, the HSUS requests that the Service suspend delisting action until this process is completed."
- “The FWS seems to believe that this downward spiral can be reversed by continuing the NPS's lake trout removal program. As an initial matter, although the NPS has removed more than 100,000 lake trout from Yellowstone Lake since 1994, the FWS points to no data indicating whether this has had any impact on the total lake trout population. Indeed, the number of lake trout captures has increased each year since 1994, indicating either that the lake trout population has not yet begun to decline or that the NPS has not made a significant dent in the population.”
- “Given the lag time between environmental changes and impacts on population trends, it is unclear whether grizzlies can adapt to the loss of such an important food source, especially in combination with the ongoing loss of whitebark pine trees. See supra at pp. 10-11. At the very least, the absence of spawning cutthroat reduced the carrying capacity of Yellowstone and Grand Teton National Parks. The consequence is to force more Yellowstone grizzlies out of the Park to find food, thereby exposing them to greater risk of human-caused mortality.”
- “Despite aggressive Park Service efforts to control the lake trout population with extensive gill-netting, trapping, and angling, recent fall counts of YCT in Yellowstone Lake have been the lowest of any time over the past 25 years of monitoring.”
- “Yellowstone cutthroat trout in Yellowstone Lake and its immediate spawning tributaries have been decimated due to the introduction of lake trout in Yellowstone Lake (Reinhart et. al. 2001).”
- “Cutthroat trout fishing by grizzly bears has declined by 87% between 1989 and 2004 as a result of non-native lake trout, whirling disease and drought.”

805 – ARMY CUTWORM MOTHS

Respondents commenting on army cutworm moths are concerned about the effects of pesticide use, human recreational disturbance, land development, and global climate change on the availability of moths to grizzly bears. The pesticide use of greatest concern occurs in the lower elevation agricultural fields surrounding the GYA in Montana, Wyoming, Idaho, Nebraska, and South Dakota, where the moths spend the rest of their life cycle. Some are concerned that human recreational activities disturb bears and will force them away from moth sites. Several respondents feel that global climate change restricts the area available to moths by forcing alpine vegetation higher up the mountainsides onto areas of reduced acreage.

One respondent states that grizzly bear survival is positively affected by the location of the moth sites, which are in high elevation alpine areas, relatively free from human intrusion.

- “Moths are threatened with direct killing by pesticides, global warming, development and recreation pressure in and around moth sites. The delisting rule did not fully examine threats to this key food source.”
- “From the standpoint of preventing human-caused grizzly bear mortality, moth sites have the added advantage of being located on remote talus slopes that are generally free from human interference. Thus, in much the same way that whitebark pine seed-cone foraging keeps grizzly bears out of the way of people during good seed-crop years, moths provide an abundant, high-quality food source that reduces bear-human encounters, conflicts, and bear mortality.”
- “The delisting plan fails to take necessary precautions to protect moth sites from human disturbance. And moth sites are vulnerable in the GYE, where the human population is growing. On the Shoshone Forest for example, 39 moth sites lie outside protected Wilderness, and are open to increased human activity under current forest plans.”
- “Alpine moths are also likely to decline significantly as a result of a warmer climate as a result of climate disruption, which is already threatening other alpine insects...”
- “Importantly, mountain-climbing and other human recreation in high alpine areas can disrupt grizzly feeding at moth sites and significantly reduce energy gains from moth consumption. White, et al.1999. Unless public land managers are required to secure moth sites for grizzly bears---which is not the case under the delisting proposal---human presence may preclude bears from utilizing this key food source.”
- “Army cutworm moths are vulnerable to predators, parasites, disease, climatic variation, and increased pesticide use.”
- “Army cutworm moths migrate from the Great Plains each summer to the high altitudes to feed on the alpine nectar, providing a grizzly up to a third of its caloric intake for an entire year. But these moths are under constant assault from farmers who consider them pests.”

806 – UNGULATES

Respondents commenting on the threats to the availability of ungulates as food for grizzly bears particularly discuss elk and bison. The most common concern is the effect of diseases on ungulates, but they are also concerned about competition from wolves for what they predict to be a shrinking prey base. Many respondents object to management decisions to kill bison to prevent the spread of brucellosis. They contend these actions remove a large mass of bison carrion that could be eaten by grizzlies.

Others predict that chronic wasting disease will eventually spread to the Greater Yellowstone Area and infect elk there, and deprive grizzly bears of a major nutritional source.

Respondents interpret interactions between grizzlies and wolves in two different ways. A few respondents state that wolves reduce the number of elk over the winter, so that less elk carrion is available to bears in the spring. One respondent believes wolves are beneficial to grizzlies, since bears can occasionally drive wolves off of wolf kills and eat the meat.

- “Bovine brucellosis poses an indirect threat to grizzly bears, since management control of bison and elk to prevent bovine brucellosis from infecting domestic livestock will make carrion less available.”
- “Any existing, proposed or foreseeable plans for the control of brucellosis in the Yellowstone ecosystem must be disclosed and analyzed before any decision to delist can occur.”
- “The major concern is not directly mortality of bison and elk infected with bovine brucellosis, but rather management mortality of bison and elk, in an effort to prevent the spread of bovine brucellosis to domestic animals (Reinhart et al. 2001). Thus, grizzly bear and bison and elk management will need to be coordinated with respect to bovine brucellosis control, an issue not addressed by the draft rules.”
- “Finally, there are some indications that the grizzly bear's access to carrion is increasing with the wolf recovery in the area, as the bears are able to poach wolf-killed meat.”
- “USFWS...does not even consider the large declines of the northern Yellowstone elk.”
- “Though the data and analyses are less certain, based on decreased availability of carrion to females during spring and greater consumption of meat by both wolves and adult male bears year-round, Mattson (2000 pp. 144-146) suggests that reintroduction of wolves has more likely harmed than benefited Yellowstone's grizzly bears. This is consistent with Gunther and Smith's (2004) observations of grizzly bear-wolf interactions.”
- “The IPCC predicts that the global average temperature will warm between 1.4 and 5.8% by the end of this century. Winter temperatures are projected to rise even more significantly, with increases of approximately 4-7 [degrees] C over land areas, with particularly devastating effects on the availability for grizzly bears of winter-killed ungulates.”
- “Elk calves are an especially important food for females in the spring. But elk, too, face threats in the GYE. Of particular concerns is chronic wasting disease. The disease has been discovered in deer in Thermopolis, WY. There is no known cure for the disease. Many ungulate experts anticipate that it is only a matter of time before the disease is transmitted to elk. (Peterson, 2005). If the disease reaches the elk feed grounds in Wyoming, researchers fear a major epidemic could spread. (Peterson, 2005).”
- “...933 buffalo have just been slaughtered by the government this winter, with the prospect of more animals dying before the grass turns green as a result of the extreme snow conditions. Montana's intolerant approach to buffalo could further reduce numbers of this important grizzly bear food.”
- “...areas on the plains that currently lack the bison populations that once supported grizzlies should not be considered unsuitable, since those bison can be restored; the decision to continue killing bison that leave Yellowstone National Park should be cited as a threat to the grizzly bear.”
- “The availability of meat from both bison and elk carcasses is also subject to change due to the reintroduction of wolves into Yellowstone National Park. Felicetti, et al. 2003. First, as predators, wolves are likely to affect herd compositions and total abundance of ungulate carcasses. Green, et al. (1997). Second, as scavengers, wolves will compete with bears for carcass meat. The ‘amount of

edible biomass on dead animals that is actually available to grizzly bears' may decrease as the number of competing scavengers, namely wolves, increases. Id. Further, grizzlies that displace scavenging wolves are almost always adult males. Thus, decreased availability of spring carcasses will be especially detrimental to female grizzly bears. Mattson (2000); see also Mattson (1997); Green et al. (1997) (both documenting female grizzly reliance on spring scavenging for most meat)."

- "The re-introduction of Wolves into the park, has also had the effect of changing the Grizzles' habits for foraging of winter kills-the winter kills are now being recovered by the wolves, which is forcing the Grizzles to seek food at higher elevations. Although I strongly support the wolf introduction, it will be years before this impact to the Grizzles' long term survival will be fully understood"
- "Ungulate populations could decline precipitously when chronic wasting disease spreads to the GYE."
- "...beginning in 1990, the Park Service, the U.S. Forest Service, and the State of Montana instituted various bison control programs with the stated goal of preventing brucellosis transmission from bison to cattle on private and National Forest lands surrounding Yellowstone National Park...under the current 2000 Bison Management Plan, bison that cross park boundaries are hazed, shot, and taken to slaughter. So far this winter, 845 bison have been sent to slaughter... By the end of this winter season, the test-and-slaughter program will likely result in a 20% reduction in the bison herd. With continued implementation the Bison Management Plan, bison numbers will continue to decline, and bison meat will become a less abundant food resource for grizzly bears. Reinhart, et al. (2001); Felicetti, et al. (2003). The same may be true of elk, as the State of Wyoming has begun implementing a similar test-and-slaughter program for elk to control the spread of brucellosis from elk to livestock."
- "The biggest reason they shouldn't be removed is because of the recent reintroduction of wolves as a prime predator, and competitor, in the food chain."

900 – MISCELLANEOUS

Respondents whose comments appear in this category express various views on grizzly bear delisting. Most of those respondents are in favor of establishing new grizzly populations elsewhere within their historic range, or with translocating bears from the GYA into unoccupied habitat as an alternative to killing or harassing them. One person provides a suggestion on how to handle wandering bears by relating what has been done to discourage polar bears. Another respondent urges the USFWS to focus renewed attention on grizzly bear recovery efforts in the other five Recovery Zones in the lower 48 states as a next step after delisting.

- "what about trapping and moving them where they have yet to be repopulated instead of killing them needlessly!"
- "The Montana Chapter of The Wildlife Society further observes that recovery efforts for grizzly bears in the other 5 recovery areas identified in the Recovery Plan have lagged behind the successful recovery effort in Yellowstone. We urge the Fish and Wildlife Service to focus renewed attention on these recovery areas using the successful model that has resulted in the recovery of grizzlies in the Yellowstone Ecosystem."
- "If, as you claim, the grizzly bear does on some occasions stray from Yellowstone Park, a far more compassionate approach could be taken, for this innocent act, than killing. In 2004, I spent some time in Churchill, Canada, amongst the Polar Bears, and I watched them on the tundra. These most majestic bears would frequently wander into Churchill, but they were never hunted or killed, the sound of a firecracker was enough to disperse the bear, and persuade them to leave the town of their own volition."

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- "We used to have grizzlies here in California. Sadly, we probably will never have them here anywhere in our state, but on our flag, ever again. Maybe you should think about relocating some of them to Humboldt County and farther North where they used to roam, we have a lot of space and some pretty good size elk up there."
- "Not only should the Grizzlies be maintained on the Endangered Species List, a goal should be set of re-introducing the Grizzlies to the wildernesses of California."
- "I think that relocation to other areas is a more humane approach to the problem."
- "...and most important: Bring back a viable breeding population to Colorado - Specifically the Flattops Wilderness and the South San Juan Ecosystem."
- "This would eventually jeopardize recovery efforts in nearby recovery zones, which are critical to long term survival of a wide ranging species such as the grizzly bear."
- "Considering the controversy and uncertainty of the Wyoming Wolf Recovery Plan and the lack of willingness for the Wyoming Game and Fish Department to consider wolves a trophy game animal protected by hunting regulations. It seems that the wolf population in the Yellowstone Ecosystem is uncertain. There should be a proper wolf recovery plan and a sustainable population, before the grizzly bear is delisted, because the grizzly bear depends on the wolf to make available elk throughout the year and not just during the spring on winter kills and calves."
- 'I think their ranges should be extended into other parts of the country - rather than removing any protections for them.'
- "Researchers are currently studying grizzly bears' cardiac processes during hibernation, which has led to a discovery of a substance occurring within the grizzly bear's system that could prevent heart disease in humans. Given this extremely important discovery, we have all the more reason to preserve this magnificent animal."
- "If there are too many grizzlies, disperse them throughout the park and then into the Bob Marshall Wilderness areas and down in the Tetons, up in the Salmon and Sawtooth areas."
- "Such an act would also alter perceptions of the need to study and understand these magnificent creatures and inevitably promote a more cavalier attitude to destroying any animals that do not conform to a short-sighted and self-serving human value paradigm."
- "I would further ask for the federal government to bring grizzly bears back to their original habitat in the largest wilderness area in the Lower 48 states: the Selway Bitterroot wilderness. Since you have shown you can bring bears back to a sustainable population, it is time to renew your oath of protecting wildlife where it once roamed freely."
- "We need our Grizzly Bears back in the mountains of the Pacific NW. This will not happen if you delist them."

901 – CONNECTIVITY WITH OTHER GRIZZLY POPULATIONS AND HABITAT FRAGMENTATION

Most of the respondents commenting on connectivity and fragmentation favor the re-establishment of connectivity between the GYA grizzly population and other populations to the north. Many of those respondents feel the USFWS should not delist grizzlies until that connectivity is re-established. Many contend that without connectivity to other populations, the grizzly bears in the Yellowstone Ecosystem will suffer from a lack of genetic diversity. Some respondents call for reoccupation of unoccupied, suitable habitat that promotes movement and range expansion toward areas of historic grizzly bear range. A few

call specifically for establishment of a grizzly population in the Bitterroot ecosystem. Other respondents contrast their support for connectivity with what they consider the futile and undesirable plan to augment the GYA population with bears from the Northern Continental Divide Ecosystem. A few respondents also contend that strategies in the state plans would actually reduce connectivity. Some respondents support their call for connectivity among lower 48 bear populations by citing published analyses of the census population size necessary to produce the genetically desirable effective population size. Those estimates range from 2,000 to 5,000 grizzly bears.

A few respondents who favor delisting do not see a need for connectivity and believe that augmentation will suffice. One respondent states that population augmentation is the only realistic way to increase genetic diversity in the GYA, since well-established land uses and increasing human population virtually preclude establishment of connectivity.

A few respondents are concerned that any outside grizzly bears introduced into the Greater Yellowstone Area will be killed by the resident bears.

- “We are concerned that delisting the grizzly bear may impair efforts to reestablish connectivity between the GYA and other populations by devaluing habitat restoration and management efforts, and by reducing protections against human-caused mortality.”
- “Because the ESA requires the FWS to recover threatened species throughout a significant portion of their historic range, and because establishing habitat connectivity standards across multiple jurisdictions requires centralized coordination, it is imperative that the FWS undertakes the necessary efforts to reestablish connectivity between grizzly bear populations before delisting.”
- “The idea of a full-fledged wildlife conservation plan with interconnected habitats with over 2,000 to 3,000 grizzlies is a much more sustainable plan for this species”
- “Connectivity is mandated by the Grizzly Bear Recovery Plan Linkage Zone Assessment (USFWS 1993); however, this plan has not been completed or implemented in the six recovery zones and existing areas in Canada. We believe that establishing a clear program to maintain and restore connectivity is a necessary prerequisite to delisting the Yellowstone grizzly.”
- “Delisting would loosen restrictions on these destructive activities, causing habitat areas to fragment and further isolating Yellowstone's grizzlies from more robust populations in Canada.”
- “In response to calls for recovery GYE grizzlies as part of a lower 48 population containing 2000-3000 grizzlies, the Service has claimed that this is neither biologically nor legally required, and has moved to delist an isolated population of at most 600 grizzlies with no relationship to other Recovery Areas. In this regard, the Service is simply wrong in its claims.”
- “The Conservation Strategy, which will guide post-delisting management of the grizzly bear in the GYA, states that ‘outside the PCA, grizzly bears will be allowed to expand into biologically suitable and socially acceptable areas.’ Given that sheep grazing on public lands is typically not socially compatible with grizzly bear presence, it seems that areas with sheep allotments will not provide suitable habitat. This will impact the establishment of corridors in places such as the Centennials, with its many sheep allotments.”
- “The MCD supports transplanting grizzly bears in order to improve the genetic diversity. The process is similar to that used to maintain otherwise genetically isolated livestock herds. Transplanting or relocation of male grizzly bears is easily achieved and reliance upon migration should not be assumed or depended upon. Male grizzlies from the Greater Yellowstone Area (GYA) should be transplanted to other areas as needed.”

- "The Service states that it will address the genetic variability concerns by translocating two female bears from the NCDE into the GYA every ten years. As the Conservation Strategy acknowledges, there is unlikely to be natural gene flow from the NCDE in the absence of geographical connectivity of the GYA with this area. The delisting plan assumes the effectiveness of an artificial gene flow approach without explaining the basis of this assumption or addressing how the genetic diversity will be maintained if these females do not thrive or successfully reproduce. Introducing outside bears into occupied habitat has not been uniformly successful in the past, and female bears in particular have been killed by resident bears when dropped into new territory."
- "I am sure you are aware that when grizzly bears were originally listed as threatened under the ESA, one of the listing factors was Yellowstone's isolation from other bear populations and the concern over its declining genetic diversity. And, in the Grizzly Bear Recovery Plan (1993) you and your colleagues discussed preservation of linkages between metapopulations as a 'more legitimate long-term conservation strategy than are attempts to manage separate island populations'. The Conservation Strategy states that FWS's goal is that the Yellowstone grizzly bear population 'continues at self-sustaining levels after recovery and never again becomes threatened.' The Yellowstone grizzly bear population should remain listed as threatened until its habitat and linkage corridors are protected in perpetuity."
- "Most independent wildlife and conservation biologists suggest that true viability for the lower 48 grizzly population requires 2-3000 bears with functional linkages between all 6 Recovery Zones (RZ). This would give a 90%+ probability of viability over 500 years. Despite valiant efforts such as the Yellowstone to Yukon Conservation Initiative and the proposed HR 1204 (Northern Rockies Prosperity Act), there are still no viable linkage corridors connecting the Recovery Zones."
- "Allowing continued expansion of grizzly populations into suitable habitat would also facilitate linkage with other ecosystems. To ensure an evolutionarily robust population, capable of surviving for thousands of years, it is critical to establish connections with other ecosystems. Yet, the plan in place does not provide any certainty that grizzly bears will be able to expand through the natural linkage corridor in the centennials mountains into the Selway-Bitterroot ecosystem."
- "According to analysis by Troy Merrill, Carlos Carroll and others it is still possible to establish a metapopulation of 3,000 or more grizzly bears by expanding where bears can live in Yellowstone, recovering grizzlies in the Selway-Bitterroot ecosystem, and connecting grizzly bear ecosystems to source populations in Canada (Merrill, 2003)."
- "Currently, the genetic effective population size (N_e) is about 125 bears (25% of 600 bears; Allendorf et al. 2005). This is much lower than the general scientific consensus of 500 or more for long-term persistence (Allendorf and Ryman 2002). An isolated population of grizzly bears would have to have at least 2,000 in order to achieve an effective population size of 500 in order to avoid harmful effects of genetic drift and inbreeding. Given that Schwartz et al. (2005) present results that suggest 500 to 600 bears are experiencing limits of the environment, a population of 2,000 is unrealistic. This highlights the need for either the creation of effective corridors, or translocation bears into GYA."
- "the Yellowstone grizzly cannot be isolated from others if it is to remain a healthy breed. Why are we not hearing all state and federal agencies insisting that the grizzly bear populations do indeed need to mingle, use corridors and connected habitats, if the United States is seriously interested in grizzly bear recovery in the Lower 48?"
- "The Conservation Strategy only provides for monitoring, surveys, and evaluation of habitat connectivity during the analysis process required by the National Environmental Policy Act ('NEPA'). NEPA does not, however, provide substantive protection against fragmentation. See *Dep't of Trans. v. Pub. Ditzien*, 541 U.S. 752, 756 (2004) (noting that 'NEPA itself does not mandate particular results'). Similarly, monitoring and surveys are not substitutes for specific, enforceable standards."

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- "...designating the greater Yellowstone ecosystem population of grizzly bears as a distinct population...eliminates need for the designation of a continental divide migration corridor to facilitate grizzly bear recovery, as advocated by extreme preservationists."
- "This population at its current level is too small and isolated to ensure long term genetic viability. To address this concern the current plan proposes to import two grizzly bears from the Northern Continental Divide Ecosystem (also listed as a threatened population) every ten years. This proposal disregards the low success rate for transplants. Also one must ask how one threatened population can withstand the loss of bears to supplement another?"
- "I would much rather see the continuation of existing protections for the grizzly remain in effect until there is much more genetic exchange between grizzlies here in Greater Yellowstone and the Glacier/Bob Marshall/Northern Continental Divide areas."
- "It is the bears migrating to and from other populations that will be killed most frequently."
- "Grizzly bears are already demonstrating that they are capable of moving between ecosystems; a grizzly bear was killed by a bow hunter in the fall of 2005 near Anaconda, MT, for example; and bears are moving west, recolonizing the Centennials and Gravelles. By their behavior, grizzlies are demonstrating that they will occupy habitat if that habitat is suitable, human population is low, and people are reasonably tolerant. There is suitable habitat connecting Yellowstone to other ecosystems: grizzly bears can occupy this habitat if we let them. Not only does natural recovery accomplish the goals of the ESA, but it will be less costly and labor intensive in the long-term, and more likely to succeed."
- "Similarly, we encourage continued efforts to establish connectivity with other ecosystems (the Bitterroot and NCDE) although we don't believe that such connectivity is required under the ESA prior to delisting bears."
- "In light of the central coordination required, habitat linkage strategies must be fully evaluated, habitat standards must be implemented, and habitat connectivity programming must be funded before delisting."
- "We recommend that despite the practical difficulties that exist in re-establishing connectivity, all opportunities that arise which could contribute to connectivity be pursued. Specifically, we continue to recommend re-establishment of the Rule that was rescinded by the US Department of Interior in 2001 to re-introduce grizzly bears to the Bitterroot Ecosystem of Montana and Idaho."
- "Opponents of delisting state that recreating connectivity with other grizzly populations will only occur if Yellowstone grizzlies are retained on the ESA list, and remain a Federal responsibility. Although they are probably right that acquisition of the necessary lands is most likely under Federal initiative, the question remains whether or not functional connectivity can be achieved even under the best cast scenario. Already land use changes in recent decades may have rendered such a goal beyond reach. Most of the critical lands are in private ownership, many have been developed, and escalating property values will work against public acquisition and/or easements."
- "The future of a healthy grizzly population depends critically on dispersal of young bears between subpopulations. Only by continued protection from hunting and removal pressures will enough young bears survive to facilitate adequate gene flow to maintain or potentially increase the genetic diversity in the Yellowstone subpopulation, thus increasing the probability of long term persistence of this valued component of the Yellowstone Ecosystem."
- "Delisting the species in any portion of the western states' population of grizzly bear will weaken recovery of the species to self-sustaining status. All of these area populations are, or should be,

connected in order for them to function as they did historically. You don't quit greasing one link in a drive chain and expect the chain to function for long."

- "Indeed, practices outlined in state management plans would reduce potential connectivity."
- "...if grizzly bears were restored in central Idaho, delisting the Yellowstone population may have been appropriate. This sentiment is shared in a study by Boyce et al. (2002) who state, 'by restoring grizzly bears to the Bitterroot wilderness of Idaho and Montana can reduce the probability of extinction for grizzly bears in the Rocky Mountains of the United States by as much as 69-93%.' Without an established population in Idaho, however, we oppose delisting of the Yellowstone grizzly bear..."
- "We believe the solution to maintaining genetic diversity in the Yellowstone population lies not in agency-engineered translocation but rather includes: 1) the establishment of a grizzly bear population in central Idaho, and 2) restoration and enhanced occupancy of the connective habitat between Yellowstone and central Idaho, and between Yellowstone and the NCDE. We disagree with the USFWS opinion that cancellation of the proposed reintroduction efforts in the Selway-Bitterroot recovery area makes connectivity issues irrelevant."
- "Allendorf and Ryman (2003) reported that something closer to 5000 might be required to maintain evolutionary potential, and noted that a population of this size would require '...greatly increasing the connectivity among populations over a wide geographical area..."
- "The barriers to movement during the past century are not permanent in nature, and the genetic isolation that has resulted is not something to maintain, but something to reverse. Instead of delisting bears, we should focus our efforts and finances on protecting and restoring linkage habitat that has long been identified and mapped by American Wildlands to connect the Yellowstone grizzly population with other grizzly populations."
- "A true bear recovery, on the other hand, could be achieved by expanding the habitat for grizzly bears in Greater Yellowstone and adjacent ecosystems, and connecting these bears to more robust populations in Canada."
- "The United States National Academy of Sciences established the Committee on Scientific Issues (NAS, 1995) which has concluded that secure populations are likely to require '...effective population sizes greater than approximately 1000 individuals...', which '...translates into a goal for long-term survival for most species of maintaining populations with more than a thousand mature individuals per generation, perhaps several thousand in some cases.' For grizzlies, an 'effective population translates into a 'total population' of approximately 4000 individuals."
- "in the Grizzly Bear Recovery Plan (1993), you and your colleagues discussed preservation of linkages between metapopulations as a 'more legitimate long-term conservation strategy that are attempts to manage separate island populations.' The Conservation Strategy states that FWS's goal is that the Yellowstone grizzly bear population 'continues at self-sustaining levels after recovery and never again becomes threatened.' The Yellowstone grizzly bear population should remain listed as threatened until its habitat and linkage corridors are protected in perpetuity."
- "Connectivity is mandated by the Grizzly Bear Recovery Plan Linkage Zone Assessment (USFWS 1993) which has never been completed for all 6 recovery zones and existing areas in Canada; much less implemented. We feel that a clear program to maintain and restore connectivity is a necessary prerequisite to delisting the Yellowstone grizzly. Without such a program it is almost certain that the population will become even more isolated."
- "...delisting the proposed DPS would inhibit migration of grizzlies from the DPS into unoccupied habitats outside the DPS, and thus jeopardize recovery elsewhere (including in regions that constitute

a significant portion of the grizzly bear's original range but that have not yet been denominated as recovery areas).”

- “...the rule's...generally non-precautionary strategy toward threats to habitat essentially guarantee that, even if the GYE population itself remains viable, no grizzly bears will disperse to adjacent areas outside the DPS. Delisting within the GYE may therefore preclude recovery in adjacent regions.”
- “The ESA requires recovery of endangered populations in the wild; the Yellowstone grizzly bear population must function as a wild, connected population in order to meet this mandate, not be artificially manipulated by human-supported genetic recovery.”
- “As grizzly bears numbers increase and they move to recolonize their historic habitat, ESA protection is necessary during this vulnerable expansion process.”

902 – CONNECTIVITY AND HABITAT FRAGMENTATION WITHIN THE GYA

Very few respondents commented on connectivity within the Greater Yellowstone Area. One respondent feels that increased development within the GYA will lead to habitat fragmentation. Another respondent suggests that the same techniques proposed for the augmentation plan could be used to move bears across local barriers within the GYA, such as highways.

- “Rapid development of the Greater Yellowstone ecosystem for energy development threatens immanent habitat fragmentation for the Grizzly.”
- “Weakening current protections would further fragment and destroy their last remaining home.”
- “If FWS finds it acceptable to transport bears from other locations to augment genetic diversity, why can't the same approach be taken for transport of bears across highways, a much smaller distance to travel? Clearly, a double standard is in play here when FWS claims that bears will be brought in from other sub-populations if genetic problems are discovered yet no effort is made to facilitate crossings of roads that bisect and fragment important habitat.”

903 – FUNDING TO IMPLEMENT CONSERVATION STRATEGY AND STATE PLANS

Most respondents commenting on funding to implement the Conservation Strategy and the State Plans are skeptical of the security of future funding. Some say that federal agency budgets are shrinking, and others contend that the poor states of Montana, Idaho, and Wyoming cannot afford to pay the costs of grizzly bear management. Many deem that a lack of secure state funding is sufficient reason for the courts to halt or delay delisting. Many respondents also state that secure funding mechanisms would have to be in place before delisting can proceed. Another common suggestion is that the USFWS needs to add a provision to the Conservation Strategy creating a trigger to relist the grizzly bear if state or federal funding is insufficient.

A few respondents suggest that the necessary funding could be made secure by the creation of an endowment fund by the federal government. A one-time allocation of \$40 million is thought to be sufficient to fund grizzly management in the GYA in perpetuity.

A couple of respondents note that even if the grizzly remains on the Endangered Species List, there is no guarantee that Congress will vote for funding its management by federal agencies in future years.

A few respondents who favored delisting feel that the federal government should also fund the grizzly management activities of the states, and one contends that failure to do so would create an illegal unfunded federal mandate. One respondent is surprised that the state of Wyoming is regarded as too

poor to fund its own grizzly bear management activities. This respondent also states that Wyoming had a \$2.2 billion budget surplus in 2005.

- "-All I heard from the NGOs in the hearing in Cody, WY is no funding for the grizzly bear proposal, because of oil and gas industry and coal, Wyoming has a surplus in the black of 2.2 billion, this proposal could not have come at a better time financially."
- "...the only sure method of securing adequate future funding is for the IGBC to create a permanent endowment that will generate funds indefinitely. The IGBC recognized the necessity of such a funding mechanism and contemplated its creation, but it was never created."
- "When the agencies and the Administration are seriously concerned with the long term survival of the grizzly and not just the 'delisting,' there will be healthy allotments of funds to replace the Endangered Species Act allocations."
- "Necessary funding is essential given the intensive habitat and population monitoring needs, and costly conflict resolution efforts in the delisting plan. To address this challenge, in 1998 the IGBC and state game and fish directors proposed to create a permanent endowment to generate funds indefinitely. NRDC and other organizations supported this proposal, and wrote letters to generate political interest. The fund was never created, and no alternative proposal has been made. Without committed long-term funding for management and research, delisting is inappropriate."
- "Funding is an integral part of future conservation efforts, and its uncertainty has been an additional reason for courts to reject listing determinations that rely on that uncertainty. See *Federation of Fly Fishers v. Daley*, 131 F. Supp. 2d 1158, 1167-68 (N.D. Cal. 2000) (finding reliance on future conservation measures improper where '[o]ther than a budget change proposal, NMFS cited no funding that had been definitely earmarked toward realizing [the state agency's] commitments')."
- "These are not rich states and may have trouble finding the money to manage the bears scientifically rather than politically."
- "This delisting plan is not adequately funded and lacks agency commitment to implement it. It requires \$1.2 million per year in addition to what is already being spent on grizzly recovery. After delisting, ESA funding to the states will disappear, while Forest Service funding declines. The Forest Service already lacks the necessary funds to monitor habitat. Where will the additional monies come from to pay for implementation of any delisting plan?"
- "Too often, when state budgets are formed and funds are scarce, wildlife and habitat are the first things to be neglected."
- "After delisting, ESA Section 6 funding to the states will disappear, reducing available funds to the three states by several hundred thousand dollars per year. Already now, some of the activities of the Interagency Grizzly Bear study Team are constrained because of shortage of funds: what will happen when the Federal Government is out of the picture?"
- "If the states want to manage grizzly bears, it is their responsibility (not the federal government's) to come up with the funding."
- "...long-term funding must be secured, because without rapid and constant feedback about habitat and population trends, no effective response procedure will be possible."
- "The delisting proposal is premised upon full implementation of the regulatory mechanisms and actions in the conservation Strategy and the state grizzly bear management plans. 70 Fed. Reg. at 69,875). According to the Conservation Strategy, that implementation requires a secure source of funding estimated to be \$3.5 million per year. Conservation Strategy, Appendix H at 154 (updated

2004). This represents an increase over current grizzly bear expenditures of approximately \$1 million per year, at a time when agency budgets are shrinking, not expanding.”

- “...if delisting occurs, non-allocation of the funding necessary to monitor and assess the status of the DPS should be included as a condition that should automatically trigger consideration for re-listing.”
- “We insist that, where not addressed by Wyoming’s grizzly bear management plan, the USFWS and other Federal agencies must bear the financial burden of management with direct funding to the State and Local entities who have been collared with paying the costs of grizzly bear management outside the PCA, where grizzly bears are not wanted.”
- “Show me the money. The proposal contains numerous promises that the states will extensively monitor and manage grizzly bears, but no secure, long-term funding source has been found to carry out that plan. Without a secure funding source, management of Greater Yellowstone’s grizzly bears will dwindle. Delisting should not occur until long-term funding is secured.”
- “However, multi-year commitment of funds, personnel, and political support on the part of the states is critically important to the success of this Strategy. Population and habitat monitoring on the scale described are expensive and complex. Yet, the sources of the money to implement monitoring fully and consistently with multiyear commitment have not been identified.”
- “Inadequate funding is assured in nearly all government programs. An unnecessary war, education, anti-terrorism, infrastructures, social programs, and transportation are only a few among the government programs that rise to the surface and siphon off funding necessary for wildlife management programs. Adequate funding for the monitoring and maintenance of grizzly bears must be assured before delisting.”
- “We note also, that funding uncertainty for these programs exists regardless of whether grizzlies are delisted or remain listed. Funding uncertainties would likely increase should delisting fail to occur and current significant funding from the states was withdrawn.”
- “Commitments to fund the necessary work will be crucial to ensure that any reversal of positive trends will be detected and addressed in time to prevent another serious population decline.”
- “...MSGA and MPLC believe that, if after the bear is removed from threatened status, and the Federal Government dictates management of the bear through a conservation strategy, that the Federal Government should provide funding for the management of the grizzly bear.”
- “Given ever declining federal and state budgets for wildlife conservation, and how fundamental sufficient resources are to the success of these plans, FWS should more clearly articulate the scope of funding needs, where the funds will come from, and the long-term outlook for federal and state appropriations.”
- “Funding is one of the key components of ensuring that the Conservation Strategy, state management plans, and Park and National Forest amendments are implemented. These plans will cost more than is currently being invested in bears in Yellowstone. Adequate funding is crucial to maintaining those regulatory mechanisms required for delisting.”
- “How can we, with any faith, consider de-listing when such fiscal uncertainty exists? We cannot support de-listing until there is a dedicated source of funding for grizzly bear management for the three states and federal agencies.”
- “...the regulatory authority and State responsibility for managing grizzly bears is adequate and reasonable. Questions remain regarding future funding and agency commitments to conservation.”

- “It is critical that the final rule address the funding shortfall for the monitoring in two ways: 1) Language in the final rule must assure that existing agency budgets will provide for full funding of the monitoring program if the agencies fail to secure an annual appropriation for or funding through other means, and 2) the final rule must stipulate that any failure to implement the post-delisting monitoring plan should itself be a trigger for a status review.”
- “While we recognize that the Service does not have the ability to guarantee funding for any aspect of its work, any delisting rule must clearly identify the necessity of maintaining adequate monitoring, and be clear that a failure to conduct appropriate monitoring would be a basis in and of itself for proposing re-listing.”
- “Delisting prior to securing funding would be tantamount to delisting without having the plan in place at all. It would amount to the unfunded mandate against which the Governors' Roundtable cautioned. Therefore, funding for state programs, federal programs, and Conservation Strategy need to be secured prior to delisting in order to ensure that the identified monitoring, evaluation, and management of the GYE grizzly bears will occur.”

904 – TRIGGERS TO RELIST AND SLOW RESPONSE

Many respondents say there is not an adequate emergency plan in place to immediately relist the grizzly bears and that delisting should not occur before the USFWS has a plan in place with triggers identified. Their recommendations range from specifying management conditions (e.g., unsatisfactory Forest Plan amendments or habitat degradation) that would trigger a status review to “hard” triggers that would result in immediate relisting if a threshold condition (e.g., mortality limits, habitat degradation, funding availability) is violated.

Some respondents object to the ineffectiveness of even “hard relisting triggers”. Those respondents cite the results of a modeling exercise that demonstrated that lag-times exist between when habitat is lost and when this loss shows up as a population decline. They claim that by the time the problem is detected, it may be too late. One respondent contends that even a trigger resulting in an immediate status review might be ineffective. The reason given is that the USFWS often finds a listing petition to be “warranted-but-precluded”, and does not proceed with listing in a timely fashion.

Some respondents contend that the proposed delisting rule relies on a monitoring review that is dependent upon accurate and timely monitoring data about habitat and population trends. They say that data will not be available without secure and permanent funding which has not been secured. They also are concerned that the biology and monitoring review will not result in taking any corrective action.

Other respondents say the current political climate should preclude delisting. These people doubt the ability of the U.S. Fish and Wildlife Service's to “move the behemoth bureaucracy” quickly enough to reinstitute the protections of the Endangered Species Act.

Another respondent contends that the Endangered Species Act does not provide a legal justification for an automatic trigger for relisting.

- "While the Strategy provides for emergency relisting, such action is contingent upon a determination 'by the Service' that the threat is severe and immediate. However, the Strategy does not indicate the precise process by which such a determination would be made and who the decision-maker would be. If the decision to relist on an emergency basis does not rest with those professionals within the Service charged with studying impact of delisting upon the grizzly bear population and maintaining its existence within the Yellowstone ecosystem but instead rests with political appointees, that protection is meaningless."
- “There isn't an adequate emergency plan set in place. The proposal lacks a plan to ensure protections for the grizzly bear will be restored promptly if the bear population drops sharply or key

food sources disappear. An emergency plan that restores protections should be developed before the bear is delisted.”

- “...if delisting occurs, non-allocation of the funding necessary to monitor and assess the status of the DPS should be included as a condition that should automatically trigger consideration for re-listing.”
- "The Proposed Rule has criteria that lead to a required 'Biology and Monitoring Review'; however, it lacks a clear set of demographic and/or habitat effectiveness conditions that would lead to automatic or expedited relisting. This should be a required condition of delisting..."
- “The ESA's requirements to monitor delisted species for 5 years and use the law's emergency authority to relist as needed to prevent significant risk to the well-being of the species were added in 1988 to facilitate delisting. The Institute believes that this structure provides the necessary safeguards for species. In this regard, inclusion in the Conservation Strategy of review mechanisms that would lead to relisting of the species if unforeseen circumstances resulted in a population decline is important and reassuring.”
- "...the Service's unwarranted assumption that the 'Future will look like the past - or the present' virtually guarantees that federal and state agencies will be slow to detect, react to, and mitigate for, declines in habitat and grizzly bears."
- “The committee fails to take corrective actions, it is unclear at what point FWS would intervene. FWS states that it could relist at any time; but, that hardly provides reassurance, especially given: a. the politically charged nature of this issue; and b. the track record of the Bush administration, which has failed to voluntarily list a single species, no matter how imperiled.”
- “The plan also fails to describe how it will address deviations from habitat or other standards. For example, there are no specific criteria to trigger change if whitebark pine crops plummet or bison populations are dramatically reduced. Also, it is unclear what exactly constitutes a deviation from the 1998 baseline, since there is still some confusion about what the baseline is.”
- “The primary factor that would prompt a review of the status of the population or management change is a violation of mortality limits. The plan contains no specific habitat impairment standards that would prompt a management response.”
- "Scientists have demonstrated that significant lag-times exist between habitat loss and grizzly bear extinctions. Research has also shown threshold population effects, which could mean that by the time the problem is detected, it may be too late to fix it. Estimates of lag-times between habitat degradation and detectable effects on the Yellowstone grizzly bear population was found to be 8-13 years, according to Dr. Dan Doak (1995). Doak also said that, 'Long lag-times can exist between critical levels of habitat degradation and any detectable change in population sizes, even when monitoring data are excellent.'"
- “The plan relies on adaptive management, with no specific thresholds to prompt changes if they are needed. The only specific threshold to prompt a review of the status of the population after delisting is a violation of mortality limits. The plan lacks thresholds and mechanisms to trigger change should habitat decline - which is happening now, and will continue. Scientists have demonstrated that lag-times exist between when habitat is lost and when this loss shows up as a decline in population. By the time the problem is detected, it may be too late to fix it.”
- “In addition, we are concerned about whether such standards and criteria will remain in effect when those Forest Plans are subsequently revised, as is scheduled to be done by 2010. To address that concern, we urge the Fish and Wildlife Service to declare unequivocally that any subsequent revision

of applicable Forest Plans that removes in whole or in part the habitat standards and criteria of the Conservation Strategy will result in an immediate formal status review and consideration of re-listing.”

- “A more appropriate trigger for response should be discernible decline in habitat, not bear mortality. The agency already well knows that mortality is a certainty in the absence of a stable natural food supply or other decline in habitat. Studies have shown that there may be a gap in time between habitat decline and resulting mortality.”
- “With a higher than estimated mortality rate and a very low reproductive rate a crash in grizzly numbers could happen in the blink of an eye in biological time.”
- “Indeed, the proposal's current safety nets are alarming to many of us. In many cases, mortality rates could be exceeded for up to 3 years before anything is done to change the situation. Grizzlies breed slowly. Three years is too long. Re-listing is not a viable solution either because we all know that could take many years unless the proposal mandates re-listing without exception under a given set of circumstances.”
- “The possibility of relisting - which itself would be a political feat given the voracity with which Idaho, Montana, and Wyoming have sought to delist the grizzly bear in order to implement a sport hunting season - is not an adequate regulatory mechanism to justify delisting. If that were the case, then all species would satisfy the regulatory mechanism factor in the delisting analysis because all species would be subject to potential relisting if post-delisting management went awry. Moreover, the threat of a relisting petition is not compelling given that the FWS could render a warranted-but-precluded finding as it has done in response to numerous other grizzly bear petitions. See Section II, supra; Delisting Proposal, 70 Fed. Reg. at 69,861.”
- “The best available science demonstrates a significant time lag between habitat loss and grizzly bear extinctions. There is usually a multi-decades lag between loss of grizzly bear habitat, and extinction of isolated, residual populations confined to the habitat islands created by habitat loss.”
- “We are aware of no mechanisms the FWS might use in their delisting proposal to compel compliance with their plans from the states or Forest Service. The FWS has no option but to assume these agencies will comply with their plans as written; if they do not, the only recourse available is relisting the species.”
- “The proposed delisting rule identifies excessive mortalities as a trigger for a Biology and Monitoring Review. This review will be conducted by the Interagency Grizzly Bear Study Team with the goal of identifying why population or habitat goals have not been met and what management options exist. We doubt that the ESA can be construed to provide a trigger for automatic relisting of a species. In all likelihood, the best the FWS can do in a delisting rule is to specify a process for triggering a review. The proposed rule does this.”
- “As a result, NPCE is concerned that there are no thresholds identified in the proposed rule that trigger non-discretionary agency actions to address problems. We view this as a significant weakness in the proposed action, and we conclude that, as articulated in the proposed rule, there is not sufficient certainty that appropriate action would be taken in a timely manner to address issues raised in monitoring. In addition, it is critical that thresholds and a timeframe for action be articulated in the final rule to assure consistency in decision-making and for the public to fully understand the rules of the game.”
- “In addition, because there is significant uncertainty associated with the monitoring protocol and estimation of these demographic parameters, any significant failure to implement the post-delisting monitoring plan should itself be a trigger for a status review. Such triggers should be identified in the final delisting notice, in addition to the already proposed safeguards in the Conservation Strategy.”

- "Relisting would almost certainly be met with vigorous resistance on economic grounds, and even if it were accomplished, any habitat loss or degradation occurring while that the animals were de-listed would be politically very difficult to undo. Any future recovery plan would therefore begin from a considerably more difficult baseline."
- "The Delisting Proposal notes that if it is later determined that existing food sources are no longer available, and a significant increase in grizzly bear mortalities has occurred, then the proper course of action is to file a petition to relist the Yellowstone DPS as a threatened species... [Footnote #1] Obviously, this does little to allay the HSUS's concerns. If the future has any correlation to the past, the FWS will conclude that any petition to relist the Yellowstone DPS is warranted, but precluded by funding and resource issues."
- "The proposed delisting rule relies on 'Biology and Monitoring Review' triggered by certain factors to ensure that agencies respond to warning signs about grizzly bear population or habitat. GYC has several concerns about the adequacy of this response process. First, the monitoring review is dependent upon accurate and timely monitoring data about habitat and population trends. That data will not be available with out secure, permanent funding, which has not been secured. Second, there is a lag time of between eight and thirteen years between declines in habitat and measurable evidence of decline. (Doak 1995). Third, the biology and monitoring review does not result in any corrective action being taken."
- "The plan relies on adaptive management, with no specific thresholds to prompt changes if they are needed. The only specific threshold to prompt a review of the status of the population after delisting is a violation of mortality limits. The plan lacks thresholds and mechanisms to trigger change should habitat decline - which is happening now and will continue. Scientists have demonstrated that lag-times exist between when habitat is lost and when this loss shows up as a decline in population."
- "...the response procedure should be one specifically designed for Greater Yellowstone's grizzly bears, and it should be independent of the normal USFWS rules and regulations regarding relisting. While this delisting proposal rejects the precautionary principle as a guide for grizzly bear recovery (see Schwartz et al. 2005 at p. 80, 'we find [the precautionary principle] lacking as a basis for good conservation decisions'), it recognizes the uncertainty and fragility that grizzly bears in Greater Yellowstone face. Dr. Schwartz and his colleagues warn that 'grizzly bears can never again be viewed as an ordinary species.' Id. at 81. If the USFWS is going to take this risky step to delist the grizzly bear in Greater Yellowstone, it needs to build a specially designed emergency response process into the proposal. That emergency response process must give the USFWS the ability to stop or modify management policies and projects over large areas while it investigates the causes and effects of those policies or projects, rather than waiting for conclusive data that such policies or projects are causing a deleterious effect on the population. This at least introduces the precautionary principle back into grizzly bear conservation efforts after delisting occurs, when warning signs show up. Without such a specially designed emergency process that gives the USFWS preemptive authority to act before all the information about a warning sign is discovered and known, the highly fragile Greater Yellowstone grizzly bear population will be subject to the political whims of the day."
- "Where is it written that the immediate re-institution of protection is insured at the first sign of failure? You, and yours have given us no reason to believe you can move the behemoth bureaucracy any more quickly to reinstitute the protections than it has taken to remove them."
- "In the final rule, the FWS should make clear which demographic and habitat thresholds would initiate a formal status review, and should clearly articulate a timeline by which such review will be acted on."

905 – MONITORING

Respondents commenting on monitoring are either critical of existing monitoring plans or suggest other monitoring methods they feel should be done instead of or in addition to the existing monitoring methods. Many respondents criticize current methods used to monitor whitebark pine seed-cone production, claiming that data on the proportion of trees dying each year, which are not currently collected, are at least as important as the size of the cone crop. Other respondents claim the current monitoring systems to detect the rapid changes in blister rust infection rates in specific parts of the ecosystem are inadequate. They claim the sample size is relatively small for such a large region.

The continuing use of the unduplicated counts of females with cubs-of-the-year to estimate population size drew the criticism of many respondents. Some respondents suggest that a DNA-based survey would be a better monitoring method, and one respondent objects that the proposed monitoring of genetic diversity does not specify the point at which population augmentation would be considered necessary. Some recommend that telemetry studies be conducted to explore the age of first reproduction of females to supplement traditional data on sightings of females with cubs. Another respondent claims that the proposed monitoring of genetic diversity is not sufficient to detect the expected slight decline in heterozygosity, due to inadequate sample size and thus inadequate statistical power.

A few respondents call for clearly formalized monitoring programs established outside the PCA, and some want monitoring programs inside and outside the PCA to determine use patterns and trends in use of roads and trails, ATV use, and private land development. One respondent recommends monitoring trails in roadless areas of bear habitat and if conflicting uses become a problem to bear survival, trails should be closed on a seasonal level.

One respondent argues that the planned extent of trapping and radio-collaring of bears is unethical, and that the monitoring should be abandoned in favor of keeping the bears listed as Threatened

Another respondent suggests that Resource Selection Functions be used to monitor the habitat criteria, rather than the Cumulative Effects Model.

- “...despite promises in the CS that private lands development will be monitored inside and outside the PCA, the plan fails to establish a comprehensive system for monitoring of development after delisting...”
- “The delisting plan states that in the future, habitat outside the PCA will be monitored, and changes assessed, but FWS provides few details about how this will occur. FWS cannot rely on the promise of future regulatory mechanisms in its delisting decision.”
- “...FWS has continued to use a population monitoring methodology, females with cubs of the year, that the Service acknowledged from the very start was unreliable, that a federal court has declared illegal, and that has been reconfirmed to produce subjective and highly variable results in subsequent scientific publications. The consequences of these errors have become more profound because FWS continues to set mortality thresholds based on this discredited metric and now has proposed to use the metric to estimate total population, not a minimum population estimate.”
- “The delisting plan and related documents lack necessary standards for monitoring use patterns and trends on roads and trails, particularly by ATVs, which effectively transform the trails into roads, and make previously remote wild country accessible to an increasing number of people.”
- “Any coordinated monitoring protocol should begin by establishing bear analysis units in the areas outside of the PCA. Bear management units (BMUs) and subunits have been used for over a decade to evaluate population and habitat information inside the Recovery Zone. Subunits provide the optimal scale for evaluation of seasonal feeding opportunities and landscape patterns of food availability for grizzly bears.”

- “The IGBST monitoring effort is certainly adequate for its slated objectives, but does not provide information about the extent, location, or vital rates of MPB populations. While the report mentions a rate of beetle infestation among the live trees, the sample size is likely too small (51 plots) to detect and quantify highly-clustered phenomena like insect outbreaks. Specialized sampling techniques, such as adaptive cluster sampling, may be applicable to quantifying and understanding the ongoing MPB epidemic (Thompson and Seber 1994, Smith et al. 1995, Brown and Manly 1998, Philippi 2005).”
- “One of the challenges to early detection upon delisting will be the decentralization of grizzly bear management efforts spread out over several state and federal agencies. It is imperative, therefore, that the FWS refrain from delisting unless and until coordinated, funded, and mandatory monitoring and data evaluation protocols have been implemented throughout the GYE.”
- “Based on the average number of female bears in the Reassessing Methods document (N=144), this would mean that an average of 17% of the adult female bears would be carrying radio collars. As a biologist, I think that is an excessive amount of handling. It is abusive and unethical in the context of your claim that the population is 'recovered'. Furthermore, I think the intrusions on wilderness are excessive for these long-term, seemingly interminable (or until the money runs out) research activities (trapping, aircraft, etc.). My view is that you should back off the intrusive handling approach... Be conservative, keep the bear listed, expand the Recovery Zone, and vigorously protect habitat.”
- “FWS proposes to monitor genetic diversity within bears and if no indication of immigration to this subpopulation is found, then individual bears would be imported. This wrong-headed scheme would be triggered by monitoring yet no criteria for genetic diversity is provided or available. Monitoring for this type of genetic change is difficult and fraught with uncertainty and yet it is proposed as a mitigation measure for the very serious problem of genetic isolation.”
- “First, the monitoring review is dependent upon accurate and timely monitoring data about habitat and population trends. That data will not be available without secure, permanent funding, which has not been secured. Second, there is a lag time of between eight and thirteen years between declines in habitat and measurable evidence of decline. (Doak 1995).”
- “FWS asserts that there is: ‘a highly sensitive system to monitor the health of the [grizzly] population and its habitat and to provide a sound scientific basis to respond to any changes or needs with adaptive management actions.’ 70 Fed. Reg. at 69881. This is plainly belied by the monitoring methods for assessing the production levels and availability of whitebark pine seed cones. The federal monitoring of whitebark pine throughout the GYE will not detect a whitebark population crash until after it has happened. See Cherry (2005) (2004 IGBST Annual Report, Appendix B) (‘By the time there [is] convincing statistical evidence of a problem, the problem [will] have become obvious nonstatistically.’)”
- “...we suggest other techniques be considered for monitoring of the habitat criteria. For example, Resource Selection Functions (RSF) may provide a more empirical approach compared with the currently used Cumulative Effects Model. In addition, we also suggest that production, growth rate and survival of cubs of radio-collared females be monitored as additional indicators of habitat capability/value.”
- “There is also a serious problem with the power to detect a decline in diversity. There will not be sufficient power in the monitoring to make it effective... Detection of such a small amount of heterozygosity will be impossible given the population size of Yellowstone grizzly bears and the number of progeny produced.”
- “The FWS conclusion that implementing a DNA monitoring program is prohibitively expensive directly contradicts an earlier scientific report co-authored by the FWS Grizzly Bear Recovery Coordinator that concluded that a DNA hair recapture population monitoring method could be implemented in the

Northern Continental Divide Grizzly Bear Ecosystem much more cheaply than the radio-collar monitoring approach the agencies continue to employ in Yellowstone.”

- “We also recommend that trails in roadless areas of bear habitat be monitored and if conflicting uses become a problem to bear survival, trails should be closed on a seasonal level.”
- “...if all population assessment is based on counts of females with cubs, demographic changes may be missed or only detected after considerable time lag. For example, age of first reproduction is likely more sensitive to changes in food supply than litter size or pregnancy rate, with significant effects on population reproductive rate, yet changes in this parameter are largely invisible in the absence of studies using radio-telemetry. We recommend that telemetry studies be conducted to explore these questions and supplement traditional data on sightings of females with cubs.”
- “Unfortunately, current monitoring systems have been inadequate to detect these rapid changes in blister rust infection rates in specific parts of the ecosystem. We recognize that agencies are working hard to compile data on a broad ecosystem-wide basis. But, the sample size is relatively small for such a large region; and certain areas with high infection rates are receiving inadequate attention. Habitat in some BMUs is suffering much more than in others. Without a system to measure and respond to such changes, FWS cannot demonstrate the adequacy of regulatory mechanisms after delisting.”
- “The federal whitebark monitoring protocol is designed to measure the annual variability of seed-cone production of living trees. Observers walk fixed transects throughout the region, and count the number of cones on each living tree, thus generating the average productivity for the ecosystem. Id. This monitoring protocol ignores dead trees rather than counting their productivity as zero... By focusing on the productivity of living trees, the IGBST research has failed to shed light on a crucial problem-as more and more whitebark pines die, there will be less of this critical food source available to grizzly bears. Thus, regardless of the annual cone productivity monitored across the ecosystem between 2002 and 2004, the total number of live whitebark pine trees in the study transects decreased by 25%. While that alarming decline can be pieced together by comparing the two reports, FWS makes no mention of it or to its ramifications for the future of Yellowstone grizzlies.”

906 – GRIZZLIES ATTRACT TOURISTS

Respondents commenting on tourism claim that the opportunity of seeing a grizzly bear in the wild is a major motivation for tourists visiting Yellowstone National Park. Many also praise the economic benefits of the grizzly bears to the surrounding areas. One person says that the increase in tourism is squeezing out the very bears that people come from all over the world to see.

- "As the United States loses it's economic manufacturing base, more areas are making the majority of their income from tourism. Yellowstone Park is the gem of the U.S. National Parks system, and tourists from all over the world come to the United States to visit. One of the prime attractions of Yellowstone is large mammals. And the biggest attraction is bears."
- "Please consider the value of these bears -- not only as a part of the park but also the economic value for the local economy."
- "Can you imagine the loss of income to Yellowstone Park and the surrounding area, should the public have no bears to view when they visit the park. I personally have met people from all over the world who visited Yellowstone just in the hopes of a glimpse of a Grizzly Bear. One lady I met had visited Yellowstone for 25 years in hopes of seeing a Grizzlyly."
- "Please remember that wildlife watching brings more economic benefit to communities than either hunting or fishing. And many hope to someday see a Grizzly Bear."

Summary of Public Comments on the Proposed Rule to Delist Grizzly Bears in the Greater Yellowstone Area

- "For me it is always a thrill to see bears in the wild. We are a tourist state, and I know that such things as grizzlies, wolves, and other large mammals are part of the draw for tourists to visit Wyoming."
- "I personally believe shooting wildlife with a camera brings in as many tourists and improves the economy of these states to a greater degree"
- "Colorado, California, Washington and Oregon all have lovely mountains. But the opportunity to see a grizzly in the wild is one of the things that make Yellowstone so special. Yellowstone is the largest remaining intact ecosystem in the lower 48 states, and it provides opportunities to hunt, fish, camp and view wildlife that are literally the world standard."
- "ecotourism is what helps keep these communities alive. People want to see them and experience nature as it should be, not just the tranquil park setting that the Bush administration seems to want to achieve."
- "As a tourist I treasure the unique experiences of seeing animals in their native habitat so please reverse your course."
- "We join millions of other Americans--and foreign tourists, too--who travel great distances at great expense to see our wildlife--especially grizzlies-- in the wild."
- "While the bears actually draw and make dollars, they are still being squeezed out of their environments by the tourist trade that they attract."
- "Yellowstone is the only place in the country where you can go and have at least a reasonable chance of seeing a grizzly bear in the wild. For that reason it's the only place I ever want to spend any of my vacation time."

907 – CLIMATE CHANGE, RANDOM FACTORS, CUMULATIVE EFFECTS, AND UNCERTAINTY

Respondents commenting in this category are primarily concerned with global climate change, unforeseen disease epidemics, the cumulative effects of small negative actions, unspecified random impacts and catastrophic events. Several respondents comment specifically on the Cumulative Effects Model used by the Forest Service used to monitor habitat conditions.

Those respondents mentioning global climate change contend that the up-slope migration of plant communities caused by warmer climate will deprive grizzly bears of important food sources. Several respondents are concerned with the impacts on whitebark pine from global warming. One respondent warns that a warmer climate threatens not only alpine moths, but other alpine insects and alpine mammals (such as the pika) that grizzlies prey upon. On the other hand, another respondent claims that climate change and other natural disasters, however harmful they might be, would not be mitigated by ESA listing.

Several respondents are concerned with the Forest Service using the Cumulative Effects Model (CEM) as the primary method of monitoring habitat conditions inside the PCA; and that the model does not extend outside the PCA. Furthermore, these respondents say the Forest Service has not attempted to verify the status of roads and trails, or to resolve data discrepancies in forests outside the PCA. They contend that such analysis was essential to completing the CEM. They also contend that by the Forest Service's admission, the roads data on national forests outside the PCA include considerable error.

One respondent is concerned that more personnel within the Forest Service need to know how to use the Cumulative Effects Model (CEM) as a tool to monitor the habitat effectiveness baseline. Another

respondent says the Craighead Environmental Research Institute has refined a habitat suitability model, based upon experimental opinion, which is as accurate as other models including the cumulative effects model or CEM. This respondent asserts that the CEM has not been applied outside of the Primary Conservation Area (PCA) and the IGBC is therefore unable to assess the relative importance of other habitat by relying on this model.

- "Delisting will expose the bears and their habitat to increased pressure that is very likely to diminish their population under the best of conditions and a drastic reduction under conditions of disease or sustained drought."
- "Providing for dispersal between local populations helps ensure genetic exchange, as well as allowing for immigration and emigration in response to epidemic disease, insect outbreaks, climate change or large scale fire that might extirpate one or several local populations..."
- "The fact is that the current population of 500 - 600 bears is nowhere near the population needed to maintain genetic diversity and prevent a single event from destroying the species."
- "Page 69868 has an extensive discussion of the importance and use of the Cumulative Effects Model (CEM) as a tool to monitor the habitat effectiveness baseline. While ideally this would be an important means of evaluating changes in habitat use, we are concerned that very little resources have been invested in making this a complete model, and the fact that only one person knows how it works makes it of limited use. If FWS is going to rely on this so heavily, we think that a plan needs to be established for educating more agency personnel how the CEM works and ensuring that the latest data is included. While this has come up a number of times in Subcommittee discussions, it inevitably gets shelved due to higher priorities."
- "The Craighead Environmental Research Institute has refined a habitat suitability model, based upon experimental opinion, which is as accurate as other models including the cumulative effects model or CEM (Olenicki and Craighead 2005a, 2005b, Craighead et al. in prep 2006). The CEM has not been applied outside of the Primary Conservation Area (PCA) and the IGBC is therefore unable to assess the relative importance of other habitat by relying on this model."
- "I do not think delisting is appropriate at this time. Current aggressive energy and motorized recreation plans, exurban development, and global warming in the region need to be incorporated into cumulative impacts that may affect this population."
- "USFWS does not address or make provision for coincidental loss of food source(s) due to climate changes, epidemic diseases, increased human development and other unforeseen events. Cumulative impact must be considered and planned for."
- "Recent research suggests that as the climate warms, mountain pine beetle outbreaks will increasingly spread into forests at higher elevations and more northerly latitudes. Modeling efforts based on the best available scientific information indicate that virtually all whitebark pine stands in the Yellowstone area, except for portions of the Absaroka Mountains and the entirety of the Wind River Range (both of which are outside of the PCA) will be decimated by mountain pine beetle infestations during the next several decades. Logan (2006)."
- "Alpine moths are also likely to decline significantly as a result of a warmer climate as a result of climate disruption, which is already threatening other alpine insects: alpine mammals that grizzlies prey upon, such as pikas, will likely be similarly impacted. And as the climate warms, ungulates that die in significant numbers in the late winter and spring will not face the same snow accumulations; their survival in greater numbers will deprive grizzlies of carcasses to feed on during the critical period when bears emerge from their dens."

- “Global warming affects whitebark pine in two fundamental respects: (1) by increasing susceptibility to mountain pine beetle attacks; and (2) by making lower-elevation areas inhospitable to whitebark pine trees...This...will result in significantly reduced carrying capacity for Yellowstone grizzly bears.”
- “...how do you plan ahead for the unseen or unexpected like disease or some other unforeseen problem which could wipe out a large number of animals to the point that they might not be able to recover especially if they are already diminished by hunting or continued loss of habitat.”
- “Opponents also postulate a number of natural disasters such as loss of important forage types (Wilcox 2005), climate change and disease threats as being reasons to keep the bears listed. However, these imaginary threats would not be mitigated by ESA listing.”
- “A particular future disease, parasite, weather pattern, change in nutrition, etc, might cause the extinction of the remaining bears who have lost the genetic flexibility to deal with changed conditions.”
- “...climate warming, without taking into account losses from blister rust or MPB, will reduce the range of whitebark pine in the GYE (Romme & Turner, 1991) by as much as 78% within core grizzly bear habitat (Merrill, 2006).”
- “The Yellowstone grizzly bears must be listed as endangered if there exists a single factor, or some combination of factors, that causes them to be in danger of extinction in a significant portion of their range. In this regard, I direct your attention to the parable of the Heath Hen (Shaffer 1981), teaching how extinction is the cumulative consequence of a series of small insults, each of apparently insignificant effect when considered individually (see also Laikre [1991]). Thus, even if one cannot identify a single factor causing the Yellowstone grizzly bears to be at risk of extinction, they may still be at risk from multiple factors acting in concert.”
- “The draft rules do not analyze the chance of extinction from demographic stochasticity, environmental stochasticity or catastrophies. Empirical data show substantial year-to-year variation in population growth rate correlated with whitebark pine mast and non-mast years, an obvious source of environmental stochasticity.”
- “By 2100 the Yellowstone grizzly bears will inhabit a small isolated habitat island that will be 1.4 to 5.8 degrees C warmer than their current habitat. A temperature shift at the upper end of this range would be catastrophic, and it is hard to see how a temperature shift in the middle of this range would not have significant, and likely seriously detrimental, impacts on whitebark pine, and perhaps also on army cutworm moths. A pessimistic or even most likely interpretation of the global climate change information (i.e. assuming a 3.6 degree C or higher temperature increase) would require an endangered listing, regardless of other factors.”
- “Meteorological data strongly indicate that climate change is likely underway. Well-founded projections about the unfolding of the current MPB outbreak in whitebark pine need to be taken seriously, and considered in conservation planning for the Yellowstone grizzly bear population.”
- “Projects that lead to significant loss of habitat security or quality outside the PCA may pose a long-term threat to the bear's viability, even if such projects do not have an immediate effect on demographic measures. For that reason, we urge the Service to develop clear criteria for tracking and monitoring the cumulative impact of management decisions by other federal and state agencies on habitat outside of the PCA.”
- “FWS does not adequately address potential habitat loss on currently occupied grizzly bear habitat outside of the PCA in the plan. At no point in the document is there an adequate comprehensive assessment of cumulative effects of potential roadbuilding, oil and gas development, and timber projects.”

- “The Federal government, the State governments, interested groups, and concerned citizens should embrace and celebrate the successes of the ESA. We should not shy away from scientifically warranted delistings, such as the delisting proposed for the Grizzly Bear, due to a call for absolute certainty.”
- “The agency uses the Cumulative Effects Model (CEM) as the primary method of monitoring habitat conditions inside the PCA; the model does not extend outside the PCA. Furthermore, as previously discussed, the FS has not attempted to verify the status of roads and trails, or to resolve data discrepancies in forests outside the PCA; such analysis was essential to completing the CEM. By the FS's admission, the roads data on national forests outside the PCA include considerable error.”
- “The Yellowstone grizzly bears can respond to habitat changes such as those caused by global climate change, loss of whitebark pine by blister rust and mountain pine beetle and/or loss of lake trout and other foods through introduced species in several ways: They can either track their habitat across space or change genetically (Pease et al. 1989, Droz and Pekalski 2002), or perhaps alter their behavior without tracking their habitat spatially (as suggested by the draft rules). However, the Yellowstone bears will be unable to track their environment spatially because it is a small habitat island, and they will be unable to track it genetically because of lack of genetic variation. And the available data shows that bears do not shift from whitebark pine to alternative foods to any substantial amount.”

908 – BLACK MARKET TRADE IN BEAR PARTS

A few respondents believe that delisting and the subsequent grizzly bear hunting seasons will fuel the illegal trade in bear parts. All respondents who mentioned the trade in bear parts opposed it.

- “So many bears are killed illegally for the Chinese trade in their paws.”
- “Hey, so I’m not quite sure what the endangered species act says, but if they are taken off of it, does it mean that people can start to hunt them again??? Is so it just means that hunters that do not respect the law or quota on them will start hunting them again for black market money, its pretty much just inevitable ...”
- “Oh and then we have the Asians who think Gal bladders from bears are some form of performance drug.”
- “These wonderful animals will bring a load of money from guided hunting trips – and use of their gall bladder and paws to serve the black market with big bucks – selling for Chinese medicine – how sickening and ashamed I am feeling as an American!”
- “They bring in millions to underworld markets for there gal bladders, paws, claws and fur. This is not what we had in mind when fighting for them to be on the Endangered Species List.”
- “Apologies for the form letter but this is the only way I can keep up with events. Really, there's not that many bears and considering what's going on with the Asian Bear population, we should keep the grizzlies protected.”

909 – 2004/2005 LEVELS OF MORTALITY OR OTHER POPULATION PARAMETERS

Several respondents point out that the current mortality standards were exceeded in 2004 and 2005, and that the Recovery Plan states that exceeding the mortality standards in two consecutive years means that recovery has not been achieved. Several allege the Fish and Wildlife Service changed the rules instead of acknowledging that the level of allowable female grizzly mortalities was exceeded. They claim this is in

violation of the Administrative Procedures Act and the Endangered Species Act and is misleading because FWS failed to disclose that the female mortality standards had been violated in any year. They claim that if the FWS had disclosed these critical facts, the public would have been on notice that recent mortality levels are excessive, that all recovery targets are not currently being met, and that grizzly bear recovery has not been achieved. They contend that this excessive mortality precludes delisting. Several respondents voice general concerns that the mortality levels in recent years have been too high.

- "FWS has repeatedly stated that all the recovery plan targets for Yellowstone grizzly bears have been met. This is not true. In 2004, the agency violated the level of allowable female-caused mortality. Instead of acknowledging this fact, FWS changed the rules using a method that is only now being reviewed by the public."
- "FWS Violated the Administrative Procedure Act and the Endangered Species Act By Failing to Disclose and Consider Violations of Current FWS Recovery Plan Mortality Standards. FWS established grizzly bear mortality standards in the current 1993 FWS Grizzly Bear Recovery Plan, which include standards for ensuring that female grizzly bear mortality is not excessive. FWS explicitly stated that: '[t]hese mortality limits cannot be exceeded during any 2 consecutive years for recovery to be achieved.'...The current FWS recovery plan standards for female mortality were violated in the two most recent years, 2004 and 2005."
- "A major problem with the removal of the bears from the Endangered Species List is that it ignores the 21 bears that have been poached in Montana this year."
- "Reports show that Last year was the deadliest year for grizzlies since they were protected under the Endangered Species Act. What will happen next year and next?"
- "In 2004, 19 grizzly bear deaths occurred in the region, the highest in 15 years. In addition, the female grizzly mortality rate makes up 60% of the dead, which predicts the likelihood of future endangerment."
- "In response to this excessive mortality level, FWS and the IGBC asserted that they would address these mortality levels in the delisting proposal. Id. ('The implications of the 2004 mortality spike will be analyzed in the context of draft rule.'). However, this is yet another broken promise by the FWS and the IGBC---nowhere in the proposed delisting rule is the excessively high grizzly bear mortality levels in the last few years or the '2004 mortality spike' disclosed, let alone 'analyzed.' These high mortality levels are yet another reason that the Yellowstone grizzly bear should not be delisted."
- "Even if there had been zero adult female mortalities in 2005, the 6-year average of female mortality would have exceeded the FWS 2005 allowable mortality standard because of a six-year trend of excessive female mortalities (6-year average of 5.8 exceeding the allowable standard of 4.4)."
- "Finally, after the Rule had already been issued, the Service published a new methodology for calculating mortality limits (IGBST. 2005). And despite the fact that this new methodology is still undergoing public comment, FWS has included it in the Rule as though it were an accomplished fact, when, in reality, the old methodology remains in place - inconveniently showing that female mortality limits were violated in at least two years, if a six year running average is used, and 8 of the last 12 years if annual calculations are employed (Schwartz et al. 2004)."
- "Nowhere in the proposed rule or supporting materials did FWS advise the public that excessive female grizzly bear mortality in 2004 and 2005 violated recovery plan standards. Instead, FWS claimed that the existing human-caused mortality standards 'have not been exceeded in 2 consecutive years since 1997.' 70 Fed. Reg. at 69859. This is demonstrably false and misleading. It is false because the female mortality standards were violated in 2004 and 2005; it is misleading because FWS failed to disclose that the female mortality standards had been violated in any year. Had FWS disclosed these critical facts, the public would have been on notice that recent mortality

levels are excessive, that all recovery targets are not currently being met, and that under FWS's own standards, recovery has not been achieved and delisting is inappropriate. Instead, the public was led to believe that recent mortality levels were not excessive. Compounding these errors, the FWS mounted a publicity campaign promoting the delisting of the Yellowstone grizzly bear on grounds that the Yellowstone grizzly bear population had met all recovery standards."

- "Females with cubs of the year is an inherently unreliable method for assessing population size and trends. If FWS insists on using this unreliable methodology for purposes of its delisting rule, the Service must reveal that applying this methodology to the 2005 data results in a radically reduced estimate of population size... Using the FWS's preferred approach of determining total population size via methods outlined in the Reassessing Methods paper, the Yellowstone grizzly bear population crashed from 588 bears in 2004 to roughly 350 bears in 2005."
- "As I understand it, there have been 19 known bears killed or taken out of the Yellowstone ecosystem this year already."

910 – PUBLIC LANDS SELL-OFF

A few respondents address the proposed sale of public lands in their comments, and all oppose land sales in grizzly habitat. The most popular objections are increased bear conflicts with humans, increased habitat loss and fragmentation, decreased potential for movement corridors, and increased development in the Cody-to-Yellowstone area.

- "If the persistent effort of the present administration to sell off attractive chunks of federal land succeeds the Cody to Yellowstone situation will only worsen."
- "Habitat loss, in particular, continues to be a problem and will only increase with the current trend of selling off vast amounts of public land."
- "There is current legislation before the United States Congress that proposes the sale of Federal lands for private ventures. I am concerned that if lands under Federal control revert to private property, this may lead to a further fragmented landscape. Small housing tracts may potentially divide migration corridors and lead to increased threats to bears via elevated human interaction (e.g., hunting conflict, livestock/pets, feeding, and vehicle collisions)."
- "The recent US Forest Service proposal is to sell off some public lands to create money for the school and highway trust funds. Will critical lands be included in these sales?"

APPENDIX A – CONTENT ANALYSIS CODE LIST

PROJECT: Proposed rule designating the greater Yellowstone population of grizzly bears as a distinct population segment and removing the Yellowstone distinct population segment of grizzly bears from the federal list of endangered and threatened wildlife.

DEMOGRAPHIC CODES

ORGANIZATION TYPE:

Business
Congressional/Legislative
County govt.
Environmental interest
Industry interest
Private organization
Professional scientific organization
Recreational interest
Social/Political interest
State agency
State government
Unknown

RESPONSE TYPE:

Email
Form letter
Letter/Postcard
Petition
Public hearing testimony

OVERALL SUPPORT FOR DELISTING:

Against – Against delisting
For – For delisting
Unclear – It is not clear whether the respondent is for or against delisting

ISSUE CODE CATEGORIES

100 General Comments

- 101 Corrections to facts and data in document
- 102 Using science and data to best extent possible
- 103 Further research or analysis needed
- 104 Compliance with federal laws and court settlements
- 105 Comments on concurrent documents
- 106 Public involvement

200 DPS comments

- 201 Discreteness
- 202 Significance

300 Delisting

- 301 FWS definition of recovered
- 302 Population growth rates and slow reproduction
- 303 Sufficient habitat to ensure a viable population
- 304 Mortality control
- 305 Negative attitudes toward grizzlies
- 306 Will decline or go extinct without ESA protections
- 307 Against delisting for value-based reasons
- 308 Population size and historical range
- 309 Ability of states or feds to manage delisted population
- 310 Don't trust motivations behind delisting
- 311 For delisting
- 312 For delisting if no hunting season
- 313 Effects on trophic levels and ecosystem
- 314 Conservative or precautionary management approach

400 Factor A – Habitat

- 401 Protect habitat or more habitat
- 402 Secure habitat, roads, and motorized use
- 403 Major foods
- 404 Snowmobiling
- 405 Developed sites
- 406 Habitat-based population viability analysis
- 407 Livestock allotments, grazing, and ranching
- 408 FWS definition of suitable habitat
- 409 Timber harvest
- 410 Oil and gas development and mining
- 411 Human population, recreation, and private land issues
- 412 Improve degraded habitat
- 413 1998 habitat baseline

500 Factor B – Overutilization

- 501 Hunting
- 502 Hunting will make grizzlies wary of humans

600 Factor C – Disease and predation

- 601 Wolves and conspecific predation
- 602 Human-caused mortalities
- 603 Poaching
- 604 Accidental death
- 605 Grizzly bear/human conflicts

700 Factor D – Adequate regulatory mechanisms

- 701 Adequacy of the Conservation Strategy
- 702 USFS Forest Plan amendments
- 703 2005 Forest Planning regulations
- 704 State Management Plans
- 705 Montana Management Plan
- 706 Wyoming Management Plan
- 707 Idaho Management Plan
- 708 2005 Roadless Rule

800 Factor E – Genetics, I&E, and threats to major foods

- 801 Genetics and implications of isolation
- 802 Information and Education programs
- 803 Whitebark pine
- 804 Cutthroat trout
- 805 Army cutworm moths
- 806 Ungulates

900 Miscellaneous

- 901 Connectivity with other grizzly populations and habitat fragmentation
- 902 Connectivity and habitat fragmentation within the GYA
- 903 Funding to implement the Conservation Strategy and state plans
- 904 Triggers to relist and slow response
- 905 Monitoring
- 906 Grizzlies attract tourists
- 907 Climate change, random factors, cumulative effects, and uncertainty
- 908 Black market trade in bear parts
- 909 2004/2005 levels of mortality or other population parameters
- 910 Public lands sell-off

APPENDIX B – LIST OF TECHNICAL COMMENTS

Comment #	Person / Organization
1399	Alliance for the Wild Rockies
2322	American Farm Bureau Federation
1400	American Society of Mammalogists
1430	American Wildlands
833	Angela Hash
1039	Anthony Simon
1426	Bear Creek Council
1484	Big Wild Adventures
1423	BlueRibbon Coalition
999	Center for Biological Diversity
2087	Citizens for a User Friendly Forest
1425	Conservation Congress
1136	Craig M. Pease
1124	Craighead Environmental Research Institute
781	Darwin Ranch Hunting
906	Daryl Hunter
1630	Debra Patla
1111	Defenders of Wildlife
1049	DeLoyd Quarberg
1048	Diana F. Tomback
1393	Don Bachman
2744	Don J. Von Seggern
1167	Dubois Outfitter's Association
1181	Earthjustice (on behalf of EJ, JHCA, NRDC, and Sierra Club)
912	Echo D. Renner
2021	Environmental Defense
2752	Flathead Resource Organization
1846	Foundation for North American Wild Sheep
2964	Fremont County Commissioners, Wyoming
1245	Frontier Anglers
1244	Gary Brown
1102	Gary L. Reynolds
2072	George Wuerthner
1118	Great Bear Foundation
961	Greater Yellowstone Coalition
2753	Habitat Education Center
1269	Hagenbarth Livestock
2030	Headwaters Fish and Game Assn.
2321	Hellgate Hunters and Anglers
1101	Help Our Wolves Live
1422	Hot Springs County Commissioners

APPENDIX B – LIST OF TECHNICAL COMMENTS (continued)

1422	Hot Springs County Commissioners
1641	Hot Springs County Farm Bureau Federation
1172	Humane Society of the United States
1427	Idaho Cattle Association
1013	Idaho Conservation League
1435	Idaho Farm Bureau Federation
1282	Intermountain Forest Assn.
966	International Assn. for Bear Research and Management (IBA)
1001	International Assn. of Fish & Wildlife Agencies
1033	IWMC, World Conservation Trust
1170	Jack W. Sites, Jr.
1007	James Conroy
927	Jane Carter
891	John McLaughlin, Associate Prof., Western Washington Univ.
1232	Larry R. Bright
897	Lincoln County, Wyoming, County Commissioners
2751	Margaret B. Ptacek
943	Marilyn Olsen
907	Mark Harris
1028	Marlene Renwyck
1261	Mary Ruth Holder
1680	Meeteetse Conservation District
1644	Merlin Hare
2323	Montana Farm Bureau Federation
1270	Montana Fish, Wildlife & Parks
1429	Montana Shooting Sports Association
899	Montana Stockgrowers Assn.
1016	Montana Women For Peace Justice Equality
2031	Montana Wool Growers Assn.
1880	Mouton Cadet Sunset Society
1436	National Parks Conservation Association
1421	National Rifle Association
1439	National Wildlife Federation
2912	Natrona Cty. Sportsmen for Fish & Wildlife/Habitat
1168	Natural Resources Defense Council
902	Nick J. Rahall, U.S. House of Representatives
1434	Office of Species Conservation, The State of Idaho
1468	Park Cty. Commissioners
1433	Predator Conservation Alliance
1053	Rene Suda, Stagecoach Motor Inn
1225	Rick Meis
1437	Safari Club International
1868	Safari Club, Idaho chapter
659	Society for Conservation Biology North America
1432	Sportsmen for Fish & Wildlife, Fremont County Chapter
1501	Stephen Stringham, Wild Watch Consulting

APPENDIX B – LIST OF TECHNICAL COMMENTS (continued)

1438	Steve Primm
1352	Steven Gehman
913	Tanya Rosen
1182	Technical Petition - Scientists against delisting
1127	Technical Petition - Scientists for delisting
2350	The Rewilding Institute
1431	Timothy Kaminski
901	Troy Merrill
1424	U.S. Sportsmen's Alliance
1647	Western Assn. of Fish and Wildlife Agencies
1011	Wildlands CPR
1420	Wildlife Management Institute
1401	Wildlife Society
896	Wildlife Society, Idaho Chapter
1879	Wildlife Society, Montana chapter
1428	Wind River Alliance
1032	Wyoming Dept. of Agriculture
1287	Wyoming Farm Bureau Federation
1398	Wyoming Game and Fish Department
1637	Wyoming Stock Growers Assn.
20	Wyoming Wilderness Association
2324	Wyoming Wildlife Federation
886	Yellowstone to Yukon Conservation Initiative
1643	Yellowstone Valley Audobon

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