

# *UCRB*

## *Chapter 5*

### *Lists*

#### **Contents**

<i>Interior Columbia Basin Ecosystem Management Project Team .....</i>	<i>1</i>
<i>Project Leadership Team .....</i>	<i>1</i>
<i>ICBEMP EIS Team .....</i>	<i>2</i>
<i>Science Integration Team .....</i>	<i>5</i>
<i>Other Contributors .....</i>	<i>9</i>
<i>Distribution List .....</i>	<i>12</i>
<i>Glossary .....</i>	<i>34</i>
<i>Literature Cited .....</i>	<i>53</i>

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Experience includes positions as  
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Forest Service (10 years).

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Forest Service (12 years);  
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Private industry (14 years).

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Adams County Commissioners  
Advisory Council on Historic Preservation  
Alliance for the Wild Rockies  
American Wildlands  
American Public Land Exchange Company  
Association of Oregon Counties  
Bitterroot Backcountry Horseman  
Blueribbon Coalition  
Bonner County Commissioners, Idaho  
Boulder-White Clouds Council  
Brackett Livestock, Inc.  
Brand S Lumber  
Bridger Mountain Log Homes, Inc.  
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Custer County Commissioners  
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Gallatin Wildlife Association  
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Idaho County Commissioners  
Idaho Division of Environment  
Idaho Falls District  
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Montana Association of Counties  
Montana Audubon Council  
Montana Power  
Montana Historical Society  
Montana State Library  
Montana Stockgrowers Association  
MSU Libraries  
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Native Ecosystems Council  
Nature Conservancy - Helena  
Nevada Cattlemen's Association  
Office of Governor Batt  
Pickett Ranch Company  
Powell County Commissioners  
R.O. Jones & Sons  
Sawtooth City Association  
Shores, Cheney, Sternberg  
Sierra Club  
Sierra Legal Defense Fund  
Soil Conservation Service  
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U.S. EPA  
U.S. Fish and Wildlife Service  
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 Margery Alden  
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 Bill Bakeberg  
 Susan Baker  
 Daryl Baldwin  
 Susan & Floyd Balentine  
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 Phillip Barnhart  
 Quinten Barr  
 Roy Barrett  
 John Barringer  
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 William Beck  
 Bruce Bedke  
 Carl/Pat Bedke - Bedke K-Savy Ranch, Inc.  
 Eric Bedke  
 Ray/Scott Bedke - Wildrose Ranch  
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 Pauline Beitia  
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 George Bennett - Idaho Hunters Association  
 K. Lynn Bennett  
 Ray Bennett  
 U.S. Senator Robert F. Bennett  
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 Leo & Rosemarie Benson  
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 Dick Berg - Montana Bureau of Mines & Geology  
 Dave Bergey  
 Leon Berggren  
 Terry Berntsen  
 Shawn Berrel - University of Montana  
 Renee Beymer  
 Dennis Bieroth  
 Jay Biladeau - Idaho Department of Lands  
 Frank Billue  
 Richard Bishop  
 Vern Bisterfeldt - Ada County Commissioner  
 Ros Black - Congressman Mike Crapo's Office  
 Jean Blackburn - Twin Falls High School Library  
 Tom Blanchard - Blaine County Commissioner  
 Bryan Blanthorn - Blanthorn Ranch  
 Kenny Bleck  
 Dr. William Bleha  
 David Blew - Idaho SCS  
 Carl Blickenstaff  
 Jim Bloom - Black Pine Ranch  
 Richard Bloom  
 Dave Bodner  
 Ryan Boehme  
 Denise Boggs  
 Robin Boies  
 Kristina Booth  
 Tim Border  
 Julia Bosma-Douglas - Independence Mining Co.  
 David P. Boswell - Selkirk-Priest Basin Assn, Inc.  
 George Boucher - Elko County Manager  
 Chet Bowers - TWS  
 Jim Bowman  
 Mr. Boyd - Three Rivers Ranger District  
 Ray Boyd  
 Stan Boyd - Idaho Woolgrowers Association  
 George Brabb - Kootenai Environmental Alliance  
 Chet Brackett  
 Doug Bradetich  
 Stewart Brandborg - Friends of the Bitterroot  
 Rod Brevig  
 Randal Brewer - Devil Creek Ranch  
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 Kempthorne's Office  
 Pat Bricker  
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 Dawn Britt  
 Earl Britt  
 William Brock  
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 Heguy Brothers  
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 Sharron Browder, C/O Fish and Wildlife Service  
 Dave & Grace Brown  
 Deborah Brown - Whitehall Ledger  
 Ellsworth Brown  
 Perry J. Brown - The University of Montana  
 Rick Brown - National Wildlife Federation  
 Walter Brown  
 Larry Bruce  
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 Ken Bruya - Washington Department of Fisheries  
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 Martin Bield  
 Thomas Bilboa  
 Tom Biltonem  
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 Renn Bodecker  
 Mark Bonner  
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 Connie Cammack  
 John Campbell  
 Larry Campbell  
 Chris Carlson  
 Jeff Carlson  
 John Carpenter  
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 Kevin Chapin - Buck Creek Ranch  
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 Doug Christensen - ICL  
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 Neal Christensen - University of Montana  
 Paul Christensen  
 Dennis Christenson - U.S. Bureau of Reclamation  
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 Lila Cleminshaw  
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 Jack Cole  
 Kelly Cole  
 Barry Coles  
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 Ms. Conradsen  
 State Conservationist - Soil Conservation Service  
 Barton Cooper - B L Cooper Incorporation  
 Jim Cornwell - Nat. Res. Conservation Service  
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 Dallas Cox  
 Roger E. Cox  
 Taylor Cox  
 Gay Craig  
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 Anna & Andi Callistini  
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 Stephen Cape  
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 Thad Clock  
 Bob Closser  
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 Eron Coiney  
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 Sydney Cook  
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 Ray Crowmore  
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 Pat Dailey - Idaho Wheat Commission  
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 Dan Dallas  
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 L. Daniels  
 Michael Dardis  
 Hume Davenport - Project Lighthawk  
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 Jennifer Davis  
 Steve Davis - North Rockies Preservation Project  
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 Peter & Melissa De Lisser  
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 Charley Decker  
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 David Delsordo  
 Steve Demasters  
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 John Dits - Elko Rocky Mtn. Elk Foundation  
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 David Dudley  
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 Virgil Dupuis - Conf. Salish & Kootenai Tribes  
 Jim & Carol Duval  
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 Merle Dinning County  
 Jan Donely  
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 Dr. Stan Eilers  
 Lewis Eilers - Office of Senator Larry Craig  
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 Pete & Lisa Ellsworth  
 Ray Ellsworth, Sr.  
 Smoke Elser  
 James Endahl  
 Celeste G. Engel  
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 and Parks  
 Kirby Erickson  
 Brock Evans - NAS  
 Gordon Eato  
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 Matthew R. Fein  
 Gary Fenwick - Shoshone-Bannock Tribes  
 Yvonne Ferrell - ID Department of Parks and Rec.  
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 Gary Fisher  
 Kent Fisher  
 Egon Flato  
 Steve Flynn  
 Clint Foldin  
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 Lew Fort  
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 Steve Foster - Army Corps of Engineers  
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 Bradley/Rocky Funston  
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 Shelda Farr  
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 Gregory Gault - Dames & Moore  
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 Dean Gettinger  
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 Loren Getty  
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 Sylvia Gregory  
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 John Gutkoski - Montana Wildlife Federation  
 Mark Gutow  
 Jim Gallahan  
 Dave M. Garland  
 Rob Gibson - Wyoming Dept. of Game and Fish  
 Jon Gilbert - Idaho Outdoor Experience  
 Clyde & Jean Gillespie  
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 Bill Goodnight  
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 Pat & David Green  
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 Ray Gross  
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 Harvey Hackett  
 S. Hackney  
 Margaret Hagenbarth  
 Bill Hager  
 Andy Hahler Heartwood  
 Tom Haislip - CH2 M Hill  
 Shireene Hale - Panhandle Health District 1  
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 Roger E. Hall  
 Steve Hall - Jones & Stoakes  
 Fred & Cheryl Haller  
 Dick Hamacher  
 Errol Hammond - USFS, Deer Lodge Ranger District  
 Jody Hammond  
 Bruce and Kathleen Hands  
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 Cliff Hansen  
 Craig Hansen  
 Geraldine Hansen  
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 Garrett Hanson  
 Jim Harberd  
 Thomas R. Harmon  
 Fritz Harrigfeld  
 Ron Harrington  
 Chuck Harris - Univeristy of Idaho  
 James Harris  
 Ron Harting  
 Janine Hartley  
 Jan Hartman  
 Rick Hartz - Beaverhead County  
 Yoshie Haruyama  
 Sam Harvey - Gallatin Valley Snowmobile Assn.  
 Jeff Hash  
 Bill Haskins - The Ecology Center  
 Charles R. Hatch - College of Forestry, W&R  
 John Hatch - Congressman Mike Crapo  
 U.S. Senator Orrin G. Hatch  
 Richard Hatton  
 Alan Hausrath - Idaho Environmental Council  
 Jim Hawkins - Idaho Department of Commerce  
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 Charles Pete Hayes - Nez Perce Tribe  
 Dr. Ed Heath - Texas A & M Univeristy  
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 Jade Henderson  
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 Doug Hillam  
 Tim Hinderman  
 Colonel John Hines - Army Corps of Engineers  
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 Chad D. Holland  
 Todd & Marcie Holland - Holland Ranch Company  
 Jim & Joyce Hollopeter  
 George Holman  
 Mark Holston  
 Gregg Holtoff  
 John & Camille Holzheimer  
 Scott Hoover  
 John Hossack  
 Lynn House  
 Bill Howard  
 Chairman Howard, Payette County  
 Kent Howard  
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 Steve S. Howze  
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 David Hunt  
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 Royce Hackworth  
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 Sheri Hambleton  
 Doug Hansford  
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 Brad Hash  
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 Joe Hinson - Intermtn. Forest Ind. Assn.  
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 Joseph Horvath  
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 John Jackson  
 Laura Jackson  
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 Ward Jackson  
 Peter V. Jackson, III  
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 Jerry Jayne - Idaho Environmental Council  
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 David Jennings - Black Hills Audubon Society  
 Don Jensen - Association Logging Contractors  
 Jim Jensen - Dames & Moore  
 Jim Jensen - Montana Environmental  
 Bob Jenson - Seda-Pine Veneer  
 Monica Jerome  
 Cal Goen/Jerry Conley - Idaho Department of Fish  
 and Game  
 Wayne R. Faude/Jerry Nicolesc - Soil Conservation  
 Service  
 Edwin Jewell  
 Tony Jewett - Montana Wildlife Federation  
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 Daniel Johnson  
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 Guy & Angie Johnson  
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 Rick Johnson - Sierra Club, Northwest Office  
 Ron Johnson  
 Nick Johnston  
 Gail Jones - Gold West Country of Montana  
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 William Jones  
 William D. Jones & Sons  
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 Jeffery Jung  
 Dick Jurgens  
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 Duard Johnson  
 Jack Johnson  
 James Johnson  
 June Johnson  
 Melanie Judge  
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 Dan Karren  
 Wayne Kasworm  
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 Paul Kecera - Nez Perce Tribe  
 Drake Keiwit - Ravalli Republic  
 Warren Keller  
 Stephen Kelly - Bitterroot National Forest  
 Greg Nelson/Kelly Olson - Idaho Department of  
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 Richard J. Kendall  
 Ken Kershner  
 Sandra Key - Bridger - Teton National Forest  
 Ray & Sandy Kieft  
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 Delroy T. Kimber  
 Grant Kimber  
 Jeff Kimber - Edwin Kimber Estate  
 Lyman Kimber  
 Raida Kimber  
 Jason Kindall  
 John J. King  
 Mike King - Nez Perce National Forest  
 Al Kington  
 Ken & Edie Kinucan  
 Jack Kirkley  
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 Paul & Gretel Kleint  
 Jerry Klemm - P.P.R.C.  
 Jeanne Klobnack- Jackson Alliance for Responsible  
 Planning  
 Steve Kluver - Seda-Pine Veneer  
 Dave Knight

Ellen Knight - Rock Creek Advisory Council  
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 Bill Koehnke  
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 Rem Kohrt  
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 Madelyn Kempf  
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 Clearwater  
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 Scott Leonard  
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 Yale Lewis  
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 Don Martin - EPA  
 Earl Martin

Robert Martin  
 Glenn Marx - Office of the Governor of Montana  
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 Neil Massart  
 Tad Masterson  
 George Matejko - Salmon/Challis National Forest  
 George Matousek  
 George Matteson - Hoot Owl Farm  
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 Ron Mitchell - Idaho Sporting Congress  
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 Clayton Molinero  
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 Stephen Moore - Vigilante Electric Cooperative  
 Larue Moorhouse  
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 Sam Morigeau - Conf. Salish & Kootenai Tribes  
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 Roy Muth - International Snowmobile Ind. Assn.  
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 Herb Malany  
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 Wanda Murphy  
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 Dusty Nelson

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 Matt Nelson  
 Meg Nelson - Clark Fork Coalition  
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 Wayne Nicholas - Bear Creek Log Homes  
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 Laird Noh - Resources and Environment Comm.  
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 Lindsay Nothorn - Idaho Farm Bureau  
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 Kent Nelson  
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 Hugh O'Riordan - Givens, Pursley & Huntley  
 Steve Oates - Dept. Of Canadian Heritage  
 Charles Odegaard - National Park Service  
 Harvey Olberding  
 Terry Oliver - Seda-Pine Veneer  
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 Darrell Olson  
 Earl Olson  
 Keith Olson - Montana Logging Association  
 Robert Olson  
 Robert Olson, M.D. - Valley Medical Center  
 Nolan Oman  
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 Marcie Jo Oppenheimer  
 Florence Ore - Concerned Citizens of Pony  
 Bradford Orme  
 Rich Orme  
 Mike Orr  
 Bill Orton - Member, U.S. House of Reps.  
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 Harold & Sandra Osborne  
 Bobby Owen - Flathead Transboundary Council  
 Tom Owen - Resources Limited  
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 Jean Parker  
 John Parker  
 Ron & Sharon Parker  
 David Parrish  
 Neal Parsell  
 Greg Parsons  
 Marietta Pascual  
 Rolland Patrick - Devil Creek Ranch  
 Liz Paul - Idaho Rivers United  
 Steve Paulson  
 Ethel Peck  
 John Peevey  
 Lloyd Peiffer  
 Don, Ned & Arleen Pence - Assoc. Logging/  
 ID Women in Timber  
 Sam Penney - Nez Perce Tribal  
 Wayne Persons  
 John Peters  
 Steve Petersen  
 Robert & Mona Peterson  
 Valerie Peterson  
 William/Georgia Peterson  
 James Phelps - Montana Audubon Society  
 Rick Philips - Soil Cons. District  
 Tom & Cindy Picciano  
 Earl Picket  
 Don Pickett  
 Andrew Pilskins  
 Tom Platt - Alliance for the Wild Rockies  
 Kim Pluid  
 Ray Poe  
 Denny Pomerleau  
 C.W. Pomeroy  
 Jeff Pool - Dames & Moore  
 Ron Porter - Bitterroot Conservation District  
 Ronald Porter - Porterbilt Post & Pole Company  
 Alan Posey  
 Ken Postma  
 Margaret Powell  
 Naomi Powell  
 Steve Powell  
 Robert F. Powers  
 Rich Prang - Stanley-Sawtooth Chamber of Comm.  
 Donna Prickett

Richard Prodgers  
 Lowell Prunty - Murphy's Hot Springs  
 David A. Pugh - National Park Service  
 James Purcell - Georgetown Lake  
 Maurice Pare  
 Mike Pendergrass  
 Larry Pennington  
 Deborah Perkins  
 Mona Peterson  
 Thomas Pettit  
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 Gene Pierson  
 Robert A. Pirg  
 Roger Poirier  
 Geoff Poole  
 Ken Postma  
 Mike & Kathy Poulton  
 Randy Powell  
 John Pretty - Top Crow Tribal Cultural Committee  
 Johathan Procter  
 Frank Prunty  
 Mel Quale - Magic Valley Trail Machine Association  
 Mike Quigley  
 Gary Qualmann  
 George Quick - Northwest Timber Resource Council  
 Governor Marc Racicot - Office of the Governor  
 Mark Rafaneill  
 Lynn Rainbolt  
 Erval Rainey  
 Vern Ravenscroft  
 Kelly Rayson  
 Whitfield Reaves  
 Bruce Reay  
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 Erin Reed  
 Jason Reichel  
 Shirley Reimann  
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 Fritz Rennebaum - BLM, Salmon/Clearwater Districts  
 Paul Resnick - Shepp Ranch  
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 Jack Rich  
 Gary Richardson - T.W.S.  
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 Rick Richins - RTR Resource Management, Inc.  
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 Ryan Rickerts  
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 Chairman Ridley, Jerome County  
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 Chairman Rigby, Bear Lake County  
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 Barbara Ristow  
 Dave Rittenhouse - Boise National Forest  
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 Don Rizzi  
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 Edward Robertson - Idaho Wildlife Federation  
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 Shaun Robertson - Shoshone-Bannock Tribes  
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 Mr. & Mrs. Robinson  
 Steve Robinson  
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 Jim Rochure - Weyerhaeuser Company  
 Sue Rodriguez-Pastor - Biodiversity Legal Foundation  
 Bob Rohrer - Idaho Transportation Department  
 Charles Roland  
 Allen Rollins  
 Tim Rosco  
 Allen Rose  
 Jack A. Rose  
 Wesley Rose - Idaho Fish & Game Commission  
 Barry Rosenburg - Inland Empire Pub. Lands Council  
 Noel Rosetta  
 Jim Rosholt - Seda-Pine Veneer  
 Tom Rostock  
 Deanie Roush  
 Mearl & Christina Row  
 Melvyn D. Rowling  
 Jennifer Roy  
 Tom Ruffatto  
 Jeff Ruprecht - Audubon Society  
 Dick Rush - Agricultural Stabilization  
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 Mel Reingold  
 Dean Rhoads  
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 Shannon and Jack Rich  
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 Forrest Sanderson - Lake County Courthouse  
 Duane Sandin  
 Dean Sangrey - Idaho Outfitter & Guide  
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 Howard Santley  
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 Mike Scott - White Cloud Outfitters  
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 Jim Skinner - Lemhi Co. Cattle & Horse Growers  
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 Delma K. Smith - Winfred Kimber Estate  
 Elmer Smith  
 Harold Smith  
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 Minie Smith  
 Rod Smith  
 Stan Smith - Small Loggers Council  
 Nolan Smith & Family  
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 Amanda Stanley  
 Debbie Stanton - IGR, Clearinghouse Manager  
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 Terry Tanner - Flathead Cultural Committee  
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 Ruth Watkins - Tri-State Council  
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 Luther S. Wilson  
 W.D. Wilson  
 Wendy Wilson - Idaho Rivers United  
 Judy Wing - Pao Blue Mountain  
 Wendi Winward  
 J. R. Wolf - Continental Divide Trail Society  
 Andy Wones - Jones & Stokes Associates  
 Dave Wood  
 Marilyn Wood  
 Dick Woodard - Ada County Fish & Game League  
 Lyle Woodbury  
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 Clarence Woodcock - Flathead Culture Committee  
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 Lyle Woodbury  
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 Don Zuck  
 Johnson Tuning Fork Ranch  
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 Gil Alexander - Canyon Ferry Limnological Institute  
 John Beardsley  
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 John W. Best - Deerlodge Snowmobile Club  
 Bill Blount  
 Kevin Boling  
 Deborah Boots - Cabinet Resource Group  
 Cassandra Botts - Boise Cascade Corp.  
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 Ellis & Kathy Bryngelson  
 Barb Buentemeier - Montana Women in Timber  
 Bob Bushnell - Montana Snowmobile Association  
 Vern Bromgard

Jason Campbell - Montana Stockgrower Association  
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 Tom Caples  
 Frances Cassirer  
 Bill Chandler - Stone Forest Products  
 Sid Clark - Silvi-line  
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 Richard Connor Jr. - Pine River Lumber Co., Ltd.  
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 John Crouter  
 Terry Cundy - Potlatch  
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 Mr. & Mrs. James L. Denison  
 Marilyn L. Dinger  
 V. Dipalma  
 Calli Daly  
 Clarence & Jean Elle  
 Paula Easley, C/O Municipality of Anchorage  
 Earl J. Ferguson - Nez Perce County Commissioner  
 Dean Finch  
 Chris Gertschen - Sawtooth Science Institute  
 Doug Goodall  
 Alva D. Greene - Greene Valley Retreat  
 Gary Gadwa  
 Mathew Gouent  
 Richard J. Hallisy  
 David Hawk Jr. - Simplot Co.  
 Wayne A. Hedman  
 Steve Hilliard - Skagit County Weed Control  
 Bill Hutchinson  
 Twila Hornbeck  
 Mrs. William Immonen  
 Will & Vangie Ingram  
 Alex & Julia Irby  
 Heather Irby - Congressman Helen Chenoweth  
 Tim Jackson - Idaho State Journal  
 Kevin Johnson - Highland Rose Contracting  
 Shawn Keough - Sandpoint Chamber of Commerce  
 Patricia Klahr  
 Mary Ann Knight - Sawtooth Backcountry Horseman  
 Ferne & Bob Krumn  
 Norman Lefever  
 Ernie Lombard - N.O.H.C.C.  
 Mrs. Stanley Lukens  
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 Kelley Pezeshki - Clearwater Biodiversity Project  
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 Rick & Jody Sandru - Ruby Valley Stock Association  
 James G. Senecal - Senecal Fencing  
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 Perry Silver  
 Victor Simpson  
 Wayne Stanford  
 Wendell Stark  
 Steve Stefano  
 David Streufert - Powell County Extension  
 Steve Stuebner  
 George H. Swan - Swan Land & Livestock  
 Christopher Shelton  
 Bert Silcock  
 Paul Torrence  
 Gary Ullman - Louisiana Pacific Corporation  
 James & Sandra Unger  
 Bruce Vincent - Communities for Greater NW  
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## **Organizations and Individuals Receiving full UCRB Draft EIS**

American Wildlands  
 BLM - Bennet Hills Resource Area  
 BLM - Elko District Office  
 BLM - Monument Resource Area  
 BLM - Salt Lake District Office  
 BLM - Shoshone District Office  
 Elko County Commissioners  
 Eureka Co. Public Land Advisory  
 Eureka Chamber of Commerce  
 Eureka County Commissioners  
 Eureka County Director of Public Works  
 Eureka County District Attorney  
 Eureka County Public  
 Forest Service - Lowman Ranger District  
 Kootenai Environmental Alliance  
 National Marine Fisheries Service  
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 Chairman, Adams Cassia County Commisioner  
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 Jay Anderson - Idaho State University  
 Jim Andrae - Agri-Beef  
 James Andreason County Commissioner  
 Jeff Ankney  
 Mike Antrobus - Elko Daily Free Press  
 Vic Armacost  
 Debbie Austin - Beaverhead-Deerlodge Ntl Forests  
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 Billy Alder - Custer County A.O.G  
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 Brian Amme - BLM State Office - Nevada  
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 Rod Ariwite - NW Band of Shoshoni Nation/Tribe  
 Cindy Bachman  
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 Paul Bartlett - Roots  
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 Jared Bedke  
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 Scott Benson  
 Richard Beyers  
 Bill Bladt - Sapphire Realty  
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 Steve Bliss  
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 Judy Boyle - Washington Co. Oversight Comm.  
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 Howard Buettgenbach  
 Dale Burk - Stoney Dale Press  
 Fred and Pat Burnell  
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 William Bachman - Croman, Inc.  
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 Doug & Cheryl Baker  
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 Mary Barraco  
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 Keith Bennett  
 Kenneth Benson  
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 Pattie Berger  
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 Don Bowman  
 Michael Bowman  
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 James M. Brady  
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 Craig Chase - Technology & Eng. Management  
 Richard S. Christenson - Morris and Wolff P.A.  
 Stew Churchwell - Friends of the West  
 Darrell Clarimont  
 Michael Clark - Greater Yellowstone Coalition  
 Nova Clarke  
 Bob Coats Guy - Bennett Lumber Co.  
 Patrick Coffin - U.S. Fish and Wildlife  
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 Mark Collinge - USDA AHIS/ADC  
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 Alan Dibb - Kootenai National Park  
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 Rod Evans  
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 William Felts - Thompson Creek Mining Company  
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 Ralph Goode - Salish and Kootenai Tribes  
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 Leland Heinrich - Valley County Clerk  
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 John Lawson - FMC Gold/Beartrack Mine  
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 Donald W. Lojek - Cascade Reservoir Association  
 M.J. Lott - Lott Brothers, Inc.  
 Dan Lucas - MSU/Granite County Extension  
 Eric Lundquist - American Motorcyclist Association  
 Dan Labarry  
 Jim Lancaster  
 Philip H. Laumeyer - U.S. Fish and Wildlife Service  
 Travis Laws  
 Jay Lee - Western Ancient Forest Campaign  
 Paul L. Leimbach  
 Charles Lennahan - USDA / OGC  
 Tim Linehan  
 Gretchen Lloyd - BLM, OR/WA State Office  
 Tom Loder - Hydrometrics Inc.  
 Bob Loucks - University Of Idaho C.E.S.  
 John Lowe  
 Bob MacDonald - Kootenai County Commissioners  
 Walter Maendl - Greene Valley Retreat  
 John Magnus - Independent Montana Miners  
 David Maki  
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 Area Manager - BLM, Dillon Resource Area  
 Darrell Sall - BLM, Garnett Resource Area  
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 John McCarthy - Idaho Conservation League  
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Dale McGreer - Western Watershed Analysts  
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 David W. Meyers - Environ. Affairs/Idaho Power  
 Robert Michna  
 Mike Mihelich - National Audubon Society  
 Mat Millenbach - BLM, Utah State Office  
 Mike Miller  
 Arlene Montgomery - Friends of the Wild Swan  
 Jacquie Moore  
 Tom Moore  
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 Charles Morton - So. Carmen Grazing Allotment  
 Dewitt Moss - Northside Canal Co.  
 Rich Moy  
 Falma Moye  
 Carol Mueller - People for the West  
 Phil Murdock  
 Michael Murray - Ecocentric Wildlands Mgt. Institute  
 Ed Madej  
 Mark Malkoski  
 Kathleen Marquardt - Putting People First  
 Mark Maxon  
 Tom McKern  
 Kerry McMenus - Bitterroot National Forest  
 Don McNab  
 Steve Meloche - Lincoln County Economic  
 Development Council  
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 William H. Miller - Idaho Fishery Resource Office  
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 Gary Milner  
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 Anne Morgan - BLM, Nevada State Office  
 Jeff Mosley - Montana State University  
 Ron Mulach - USDA / OGC  
 Bruce Mulkey  
 Mark Nechodom - UC Davis/University Extension  
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 Norman Nass  
 Roger Nesbit - USDI, Office of Regional Solicitor  
 Clayton Nicholes  
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 James Rathbun  
 George Rauch  
 Robert Rebholtz Jr. - Agri Beef Company  
 Jerry Reese - Targhee National Forest  
 Mark Rentz - American Forests & Paper Association  
 Tim Rhode - USDA, Forest Service Region 1  
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 David & Kathy Richmon  
 Russ Rintala  
 Dave A. Robbins  
 James A. Rochelle - Weyerhaeuser Company  
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 Eric Ryberg  
 Fred Rabe  
 Robert F. Recht  
 Leroy Reed  
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 Virginia Ricketts  
 Gil Riddell - Association of Oregon Counties  
 Tom Rieger  
 Chuck P. Rightmire - Western Livestock Reporter  
 Bruce Riley - Flathead Highschool  
 Daniel A. Rix  
 Rick Roberts - USDA, Forest Service Region 6  
 Hank Robison  
 Ken Rodgers  
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 Lynne K. Stone - Boulder-White Clouds Council  
 Glen Stonebrink - Congressman Helen Chenoweth  
 Deward Strong - Jefferson-Madison Grazing Assn.  
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 Michael Schiewe - National Marine Fisheries Service  
 John E. Schmidt - SMF Resources, Inc.  
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 Kenneth B. Schuster  
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 Lola A. Sept - Bureau of Reclamation  
 William F. Shake - U.S. Fish and Wildlife Service  
 Jon Shannon - Shannon Environmental Services  
 Steve Shelly  
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 Carl Slagowski  
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 Dave Stack - USDA, Missoula Ranger District  
 Jack Standford - Flathead Lake Biological Station  
 R.B. Stephenson  
 Robert Stephenson  
 C.B. Stinnett  
 Robert & Shannon Stockton  
 Kim Sullivan - Umatilla Tribe  
 Dan Svengin  
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 Randy Swick - Payette National Forest  
 Merlin B. Tanner  
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 Steve Thompson - Montana Wilderness Association  
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 Cliff Todd - Timberland Recovery  
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 Press Thomas  
 Jerry Todd  
 Dr. Dale Toweill - Idaho Fish and Game  
 Bill Towey - Kalispel Tribe  
 Prof. Michael Treleaven - Gonzaga University  
 Connie Tucker  
 Richard Tyacke - Hide Creek Ranch  
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 Dave Van De Graaff - Boise Cascade Corporation  
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 Jim Weber - Columbia River Inter-Tribal Fish Comm.  
 Rick Weholt  
 John C. Weidman  
 Lori A. Weller - Idaho Women in Timber  
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 Harry E. Wilson  
 V. James Wilson - Clearwater County  
 Patrick Withen  
 Connie Woo - Communities for a Great NW  
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 R.L. Zwiener  
 Deane H. Zeller - BLM, Salt Lake District Office  
 Ken Kirkman - Bonneville Power Administration  
 Pam Marcum - Committee for Idaho High Desert

### **Federal Agencies Receiving Full UCRB Draft EIS**

Environmental Protection Agency - Office of Federal Activities, Nepa Compliancy Division, Washington, DC

Department of Interior - Office of Environmental Policy and Compliance, Washington, DC

Department of the Interior - Office of Public Affairs, Washington, DC

Department of the Interior - Natural Resources Library, Washington, DC

Department of the Interior - BLM Director, Washington, DC

Department of the Interior - Bureau of Mines, Branch of Mineral Assessment, Washington, DC  
 Bureau of Mines, MS-5090 - Intermountain Field Oper. Center, Denver, Colorado

Bureau of Reclamation - Denver Federal Center (D-150), Denver, Colorado

Department of the Interior - Fish and Wildlife Service, Washington, DC

Department of the Interior - Offshore Environmental Assessment Division, Washington, DC

National Park Service (MIB 1210) - Environmental Quality Division - 774, Washington, DC

Department of the Interior, U.S. Geological Survey - Environmental Affairs Program, Reston, Virginia

Department of Agriculture - Office of Environmental Coord., (Chief, 1950), Washington, DC

Office of Deputy A/S of the USAF - Environment, Safety, Occupational Health, Washington, DC

HQ-USAF/LEEV - Environmental Division, Washington, DC

Army Corps of Engineers - North Pacific Division, Portland, OR

Department of Energy - Office of Environmental Compliance, (EH-23), Washington, DC

Environmental Review Coordinator - EPA Region VIII, Denver, CO

Environmental Review Coordinator - EPA Region IX, San Francisco, CA

Environmental Review Coordinator - EPA Region X, Seattle, WA

USDA - National Agriculture Library - Head, Acquisitions and Serials Branch, Beltsville, MD

Rural Development Administration - Region VIII - Western, Klamath Falls, OR

U.S. Department of Agriculture - Environmental Coordinator of Ecological Sciences Division, Washington, DC

NOAA Ecology and Conservation Office - Washington, DC

Deputy Assistant Secretary of Defense (E) - Arlington, VA

Equal Employment Opportunity Commission - Personnel Management Services, Washington, DC

Federal Energy Regulatory Commission - Environmental Compliance Branch, Washington, DC

General Services Administration - Office of Planning and Analysis, Washington, DC

Interstate Commerce Commission ICC, Washington, DC

*Northwest Power Planning Council - Portland, OR*

*National Marine Fisheries Service - Head  
Quarters Office of the Administrator, Washington, DC*

*National Marine Fisheries Service - Juneau, AK*

*National Marine Fisheries Service - Seattle, WA*

*National Marine Fisheries Service - Seattle, WA*

*National Marine Fisheries Service - Silver Spring, MD*

*National Marine Fisheries Service - Boise , ID*

*National Marine Fisheries Service - Northwest  
Region, Habitat Conservationists Division,  
Portland, OR*

# Glossary

This glossary provides definitions for selected terms and concepts as they are used in this EIS. For more precise technical definitions, consult the Science Integration Team documents.

**Abiotic** ~ Non-living (refers to air, rocks, soil particles, etc.).

**Adaptive management** ~ A type of natural resource management in which decisions are made as part of an on-going process. Adaptive management involves testing, monitoring, evaluation, and incorporating new knowledge into management approaches based on scientific findings and the needs of society. Results are used to modify management policy.

**Air pollutant** ~ Any substance in air that could, if in high enough concentration, harm humans, animals, vegetation, or material. Air pollutants may include almost any natural or artificial matter capable of being airborne, in the form of solid particles, liquid droplets, gases, or a combination of these.

**Air quality** ~ The composition of air with respect to quantities of pollution therein; used most frequently in connection with “standards” of maximum acceptable pollutant concentrations.

**Allotment (grazing)** ~ Area designated for the use of a certain number and kind of livestock for a prescribed period of time.

**Allowable Sale Quantity (ASQ)** ~ On a National Forest, the quantity of timber that may be sold from a designated area covered by the forest plan for a specified time period.

**Alluvium** ~ General term for clay, silt, sand, or gravel deposited in the bed of a stream during relatively recent geologic time, as a result of stream action.

**Alternative** ~ In an EIS, one of a number of possible options for responding to the purpose and need for action.

**Ambient air** ~ Any unconfined portion of the atmosphere: open air and surrounding air. Often used interchangeably with “outdoor air”.

**Amenity** ~ Resource use, object, feature, quality, or experience that is pleasing to the mind or senses; typically refers to values for which monetary values are not or cannot be established, such as scenic or wilderness values.

**Anadromous fish** ~ Fish that hatch in fresh water, migrate to the ocean, mature there, and return to fresh water to reproduce; for example, salmon and steelhead.

**Animal Unit (AU)** ~ Considered to be one mature cow of approximately 1,000 pounds, either dry or with calf up to 6 months of age, or their equivalent. This concept is based on a standardized amount of forage consumed.

**Animal Unit Month (AUM)** ~ The amount of feed or forage required by one animal unit grazing on a pasture for one month. An animal unit is one mature cow plus calf, or one horse, or five domestic sheep.

**Annual (plant)** ~ A plant whose life cycle is completed in one year or season.

**Aquatic** ~ Pertaining to water.

**Aquatic ecosystem** ~ A natural system based on a body of water (such as a stream, lake, or estuary) with its aquatic organisms and non-living components.

**Aquifer** ~ Rock or rock formations (often sand, gravel, sandstone, or limestone) that contain or carry groundwater and act as water reservoirs.

**Areal** ~ Pertaining to area.

**Arid** ~ Dry; regions or climates that lack sufficient moisture for crop production without irrigation.

**Aspect** ~ The direction the slope of a hillside or landform faces (for example, a slope with a southern aspect faces the south).

**Assessment** ~ The collection, integration, examination, and evaluation of information and values.

**Assessment of Ecosystem Components (AEC)** - See *Scientific Assessment*.

**Attainment area** ~ A geographic area that is in compliance with the National Ambient Air Quality Standards. An area considered to have air quality as good as or better than the national ambient air quality standards as defined in the Clean Air Act. An area may be an attainment area for one pollutant and a nonattainment area for others.

**Band** ~ A band is a group of people who share a culture, territory, and sense of mutual recognition. Bands are primarily those pre-treaty-making-period American Indian groups.

**Bankfull width** ~ The width of a stream channel measured between the tops of the most prominent banks on either side of the stream. Also refers to the width of the stream at the normal flood flow.

**Basal area** ~ (1) In forests, the cross-sectional area of a tree trunk measured at breast height (4.5 feet), usually expressed in square feet per acre. (2) On rangeland, the cross-sectional area of the stem or stems of a plant or of all plants in a stand. Herbaceous and small woody plants are measured at or near the ground level; larger woody plants are measured at breast or other designated height.

**Basalt** ~ a finely grained, dark, dense volcanic rock.

**Basin (river)** ~ In general, the area of land that drains water, sediment, and dissolved materials to a common point along a stream channel. River basins are composed of large river systems. In this EIS, the term refers to the equivalent of a third field hydrologic unit code, an area of about nine million acres, such as the Salmon River basin. It also is used to refer in general to the interior Columbia River Basin.

**Batholith** ~ A large intrusive mass of igneous rock, usually granite.

**Bedload** ~ Sediment moving on or near a streambed.

**Beneficial uses** ~ Any of the various uses which may be made of water including, but not limited to, domestic water supplies, industrial water supplies, agricultural water supplies, navigation, recreation in and on the water, wildlife habitat, and aesthetics. The beneficial use is dependent upon actual use, the ability of the water to support a non-existing use either now or in the future, and its likelihood of being used in a given manner. The use of water for the purpose of wastewater dilution or as a receiving water for a waste treatment facility effluent is not a beneficial use.

**Beneficiary** ~ The recipient of payment or entitlement based upon an agreement, contract, or treaty. Indian tribes in the project area signed treaties and agreements with the United States in exchange for promises by the U.S. to secure or guarantee rights the Indians reserved in these treaties and agreements.

**Best Management Practices (BMPs)** ~ Practices designed to prevent or reduce water pollution.

**Biogeochemical cycle** ~ Natural processes (biological, geological, and chemical) that recycle nutrients in various chemical forms from the environment, to organisms, then back to the environment. Examples are the carbon, nitrogen, and hydrologic cycles.

**Biological diversity (biodiversity)** ~ The variety and variability among living organisms and the ecological complexes in which they occur.

**Biophysical** ~ The combination of biological and physical components in an ecosystem.

**Biophysical template** ~ The successional and disturbance processes, landform, soil, water, and climate conditions that formed the native system with which species of plants and animals evolved.

**Biotic** ~ Living.

**Biomass** ~ Dry weight of organic matter in plants and animals in an ecosystem, both above and below ground.

**Board foot (bf)** ~ A unit of wood 12" x 12" x 1".

**Braided stream** ~ A stream that flows in an interconnected network of channels.

**Broadcast burning** ~ Burning forest fuels as they are, with no piling or windrowing.

**Browse** ~ Twigs, leaves, and young shoots of trees and shrubs that animals eat.

**Bunch Grass** ~ A grass having the characteristic growth habit of forming a bunch; lacking stolons or rhizomes.

**Candidate species** ~ Plant and animal species that may be proposed for listing as endangered or threatened in the future, in the opinion of the U.S. Fish & Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS). The FWS recently revised its list of candidate species (February 28, 1996 *Federal Register*). Under their new system, only those species for which they have enough information to support a listing proposal will be called candidates.

**Canopy** ~ In a forest, the branches from the uppermost layer of trees; on rangeland, the vertical projection downward of the aerial portion of vegetation.

**Canopy closure** ~ The amount of ground surface shaded by tree canopies as seen from above. Used to describe how open or dense a stand of trees is, often expressed in 10 percent increments.

**Carbon cycle** ~ The ecological cycle in which carbon moves from carbon dioxide in the air into organic materials in plants and animals, and returned to carbon dioxide through respiration, death and decay of tissues, or fire.

**Carbon dioxide** ~ A colorless, odorless gas that occurs naturally in the earth's atmosphere and is emitted into the air by fossil fuel combustion.

**Carbon monoxide** ~ A colorless, odorless, poisonous gas produced by incomplete fossil fuel combustion; primarily emitted by motor vehicles and other mobile sources. Carbon monoxide is a criteria air pollutant that interferes with the blood's ability to carry oxygen to the body's tissues and results in numerous adverse health effects.

**Carnivore** ~ An organism that eats only meat. The gray wolf is an example of a carnivore.

**Carrying capacity** ~ The number of animals or plants that can be maintained over a specific period of time on a specified amount of land without damage to either the organisms or the habitat.

**Ceded lands** ~ Lands that tribes ceded to the United States by treaty in exchange for reservation of specific land and resource rights, annuities, and other promises in the treaties.

**Channel (stream)** ~ The deepest part of a stream or riverbed through which the main current of water flows.

**Channelization** ~ Human-caused alterations to a stream channel that cause the channel to be fixed in place, such as levees, dikes, trenching, and rip-rap.

**Class I area** ~ Under the 1977 Clean Air Act amendments, all international parks, National Parks greater than 6,000 acres, and national Wilderness Areas greater than 5,000 acres which existed on August 7, 1977. This class provides the most protection to pristine lands by severely limiting the amount of additional air pollution that can be added to these areas.

**Clearcutting** ~ A regeneration harvest method that removes all merchantable trees in a single cutting except for wildlife trees or snags. A "clearcut" is an area from which all merchantable trees have been cut.

**Climate** ~ The composite or generally prevailing weather conditions of a region throughout the year, averaged over a series of years.

**Cluster** ~ In this EIS, refers to a group of subbasins denoting forest and range ecosystems where the condition of the vegetation and ecological functions and processes are similar, and where management opportunities and risks are similar.

**Coarse Woody Debris (CWD)** ~ Pieces of woody material having a diameter of at least three inches and a length greater than three feet (also referred to as large woody debris, or LWD).

**Collaborative** ~ Working together.

**Community** ~ A group of species of plants and/or animals living and interacting at a particular time and place; a group of people residing in the same place and under the same government.

**Community of interest** ~ People who share a common concern but may not be located in the same place.

**Compaction** ~ Making soil hard and dense, decreasing its ability to support vegetation because the soil can hold less water and air and because roots have trouble penetrating the soil.

**Competition** ~ An interaction that occurs when two or more individuals make demands of the same resources that are in short supply.

**Component** ~ A part of a system.

**Composition** (species) ~ The mix of different species that make up a plant or animal community, and their relative abundance.

**Connectivity** ~ The arrangement of habitats that allows organisms and ecological processes to move across the landscape; patches of similar habitats are either close together or linked by corridors of appropriate vegetation. The opposite of fragmentation.

**Conserve** ~ As used in Chapter 3 of this document, refers specifically to a management emphasis on protection and maintenance of forest, rangeland, and aquatic conditions, health, and integrity, recognizing that natural processes dominate the landscape and gradual change will occur. See Chapter 3 for more details.

**Conservation strategy/conservation agreement** ~ Plans to remove or reduce threats to candidate and sensitive species of plants and animals so that a listing as threatened or endangered is unnecessary.

**Consultation** ~ (1) An active, affirmative process that (a) identifies issues and seeks input from appropriate American Indian governments, community groups, and individuals; and (b) considers their interests as a necessary and integral part of the BLM's and Forest Service's decision-making process. (2) The Federal Government has a legal obligation to consult with American Indian Tribes. This legal obligation is based in such laws as NAGPRA, AIRFA, and numerous other Executive Orders and statutes. This legal responsibility is, through consultation, to consider Indian interests and account for those interests in the decision. (3) The term also refers to a requirement under Section 7 of the Endangered Species Act for Federal agencies to consult with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service with regard to Federal actions that may affect listed threatened and endangered species or critical habitat.

**Corridor (landscape)** ~ Landscape elements that connect similar patches of habitat through an area with different characteristics. For example, streamside vegetation may create a corridor of willows and hardwoods between meadows or through a forest.

**Cover** ~ (1) Trees, shrubs, rocks, or other landscape features that allow an animal to partly or fully conceal itself. (2) The area of ground covered by plants of one or more species.

**Cover type** ~ The present vegetation of an area.

**Criteria pollutants** ~ Air pollutants designated by the Environmental Protection Agency (EPA) as potentially harmful and for which ambient air standards have been set to protect the public health and welfare. The criteria pollutants are carbon monoxide, sulfur dioxide, particulate matter, nitrogen dioxide, ozone, hydrocarbons, and lead.

**Crown** ~ The part of a tree containing live foliage; treetops.

**Crown fire** ~ A forest fire that burns in the crowns of trees.

**Cultural resources** ~ Remains of sites, structures, or objects used by people in the past.

**Cumulative effects** ~ Impacts on the environment that result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

**Data** ~ Facts used in an analysis.

**Debris (organic)** ~ Logs, trees, limbs, branches, leaves, bark, etc., that accumulate, often in streams or riparian areas.

**Decay (decomposition)** ~ The breakdown of living tissues into inorganic component parts, usually caused by fungi or bacteria.

**Degradation** ~ (1) General lowering of the earth's surface by erosion or moving of materials from one place to another. (2) Reduction in value or quality.

**Demographic** ~ Related to the vital statistics of human populations (size, density, growth, distribution, etc.) and the effect of these on social and economic conditions.

**Density (stand)** ~ The number of trees growing in a given area, usually expressed in terms of trees per acre.

**Desired Range of Future Conditions (DRFC)** ~ A portrayal of the land, resource, or social and economic conditions that are expected to result in 50–100 years if objectives are achieved; in this document, portrayed as a range of conditions. A vision of the long-term condition of the land.

**Developed recreation** ~ Recreation that requires facilities that in turn result in concentrated use of an area; for example, a campground.

**Direct effects** ~ Impacts on the environment that are caused by the action and occur at the same time and place.

**Dispersed recreation** ~ Recreation that does not occur in a developed recreation site; for example, hunting or backpacking.

**Disturbance** ~ Refers to events that alter the structure, composition, or function of terrestrial or aquatic habitats. Natural disturbances include, among others, drought, floods, wind, fires, wildlife grazing, and insects and pathogens. Human-caused disturbances include actions such as timber harvest, livestock grazing, roads, and the introduction of exotic species.

**Disturbance-recovery regime** ~ Natural pattern of periodic disturbances, such as fire or flood, followed by a period of recovery from the disturbance (such as regrowth of a forest after fire).

**Diversity** ~ See biological diversity.

**Dominant** ~ A group of plants that by their collective size, mass, or number exert a primary influence on other ecosystem components.

**Downed wood** ~ A tree or part of a tree that is dead and laying on the ground.

**Duff** ~ The partially decomposed organic material of the forest floor that lies beneath freshly fallen leaves, needles, twigs, stems, bark, and fruit.

**Drought** ~ In reference to rangeland, a period without precipitation during which the soil water content is reduced to such an extent that plants suffer from lack of water. A drought year, in this EIS, refers to less than or equal to 75 percent of normally received precipitation in a year.

**Dynamic equilibrium** ~ A system that is maintained in a harmonious and integrated condition while continuous change, activity, or progress occurs.

**Ecological integrity** ~ In general, ecological integrity refers to the degree to which the elements of biodiversity and the functions that link them together and sustain the entire system are complete and capable of performing desired functions; the quality of being complete; a sense of wholeness. Absolute measures of integrity do not exist. Proxies provide useful measures to estimate the integrity of major ecosystem components (forestland, rangeland, aquatic, and hydrologic). Estimating these integrity components in a relative sense across the project area helps to explain current conditions and to prioritize future management. Thus, areas of high integrity would represent areas where ecological functions and processes are better represented and functioning than areas rated as low integrity.

**Ecological processes** ~ The flow and cycling of energy, materials, and organisms in an ecosystem.

**Ecological Reporting Unit (ERU)** ~ In this EIS, a geographic mapping unit developed by the Science Integration Team to report information on the description of biophysical environments, the characterization of ecological processes, the discussion of past management activities and their effects, and the identification of landscape management opportunities.

**Ecology** ~ the science of the interrelationships between organisms and their environment; from the Greek *Oikos* meaning “house” or “place to live.”

**Economic efficiency** ~ Producing goods and services in areas best suited for that production based on natural biophysical advantage or an area’s ability to best serve regional demands of people.

**Economic region** ~ A group of communities and their surrounding rural areas that are linked together through trade.

**Economy** ~ System of production, distribution, and consumption of economic goods.

**Ecosystem** ~ A complete, interacting system of living organisms and the land and water that make up their environment; the home places of all living things, including humans.

**Ecosystem health** ~ A condition where the parts and functions of an ecosystem are sustained over time and where the system's capacity for self-repair is maintained, such that goals for uses, values, and services of the ecosystem are met.

**Ecosystem-based management** ~ Scientifically based land and resource management that integrates ecological capabilities with social values and economic relationships, to produce, restore, or sustain ecosystem integrity and desired conditions, uses, products, values, and services over the long term.

**Edge (habitat)** ~ The margin where two or more vegetation patches meet, such as the boundary of a forest next to a meadow or the boundary of a clearcut next to a mature forest stand.

**Emission** ~ A release into the outdoor atmosphere of air contaminants.

**Endangered species** ~ A plant or animal species listed under the Endangered Species Act that is in danger of extinction throughout all or a significant portion of its range.

**Endemic species** ~ Plants or animals that occur naturally in a certain region and whose distribution is relatively limited to a particular locality. "Endemism" is the occurrence of endemic species in an area.

**Environment** ~ The combination of external physical, biological, social, and cultural conditions affecting the growth and development of organisms and the nature of an individual or community.

**Environmental Impact Statement (EIS)** ~ A statement of environmental effects of a proposed action and alternatives to it. A Draft EIS is released to the public and other agencies for review and comment. A Final EIS is issued after consideration of public comments. A Record of Decision (ROD) is based on the information and analysis in the Final EIS.

**Epidemic (outbreak)** ~ The rapid spread, growth, and development of pathogen or insect populations that affect large numbers of a host population throughout an area at the same time.

**Erosion** ~ The wearing away of the land surface by running water, wind, ice, gravity, or other geological activities; can be accelerated or intensified by human activities that reduce the stability of slopes or soils.

**Ethno-habitats** ~ Habitats that are socially and/or traditionally important to American Indian cultures.

**Eutrophication** ~ Changes that occur in a lake or other body of water due to excessive supplies of nutrients such as nitrates and phosphates, usually from runoff from the surrounding land.

**Evaluation of Alternatives** ~ Document (Quigley, Lee, and Arbelbide 1997) produced by the ICBEMP Science Integration Team, which analyzes the effects and practicality of implementing each alternative management strategy described in the ICBEMP Draft EISs.

**Evapotranspiration** ~ The actual total loss of water by evaporation from soil, water bodies, and transpiration from vegetation, over a given area with time.

**Even-aged management** ~ Method of forest management in which trees, usually of a single species, are maintained at about the same age and size and are harvested all at once so a new stand may grow.

**Even-aged stands** ~ Stands of trees of approximately the same age. Silvicultural methods that generate even-aged stands include clearcutting, shelterwood, and seed tree.

**Exotic** ~ A plant or animal species introduced from a distant place; not native to the area.

**Extinction** ~ Complete disappearance of a species from the earth.

**Extirpation** ~ Localized disappearance of a species from an area.

**Fauna** ~ The vertebrate and invertebrate animals of an area or region.

**Federal Land Policy and Management Act (1976) (FLPMA)** ~ The act that establishes public land policy primarily for the Bureau of Land Management; establishes guidelines for its administration; and provides for the management, protection, development, and enhancement of the public lands, among other provisions.

**Fines (sediment)** ~ Sediment particles smaller than 0.2 inch. Excessive fines can trap newly hatched fish and decrease the amount of water percolating through spawning gravels. High fine sediment loads slow plant growth and reduce available food, oxygen, and light.

**Fire-dependent systems** ~ Forests, grasslands, and other ecosystems historically composed of species of plants that evolved with and are maintained by fire regimes.

**Fire cycle, fire frequency** ~ See fire return interval.

**Fire-independent system** ~ Forests, grasslands, and other ecosystems whose primary natural disturbances historically were decomposition, windthrow, flooding, or other disturbances other than fire.

**Fire-intolerant** ~ Species of plants that do not grow well or die from the effects of too much fire. Generally these are shade-tolerant species.

**Fire regime** ~ The characteristics of fire in a given ecosystem, such as the frequency, predictability, intensity, and seasonality of fire.

**Fire return interval** ~ The average time between fires in a given area.

**Fire-tolerant** ~ Species of plants that can withstand certain frequency and intensity of fire. Generally these are shade-intolerant species.

**First-order stream** ~ Stream channel with no tributaries.

**Floodplain** ~ The portion of a river valley or level lowland next to streams which is covered with water when the river or stream overflows its banks at flood stage.

**Forage** ~ Vegetation (both woody and non-woody) eaten by animals, especially grazing and browsing animals.

**Forbs** ~ Broad-leafed plants; includes plants that commonly are called weeds or wildflowers.

**Forest health** ~ The condition in which forest ecosystems sustain their complexity, diversity, resiliency, and productivity while providing for human needs and values. It is a useful way to communicate about the current condition of the forest, especially with regard to resiliency, a part of forest health that describes the ability of the ecosystem to respond to disturbances. Forest health and resiliency can be described, in part, by species composition, density, and structure.

**Forest plan (Forest Land and Resource Management Plan)** ~ A document that guides natural resource management and establishes standards and guidelines for a National Forest; required by the National Forest Management Act.

**Fragmentation (habitat)** ~ The break-up of a large land area (such as a forest) into smaller patches isolated by areas converted to a different land type. The opposite of connectivity.

**Framework for Ecosystem Management** ~ Document (Haynes et al. 1996) produced by the ICBEMP Science Integration Team, which provides broad concepts and processes recommended for ecosystem analysis, planning, management, and monitoring at various scales.

**Fry** ~ A recently hatched fish, after the yolk sac has been absorbed.

**Fuel (fire)** ~ Dry, dead parts of trees, shrubs, and other vegetation that can burn readily.

**Fuel ladder** ~ Vegetative structures or conditions such as low-growing tree branches, shrubs, or smaller trees that allow fire to move vertically from a surface fire to a crown fire.

**Fuel load** ~ The dry weight of combustible materials per unit area; usually expressed as tons per acre.

**Game species** ~ Wild animals that people hunt or fish for food or recreation according to prescribed seasons and limits.

**Gene pool** ~ All the genetic (hereditary) information contained in a reproducing population of a particular species.

**Genetic adaptation** ~ Changes in the genetic makeup of organisms of a species that allow the species to reproduce and gain a competitive advantage under changed environmental conditions.

**Geoclimatic setting** ~ The geology, climate (precipitation and temperature), vegetation, and geologic processes (such as landslides or debris flows) that are characteristic of a place; places with similar characteristics are said to have the same geoclimatic setting.

**Geographic Information System (GIS)** ~ An information processing technology to input, store, manipulate, analyze, and display data; a system of computer maps with corresponding site-specific information that can be combined electronically to provide reports and maps.

**Geologic/geomorphic processes** ~ The actions or events that shape and control the distribution of materials, their states, and their morphology, within the interior and on the surface of the earth. Examples of geologic processes include: volcanism, glaciation, streamflow, metamorphism (partial melting of rocks), and landsliding.

**Geomorphology** ~ The geologic study of the shape and evolution of the earth's landforms.

**Glacial till** ~ Mixed rock of clay, sand, gravel, and boulders transported and deposited by glaciers.

**Glaciation** ~ Alteration of the earth's solid surface through erosion and deposition by glacier ice.

**Goals (management)** ~ In this EIS, refers to descriptions of what an agency wants to accomplish.

**Gradient** ~ A rate of vertical elevation change per unit of horizontal distance; also called slope.

**Grazing pressure** ~ The ratio of forage demand to forage available, for any specified forage, at any point in time. (Thus, as forage demand increases relative to forage available, grazing pressure increases, and vice-versa.)

**Greenstripping** ~ The practice of planting strips of fire-resistant vegetation at strategic locations on the landscape to slow or stop wildfires.

**Ground fire** ~ A fire that burns the organic material in the soil layer and the decayed material or peat below the ground surface.

**Groundwater** ~ Water that sinks into the soil and is stored in slowly flowing and slowly renewed underground reservoirs called aquifers.

**Guidelines (management)** ~ In this EIS, refers to suggested techniques, priorities, processes, or prescriptions that are useful in meeting objectives; not required.

**Habitat** ~ A place that provides seasonal or year-round food, water, shelter, and other environmental conditions for an organism, community, or population of plants or animals.

**Habitat type** ~ The land area capable of supporting a single plant association. Provides a way to classify land area.

**Harvest** ~ (1) Felling and removal of trees from the forest; (2) removal of game animals or fish from a population, typically by hunting or fishing.

**Harvestable** ~ In this EIS, with regard to American Indian tribes, refers to a population of plants or animals that is self-sustaining and capable of producing a dependable harvest annually to meet spiritual, cultural, subsistence, and commercial needs.

**Headwaters** ~ Beginning of a watershed; unbranched tributaries of a stream.

**Healthy landscape systems** ~ Those landscapes whose processes are in balance. The balance is dynamic; humans have the opportunity to work with changing landscape conditions to receive a predictable and reliable flow of both commodities and amenities. Healthy landscape systems show resiliency and have predictable responses to disturbance, while providing human values. Key ecological systems that interact in dynamic balance include: human, hydrologic-land, carbon-nutrient, food web, and evolutionary systems.

**Herbaceous** ~ Green and leaflike in appearance or texture; includes grasses, grass-like plants, and forbs, with little or no woody component.

**Herbivore** ~ An animal that eats plants, either primarily or entirely.

**Hierarchy** ~ A sequence of sets composed of smaller subsets.

**High quality waters** ~ Waters whose quality is necessary to support threatened, endangered, candidate, and sensitive species restoration, conservation, or recover; waters/watersheds used as sources of public drinking water; waters/watersheds where groundwater recharge to Sole Source Aquifers is designated under the Safe Drinking Water Act; and waters whose quality is necessary to support all designated beneficial uses.

**Historical Range of Variability (HRV)** ~ The natural fluctuation of components of healthy ecosystems over time. In this EIS, refers to the range of conditions and processes that are likely to have occurred prior to settlement of the project area by people of European descent (approximately the mid-1800s), which would have varied within certain limits over time. Historical conditions and processes portrayed in this EIS include such variables as: forest and range vegetation types, compositions, and structures; fish and wildlife habitats and populations; and fire regimes. For purposes of comparison to current conditions, historical conditions in this

EIS represent an estimated mid-point within the historical range of variability. HRV is discussed in this document only as a reference point, to establish a baseline set of conditions for which sufficient scientific or historical information is available to enable comparison to current conditions.

**Home range** - The area around an animal's established home which is visited during the animal's normal activities.

**Homogeneous** ~ Regular, similar; uniform throughout.

**Hot spots** ~ In this EIS, places where three or more areas of endemism or biodiversity intersect.

**Hybridization** ~ The cross-breeding of unlike individuals to produce hybrids.

**Hydrologic** ~ Refers to the properties, distribution, and effects of water. "Hydrology" refers to the broad science of the waters of the earth ~ their occurrence, circulation, distribution, chemical and physical properties, and their reaction with the environment.

**Hydrologic cycle (water cycle)** ~ The ecological cycle that moves water from the air by precipitation to the earth and returns it to the atmosphere; a variety of processes are involved, including evaporation, run-off, infiltration, percolation, storage, and transpiration.

**Hydrologic Unit Code (HUC)** ~ A coding system developed by the U.S. Geological Service to map geographic boundaries of watersheds of various sizes.

**Hydrophobic (soil)** ~ A condition in which soil becomes water-repellant, the capacity of soil to hold water is reduced, and chances for erosion are increased.

**Hydrophytic plants** ~ Plants that grow wholly or partly immersed in water.

**Igneous rocks** ~ Rocks formed by molten lava becoming solid.

**Impermeable** ~ Cannot be penetrated.

**Implement** ~ To carry out.

**Improper livestock grazing** ~ Livestock grazing which results in improper use, which can be defined as a degree of utilization of current year's growth which, if continued, will not achieve management objectives and will not maintain or improve the long-term productivity of a site.

**Indicator species** ~ A species that is presumed to be sensitive to habitat changes; population changes of indicator species are believed to best indicate the effects of land management activities.

**Indirect effects** ~ Impacts on the environment that are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.

**Infiltration** ~ The movement of water through soil pores and spaces.

**INFISH** ~ Interim Inland Native Fish Strategy for the Intermountain, Northern, and Pacific Northwest Regions (Forest Service).

**Infrastructure** ~ The basic facilities, equipment, and installations needed for the functioning of a system; commonly refers to such items as roads, bridges, power facilities, and the like.

**In-migration** ~ The movement of new residents into an area.

**Instream flow** ~ Flow of water in its natural setting (as opposed to waters diverted for 'offstream' uses such as industry or agriculture). Instream flow levels provided for environmental reasons enhance or maintain the habitat for riparian and aquatic life, with timing and quantities of flow characteristic of the natural setting.

**Integration** ~ Bringing the values and systems of different disciplines together to address policy questions with a common framework using consistent techniques and measurement units.

**Interagency** ~ Involving Forest Service, BLM, and other Federal agencies.

**Interdisciplinary Team (IDT)** ~ A team of individuals with skills from different disciplines working together in an integrated way on the same task or project.

**Intergovernmental** ~ Involving Federal, State, tribal, county, or other government entities.

**Intermittent stream** ~ A stream that flows only at certain times of the year when it receives water from other streams or from surface sources such as melting snow.

**Integrity** ~ See ecological integrity.

**Invasion (plant)** ~ The movement of a plant species into a new area outside its former range.

**Invertebrate** ~ Small animals that lack a backbone or spinal column. Spiders, insects, and worms are examples of invertebrates.

**Irretrievable** ~ A category of impacts that applies to losses of production or commitment of renewable natural resources. For example, while an area is used as a ski area, some or all of the timber production there is “irretrievably” lost. If the ski area closes, timber production could resume; therefore, the loss of timber production during the time the area is devoted to skiing is irretrievable but not irreversible, because it is possible for timber production to resume if the area is no longer used as a ski area.

**Irreversible** ~ A category of impacts that applies to non-renewable resources, such as minerals and archaeological sites. Losses of these resources cannot be reversed. Irreversible effects can also refer to effects of actions on resources that can be renewed only after a very long period of time, such as the loss of soil productivity.

**Issue** ~ A matter of controversy, dispute, or general concern over resource management activities or land uses. To be considered a “significant” EIS issue, it must be well defined, relevant to the proposed action, and within the ability of the agency to address through alternative management strategies.

**Key ecological functions** ~ A wide range of roles that species play in the ecosystem, such as predation, herbivory, nutrient cycling, and biomass contributions.

**Key environmental correlates** ~ Environmental factors that are either associated with or required by a given species, such as forest canopies, downed wood, snags, or piles of bark.

**Keystone species** ~ Species that play roles affecting many other organisms in an ecosystem; often are grouped according to their perceived importance to humans, such as “upland birds” or “waterfowl”.

**Landscape** ~ All the natural features such as grasslands, hills, forest, and water, which distinguish one part of the earth’s surface from another part; usually that portion of land which the eye can comprehend in a single view, including all its natural characteristics.

**Landscape composition** ~ The types of stands or patches present across a given area of land.

**Landscape ecology** ~ The study of the ecological effects of spatial patterns in ecosystems.

**Landscape structure** ~ The mix and distribution of stand or patch sizes across a given area of land. Patch sizes, shapes, and distributions are a reflection of the major disturbance regimes operating on the landscape.

**Lethal (stand-replacing) fires** ~ In forests, fires in which less than 20 percent of the basal area or less than 10 percent of the canopy cover remains; in rangelands, fires in which most of the shrub overstory or encroaching trees are killed.

**Lichens** ~ Organisms made up of specific algae and fungi, forming identifiable crusts on soil, rocks, tree bark, and other surfaces. Lichens are primary producers in ecosystems; they contribute living material and nutrients, enrich the soil and increase soil moisture-holding capacity, and serve as food sources for certain animals. Lichens are slow-growing and sensitive to chemical and physical disturbances.

**Lifeways** ~ the manner and means by which a group of people lives; their way of life. Components include language(s), subsistence strategies, religion, economic structure, physical mannerisms, and share attitudes.

**Litter** ~ The uppermost layer of organic debris on the soil surface, which is essentially the freshly fallen or slightly decomposed vegetation material such as stems, leaves, twigs, and fruits.

**Long term** ~ In this EIS, refers to a period on the order of 50 to 100 years or longer.

**Lower montane** ~ A terrestrial community that generally is found in drier and warmer environments than the montane terrestrial community. The lower montane community supports a unique clustering of wildlife species.

**Mainstem** ~ The main channel of the river in a river basin, as opposed to the streams and smaller rivers that feed into it.

**Maintain** ~ (1) To continue. (2) For this document, the term is intended to convey the idea of keeping ecosystem functions, processes, and/or components (such as soil, air, water, vegetation) in such a condition that the ecosystem’s ability to accomplish current and future management objectives is not weakened.

Management activities may be compatible with ecosystem maintenance if actions are designed to maintain or improve current ecosystem condition.

**Management direction** ~ A statement of goals and objectives, management prescriptions, and associated standards and guidelines for attaining them.

**Mass movement, mass wasting (erosion)** ~ Large land slump, where a mass of rock or soil slips in one large unit down from a cliff or slope.

**Merchantable timber** ~ Timber that can be bought or sold.

**Microbes** ~ Microscopic organisms such as fungi, bacteria, or algae.

**Microbiotic crust** ~ Thin crust of living organisms on or just below the soil, composed of lichens, mosses, algae, fungi, cyanobacteria, and bacteria.

**Microclimate** ~ The climatic conditions within a small habitat such as: a tree stump, under a boulder, in the space between grasses, or on the side of a slope.

**Migration corridor** ~ The habitat pathway an animal uses to move from one place to another.

**Mitigation** ~ Measures designed to counteract environmental impacts or to make impacts less severe.

**Mixed stand** ~ A stand consisting of two or more tree species.

**Mixing height** ~ Measured from the surface upward. The height to which relatively vigorous mixing of air due to convection occurs.

**Monitoring** ~ A process of collecting information to evaluate whether or not objectives of a project and its mitigation plan are being realized.

**Monoculture** ~ A plant community (forest, range) consisting of only one species; uniform throughout.

**Montane** ~ A terrestrial community that generally is found in moderate environments between the lower montane (ponderosa pine) and subalpine terrestrial communities. Montane communities are generally moister than lower montane and warmer than subalpine, and support a unique clustering of wildlife species.

**Morphology** ~ Form and structure.

**Mosaic** ~ A pattern of vegetation in which two or more kinds of communities are interspersed in patches, such as clumps of shrubs with grassland between.

**Multiple-use management** ~ The management of public lands and their various resource values so they are used in the combination that best meets the present and future needs of the American people.

**Mycorrhizae** ~ The symbiotic relationship between certain fungi and the roots of certain plants, especially trees; important for plants to take nutrients from soil.

**National Ambient Air Quality Standards (NAAQSs)** ~ Standards set by the Federal Environmental Protection Agency for the maximum levels of air pollutants that can exist in the outdoor air without unacceptable effects on human health or the public welfare.

**National Environmental Policy Act (NEPA)** ~ An act of Congress passed in 1969 declaring a national policy to encourage productive and enjoyable harmony between people and the environment, to promote efforts that will prevent or eliminate damage to the environment and the biosphere and stimulate the health and welfare of people, and to enrich the understanding of the ecological systems and natural resources important to the nation, among other purposes.

**National Forest Management Act (NFMA)** ~ A law passed in 1976 requiring the preparation of Forest Service regional guides and forest plans and the preparation of regulations to guide that development.

**Native species** ~ Species that normally live and thrive in a particular ecosystem.

**Natural areas** ~ Areas managed by various landowners that are mainly in a natural state and being managed to maintain or restore a degree of naturalness for research, monitoring, inventory, habitat protection, education, or social needs.

**Natural resources** ~ Water, soil, wild plants and animals, air, minerals, nutrients, and other resources produced by the earth's natural processes.

**Natural scenic condition** ~ Naturally appearing or only slightly altered, determined by using scenery management system methods described in the USDA Agriculture Handbook 701.

**New action** ~ Those actions that have not been implemented, or for which contracts have not been awarded, or for which permits have not been issued. (See ongoing action.)

**Niche** ~ The smallest unit of a habitat occupied by an organism, and/or the role of an organism in the environment.

**Nitrogen cycle** ~ Cyclic movement of nitrogen in different chemical forms from the environment, to organisms, and then back to the environment.

**Nitrogen-fixing** ~ Ability to remove nitrogen from the atmosphere and convert it to forms that can be used by plants, animals, and microbes. Very few specialized organisms have this ability, making them critical to the nitrogen cycle.

**No-action alternative** ~ The most likely condition expected to exist in the future if current management direction were to continue unchanged.

**Nongame** ~ Term for wild animals not commonly harvested for recreation, fur, or subsistence.

**Nonlethal fire** ~ In forests, fires in which more than 70 percent of the basal area or more than 90 percent of the canopy cover survives; in rangelands, fires in which more than 90 percent of the vegetative cover survives (implies that fire is occurring in an herbaceous-dominated community).

**Non-point source pollution** ~ Pollution whose source is not specific in location; the sources of the pollutant discharge are dispersed, not well defined or constant. Examples include sediments from logging activities and runoff from agricultural chemicals.

**Non-vascular plants** ~ Plants that do not have vessels or ducts to conduct water and food and therefore require a moist environment for survival; mosses and liverworts are examples of non-vascular plants.

**Noxious weed** ~ A plant species designated by Federal or State law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or non-native, new, or not common to the United States. According to the Federal Noxious Weed Act (PL 93-639), a noxious weed is one that causes disease or has other adverse effects on man or his environment and therefore is detrimental to the agriculture and commerce of the United States and to the public health.

**Nutrient cycles** ~ Ecological processes in which nutrients and elements such as carbon, phosphorous, nitrogen, calcium, and others, circulate among animals, plants, soils, and air.

**Objectives (management)** ~ In this EIS, refers to indicators used to measure progress toward attainment of goals. They address short- and long-term actions taken to meet goals and the desired ranges of future conditions.

**Old forest** ~ (a) *Old single story forest* refers to mature forest characterized by a single canopy layer consisting of large or old trees. Understory trees are often absent, or present in randomly spaced patches. It generally consists of widely spaced, shade-intolerant species, such as ponderosa pine and western larch, adapted to a nonlethal, high frequency fire regime.

(b) *Old multi-story forest* refers to mature forest characterized by two or more canopy layers with generally large or old trees in the upper canopy. Understory trees are also usually present, as a result of a lack of frequent disturbance to the understory. It can include both shade-tolerant and shade-intolerant species, and is generally adapted to a mixed fire regime of both lethal and nonlethal fires.

**Omnivore** ~ An animal that eats a combination of meat and vegetation. Grizzly bears and humans are examples of omnivores.

**Ongoing actions** ~ Those actions that have been implemented, or have contracts awarded or permits issued. (See new actions.)

**Out-migration** ~ The movement of former residents away from an area.

**Overfishing** ~ Harvesting of so many fish of a species, especially immature ones, that there is not enough breeding stock left to replenish the species.

**Overgrazing** ~ Consumption of rangeland grass by grazing animals to the point that it cannot be renewed, or can be only slowly renewed, because of damage to the root system.

**Overstory** ~ The upper canopy layer.

**Ozone** ~ A strong smelling, pale blue, reactive toxic chemical gas consisting of three oxygen atoms. A pollutant formed in the atmosphere which can seriously affect the human respiratory system.

**PACFISH** ~ Interim strategies for managing Pacific anadromous fish-producing watersheds in eastern Oregon and Washington, Idaho, and portions of California.

**Park-like stands** ~ Stand having scattered large overstory trees, few or no understory trees, and open growing conditions usually maintained by frequent ground fires.

**Particulates** ~ Solid particles or liquid droplets suspended or carried in the air.

**Patch** ~ An area of uniform vegetation that differs from what surrounds it in structure and composition. Examples might include a patch of forest surrounded by a cut-over area or a patch of dense young forest surrounded by a patch of open old forest.

**Pathogen** ~ An agent such as a fungus, virus, or bacterium that causes disease.

**Pattern** ~ The spatial arrangement of landscape elements (patches, corridors, matrix) that determines the function of a landscape as an ecological system.

**Percolation** ~ The oozing or draining of water through fine, porous soil surfaces.

**Perennial** ~ A plant that lives for three or more years.

**Physiography** ~ Pertains to the study of the formation and evolution of landforms.

**PILT (Payments in Lieu of Taxes)** ~ Payments made to counties by the Forest Service to mitigate losses to counties because public lands cannot be taxed. Payments to counties are based on a percentage of timber receipts.

**Planning area** ~ In this EIS, refers to either the UCRB EIS area or the Eastside EIS area.

**PM<sub>10</sub>** ~ Particulate matter that measures 10 micrometers in diameter or less, a size considered small enough to invade the alveolar regions of the lung. PM<sub>10</sub> is one of the six pollutants for which there is a national ambient air quality standard.

**Point source pollution** ~ Pollution that comes from a single identifiable source such as a smokestack, a sewer, or a pipe.

**Pool** ~ Portion of a stream where the current is slow, often with deeper water than surrounding areas and with a smooth surface texture. Often occur above and below riffles and generally are formed around stream bends or obstructions such as logs, root wads, or boulders. Pools provide important feeding and resting areas for fish.

**Pool attributes** ~ Characteristics of a pool such as its depth, width, and surface texture.

**Potential vegetation** ~ Vegetation that would likely develop if all successional sequences were completed without human interference under present site conditions.

**Potential Vegetation Group (PVG)** ~ In this EIS, made up of potential vegetation types, grouped on the basis of similar general moisture or temperature environment.

**Potential Vegetation Type (PVT)** - In this EIS, all the species that might grow on a specific site in the absence of disturbance; can also refer to vegetation that would grow on a site in the presence of frequent disturbance that is an integral part of the ecosystem and its evolution.

**Predator** ~ Organism that captures and feeds on parts or all of an organism of another species.

**Preferred alternative** ~ The alternative identified in a Draft Environmental Impact Statement which has been initially selected by the agency as the most acceptable resolution to the problems identified in the purpose and need.

**Prescribed fire** ~ Intentional use of fire under specified conditions to achieve specific management objectives.

**Prescribed natural fire** ~ A fire ignited by lightning but allowed to burn within specified conditions of fuels, weather, and topography, to achieve specific objectives.

**Prescription** ~ A management pathway to achieve a desired objective(s).

**Produce** ~ As used in Chapter 3 of this document, refers specifically to management emphasis directed at providing, growing, or making goods and services available for human needs and/or desires, while sustaining productivity and maintaining associated values. Under a "Produce" strategy, consumption-based activities dominate the landscape; this strategy is applied to areas available and suitable for resource production. See Chapter 3 for more details.

**Productivity** ~ (1) *Soil productivity*: the capacity of a soil to produce plant growth, due to the soil's chemical, physical, and biological properties (such as depth, temperature, water-holding capacity, and mineral, nutrient, and organic matter content). (2) *Vegetative productivity*: the rate of production of vegetation within a given period. (3) *General*: the innate capacity of an environment to support plant and animal life over time.

**Programmatic EIS** ~ An area-wide EIS that provides an overview when a large-scale plan is being prepared for the management of federally administered lands on a regional or multi-regional basis. A programmatic EIS is a necessary analysis of the affected environment and the potential cumulative effects of the reasonably foreseeable actions under that program or within that geographical area. Analyses of lesser scope or more site-specificity may be tiered to the analysis in a programmatic EIS.

**Proper Functioning Condition (PFC)** ~ Riparian-wetland areas achieve Proper Functioning Condition when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high water flows. This thereby reduces erosion and improves water quality; filters sediment, captures bedload, and aids floodplain development; improves floodwater retention and groundwater recharge; develops root masses that stabilize streambanks against cutting action; develops diverse ponding and channel characteristics to provide habitat and water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and supports greater biodiversity. The functioning condition of riparian-wetland areas is a result of the interaction among geology, soil, water, and vegetation.

**Project area** ~ In this EIS, refers to the entire Interior Columbia Basin Ecosystem Management Project (ICBEMP) area, encompassing both EIS areas.

**Proposed action** ~ A proposal by a Federal agency to authorize, recommend, or implement an action.

**Qualitative** ~ Traits or characteristics that relate to quality and can't be measured with numbers.

**Quantitative** ~ Traits or characteristics that can be measured with numbers.

**Rainshadow** ~ An area where little or no rain falls because it is located to the leeward side of a mountain or range whose opposite side is exposed to moisture-laden winds.

**Rangeland** ~ Land on which the native vegetation is predominantly grasses, grass-like plants, forbs, or shrubs; not forest.

**Rangeland health** ~ The degree to which the integrity of the soil and the ecological processes of rangeland ecosystems are sustained.

**Record of Decision (ROD)** ~ An official document in which a deciding official states the alternative that will be implemented from a prepared Final EIS.

**Recovery** ~ (1) Return of an ecosystem to a specified condition after a disturbance; (2) return of a previously threatened or endangered species to a condition of population viability.

**Recovery plan** ~ Identifies, justifies, and schedules the research and management actions necessary to reverse the decline of a species and ensure its long-term survival.

**Recreation Opportunity Spectrum (ROS)** ~ A framework for stratifying and defining classes of outdoor recreation environment, activities, and experience opportunities. The settings, activities, and opportunities for obtaining experiences have been arranged along a continuum or spectrum divided into seven classes: Primitive, Semiprimitive, Nonmotorized, Semiprimitive Motorized, Roded Modified, Roded Natural, Rural, Urban.

**Redd** ~ Spawning nest made by salmon or steelhead in the gravel bed of a river.

**Refugia** ~ Areas that have not been exposed to great environmental changes and disturbances undergone by the region as a whole; refugia provide conditions suitable for survival of species that may be declining elsewhere.

**Regeneration** ~ The process of establishing a new crop of trees on previously harvested land; also refers to the new crop of trees that have become established.

**Regional** ~ In this EIS, generally refers to either the planning area (EIS area) or the project area (entire ICBEMP). In watershed discussions, also refers to first field hydrologic unit codes.

**Rehabilitate** ~ To repair and protect certain aspects of a system so that essential structures and functions are recovered, even though the overall system may not be exactly as it was before.

**Resident fish** ~ Fish that spend their entire life in freshwater; examples in the UCRB include bull trout and westslope cutthroat trout.

**Resilient, resiliency** ~ (1) The ability of a system to respond to disturbances. Resiliency is one of the properties that enable the system to persist in many different states or successional stages. (2) In human communities, refers to the ability of a community to respond to externally induced changes such as larger economic or social forces.

**Resolution** ~ (1) Degree of detail (finer resolution provides greater detail); (2) a solution.

**Resource Management Plan (RMP)** ~ A document that provides land and resource allocations, allowable uses, and resource goals, objectives, management actions, and monitoring for the Bureau of Land Management; required under the Federal Land Policy and Management Act.

**Restoration** ~ Holistic actions taken to modify an ecosystem to achieve desired, healthy, and functioning conditions and processes. Generally refers to the process of enabling the system to resume its resiliency to disturbances.

**Restore** ~ As used in Chapter 3 of this document, refers specifically to management emphasis designed to move ecosystems to desired conditions and processes, and/or to healthy forestlands, rangelands, and aquatic systems; a variety of management-induced activities dominate the landscape. Generally, "Restore" strategies are applied to areas of moderate to low ecological integrity.

**Revegetation** ~ Establishing or re-establishing desirable plants on areas where desirable plants are absent or of inadequate density, by management alone (natural revegetation) or by seeding or transplanting (artificial revegetation).

**Riffle** ~ Relatively shallow section of a stream or river with rapid current and a surface broken by gravel, rubble, or boulders.

**Riparian area** ~ Area with distinctive soil and vegetation between a stream or other body of water and the adjacent upland; includes wetlands and those portions of floodplains and valley bottoms that support riparian vegetation.

**Riparian conservation area (RCA)** ~ Portions of watersheds where riparian-dependent resources receive primary emphasis, and management activities are subject to specific standards and guidelines. RCAs include traditional riparian corridors, wetlands, intermittent headwater streams, and other areas where proper ecological functioning is crucial to maintenance of the stream's water, sediment, woody debris and nutrient delivery systems.

**Riparian ecosystem** ~ An ecosystem that is a transition between terrestrial and aquatic ecosystems; includes streams, lakes, wet areas, and adjacent vegetation communities and their associated soils which have free water at or near the surface; an ecosystem whose components are directly or indirectly attributed to the influence of water.

**Risk assessment** ~ Process of gathering data and making assumptions to estimate short- and long-term harmful effects on human health or the environment from particular products or activities.

**Road** ~ *BLM*: A route open normally to highway vehicles (such as trucks and automobiles); route may be improved, is maintained by mechanical means, and receives regular and continuous use; route must have purpose and intent to be maintained when necessary. *Forest Service*: **Arterial roads** ~ roads usually developed and operated for long-term land and resource management purposes and constant service; **Collector roads** ~ roads that collect traffic from Forest local roads, usually connecting to a Forest arterial road or public highway, operated for either constant or intermittent service depending on land use and resource management objectives; **Local roads** ~ roads that are constructed and maintained for a given resource use but also used for other purposes, with locations and standards usually determined by the requirements of a specific resource activity other than by travel efficiency.

**Rotation** ~ Refers to each generation of a managed forest; the number of years between the time that a forest stand is regenerated and its final harvest.

**Rubble** ~ Loose, angular rock fragments.

**Runoff (surface)** ~ Fresh water from precipitation and melting ice that flows on the earth's surface into nearby streams, lakes, wetlands, and reservoirs.

**Salmonids** ~ Fishes of the family Salmonidae, including salmon, trout, chars, whitefish, ciscoes, and grayling.

**Salvage** ~ Harvest of trees that are dead, dying, or deteriorating due to fire, wind, insect or other damage, or disease.

**Scale** ~ (1) The level of resolution under consideration (for example, broad scale or fine scale); (2) the ratio of length on a map to true length.

**Scientific Assessment** ~ Refers to two documents produced by the ICBEMP Science Integration Team: *An Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin and Portions of the Klamath and Great Basins* (Quigley, Graham, and Haynes 1996), which examines historical and current biophysical, social, and economic systems in the project area, and the associated Staff Area Reports (STARs) published as *An Assessment of Ecosystem Components [AEC] in the Interior Columbia Basin and Portions of the Klamath and Great Basins* (Quigley and Arbelbide 1996).

**Scoping** ~ The early stages of preparation of an environmental impact statement, used to solicit public opinion, receive comments and suggestions, and determine the issues to be considered in the development and analysis of a range of alternatives. Scoping may involve public meetings, telephone conversations, mailings, letters, or other contacts.

**Sediment** ~ Solid materials, both mineral and organic, in suspension or transported by water, gravity, ice, or air; may be moved and deposited away from their original position and eventually will settle to the bottom.

**Seed trees** ~ Mature trees left standing after timber harvest to provide seeds to regenerate the new stand; a harvest prescription.

**Selective cutting** ~ Cutting of intermediate-aged, mature, or diseased trees in an uneven-aged forest stand, either singly or in small groups. This encourages growth of younger trees and maintains an uneven-aged stand.

**Semi-arid** ~ Moderately dry; region or climate where moisture is normally greater than under arid conditions but still definitely limits the production of vegetation.

**Sensitive species** ~ Species identified by a Forest Service regional forester or BLM state director for which population viability is a concern either (a) because of significant current or predicted downward trends in population numbers or density, or (b) because of significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.

**Seral** ~ Refers to the sequence of transitional plant communities during succession. Early-seral refers to plants that are present soon after a disturbance or at the beginning of a new

successional process (such as seedling or sapling growth stages in a forest); mid-seral in a forest would refer to pole or medium sawtimber growth stages; late- or old-seral refers to plants present during a later stage of plant community succession (such as mature and old forest stages).

**Seral stage** ~ The developmental phase of a forest stand or rangeland with characteristic structure and plant species composition.

**Shade-intolerant** ~ Species of plants that do not grow well or die from the effects of too much shade. Generally these are fire-tolerant species.

**Shade-tolerant** ~ Species of plants that can develop and grow in the shade of other plants. Generally these are fire-intolerant species.

**Short-term** ~ In this EIS, refers to a period of less than 25 years.

**Shrink-swell potential** ~ The susceptibility of soil to change in volume due to a loss or gain in moisture content. A shrink-swell potential is typically associated with soils that have a high percentage of clay.

**Silviculture** ~ The practice of manipulating the establishment, composition, structure, growth, and rate of succession of forests to accomplish specific objectives.

**Site** ~ A specific location of an activity or project, such as a campground, a lake, or a stand of trees to be harvested.

**Site potential** ~ A measure of resource availability based on interactions among soils, climate, hydrology, and vegetation.

**Site potential tree height (SPTH)** ~ The average maximum height of the tallest trees (200 years or older) for a given site class.

**Smolt** ~ Young salmon or trout migrating to the ocean and undergoing biological changes to enable them to move from freshwater streams to saltwater.

**Snag** ~ A standing dead tree, usually greater than five feet tall and six inches in diameter at breast height. Snags are important as habitat for a variety of wildlife species and their prey.

**Soils** ~ The earth material that has been so modified and acted upon by physical, chemical, and biological agents that it will support rooted plants.

**Soil productivity** ~ See productivity.

**Soil structure** ~ Refers to the physical structure of soils that enables air and water to move or be stored.

**Soil texture** ~ Relative amounts of sand, silt, and clay in a soil. Coarse-textured soils are generally sandy and often contain gravel of various sizes; fine-textured soils are very fine, sandy, silty, or clayey.

**Spatial** ~ Related to or having the nature of space.

**Spawning habitat** ~ Areas used by adult fish for laying and fertilizing eggs.

**Special status species** ~ Refers to federally listed threatened or endangered species, Federal candidate species, species recognized as requiring special protection by State agencies, and species managed as sensitive species by the Forest Service and/or BLM.

**Species** ~ A population or series of populations of organisms that can interbreed freely with each other but not with members of other species.

**Species richness** ~ A measure of biological diversity, referring to the number of species in an area.

**Stability** ~ Ability of a living system to withstand or recover from externally imposed changes or stresses.

**Stand** ~ A group of trees in a specific area that are sufficiently alike in composition, age, arrangement, and condition so as to be distinguishable from the forest in adjoining areas.

**Standards (management)** ~ In this EIS, refers to required management actions specifying how to achieve objectives. Standards can include requirements to refrain from taking action in certain situations.

**Stand composition** ~ The vegetative species that make up the stand.

**Stand density** ~ Refers to the number of trees growing in a given area, usually expressed in trees per acre.

**Stand-replacing fire** ~ See lethal fire.

**Stand structure** ~ The mix and distribution of tree sizes, layers, and ages in a forest. Some stands are all one size (single-story), some are two-story, and some are a mix of trees of different ages and sizes (multi-story).

**State Implementation Plan (SIP)** ~ A document prepared by each State describing existing air quality conditions and measures that will be taken to attain and maintain national ambient air quality standards.

**Stewardship** ~ Responsibility of Federal agencies to manage natural resources on public land.

**Stream morphology** ~ The study of the form and structure of streams.

**Strongholds (fish)** ~ Watersheds that have the following characteristics: (1) presence of all major life-history forms (for example, resident, fluvial, and adfluvial) that historically occurred within the watershed; (2) numbers are stable or increasing, and the local population is likely to be at half or more of its historical size or density; (3) the population or metapopulation within the watershed, or within a larger region of which the watershed is a part, probably contains at least 5,000 individuals or 500 adults.

**Structure** ~ The size and arrangement, both vertically and horizontally, of vegetation.

**Subalpine** ~ A terrestrial community that generally is found in harsher environments than the montane terrestrial community. Subalpine communities are generally colder than montane and support a unique clustering of wildlife species.

**Subbasin** ~ A drainage area of approximately 800,000 to 1,000,000 acres, equivalent to a 4th-field Hydrologic Unit Code (HUC).

**Sub-regional** ~ In this EIS, generally refers to areas geographically smaller than "regional" but larger than a National Forest or BLM District. In watershed discussions in this EIS, the term also refers to the equivalent of a second field hydrologic unit code, an area of about 22 million acres.

**Subsistence** ~ Customary and traditional uses of wild renewable resources (plants and animals) for food, shelter, fuel, clothing, tools, etc.

**Subspecies** ~ A distinct, geographically separated group of organisms of a species.

**Substrate** ~ The soil or underlying rock on which an organism is growing or to which it is attached.

**Subwatershed** ~ A drainage area of approximately 20,000 acres, equivalent to a 6th-field Hydrologic Unit Code (HUC). Hierarchically, subwatersheds

(6th-field HUC) are contained within a watershed (5th-field HUC), which in turn is contained within a subbasin (4th-field HUC). This concept is shown graphically in Figure 2-2 in Chapter 2.

**Succession** ~ A predictable process of changes in structure and composition of plant and animal communities over time. Conditions of the prior plant community or successional stage create conditions that are favorable for the establishment of the next stage. The different stages in succession are often referred to as “seral stages.” (See, Seral.)

**Surface fire** ~ A fire that burns surface litter, dead woody fuels, other loose debris on the forest floor, and some small vegetation, without significant movement into the overstory, usually with a flame less than a few feet high.

**Sustainability** ~ (1) Meeting the needs of the present without compromising the abilities of future generations to meet their needs; emphasizing and maintaining the underlying ecological processes that ensure long-term productivity of goods, services, and values without impairing productivity of the land. (2) In commodity production, refers to the yield of a natural resource that can be produced continually at a given intensity of management.

**Taxa (taxon)** ~ Group of organisms that share common characteristics that differ from other groups and form the basis for categories of classification such as species, genus, family.

**Tectonic** ~ Relating to, causing, or resulting from structural deformation of the earth’s crust.

**Temporal** ~ Related to time.

**Terrestrial** ~ Pertaining to the land.

**Terrestrial communities** ~ Groups of cover types with similar moisture and temperature regimes, elevational gradients, structures, and use by vertebrate wildlife species.

**Thermal cover** ~ Cover used by animals to protect them against weather.

**Thinning** ~ The practice of removing some of the trees in a stand to enable remaining trees to grow faster or to change the characteristics of the stand for wildlife or other purposes.

**Threatened species** ~ Species listed under the Endangered Species Act that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

**Tier** ~ In an EIS, refers to incorporating by reference the analyses in an EIS of a broader scope. For example, a Forest Service project-level EIS could tier to the analysis in a Forest Plan EIS; a Forest Plan EIS could tier to a Regional Guide EIS.

**Topography** ~ Physical features of the ground surface such as hills, plains, mountains, steepness of slope, and other features.

**Transpiration** ~ Water loss from plants during the course of photosynthesis.

**Tribe** ~ Term used to designate a Federally recognized group of American Indians and their governing body. Tribes may be comprised of more than one band.

**True firs** ~ Coniferous trees of the genus *Abies*. Grand fir (*Abies grandis*) and Subalpine fir (*A. lasiocarpa*) are examples of true firs found in the UCRB. Douglas-fir (*Pseudotsuga menziesii*) is in a different genus and is more closely related to hemlocks than to true firs.

**Trustee/Trust responsibilities (tribal)** ~ A trustee is one who holds legal title to property to administer it for the benefit of another. The Federal Government’s trust responsibility arises from promises made in treaties, executive orders, and agreements. Certain lands and resources of Indians are entrusted to the United States Government through those treaties and agreements.

**Turbidity** ~ The condition of a body of water that contains suspended material such as clay or silt particles, dead organisms, or small living plants and animals.

**Umbrella species** ~ A large-bodied wildlife species that has a large home range and broad requirements for habitats and resources; managing for an umbrella species is assumed to provide habitats and resources for other species.

**Underburn** ~ A burn by a surface fire that can consume ground vegetation and ladder fuels.

**Understory** ~ Plants that grow beneath the canopy of other plants. Usually refers to grasses, forbs, and low shrubs under a tree or shrub canopy.

**Uneven-aged management** ~ Method of forest management in which trees of different species in a given stand are maintained at many ages and sizes to permit continuous natural regeneration. Selective cutting is one example of an uneven-aged management method.

**Uneven-aged stand** ~ Stand of trees in which there are considerable differences in the ages of individual trees.

**Ungulates** ~ Hoofed, plant-eating mammals such as elk, deer, and cattle.

**Upland** ~ The portion of the landscape above the valley floor or stream.

**Vascular plants** ~ Plants that have vessels and ducts to conduct water and sugars; flowering plants, ferns, and their allies are vascular plants.

**Vegetative composition** ~ The plant species present in a plant community.

**Vertebrate** ~ An animal with a backbone; mammals, fishes, birds, reptiles, and amphibians are vertebrates.

**Viable population** ~ A population that is regarded as having the estimated numbers and distribution of reproductive individuals to ensure that its continued existence is well distributed in the project area.

**Visual resources** ~ The visible physical features of a landscape.

**Water Quality Limited** ~ A Clean Water Act classification for waters where application of best management practices or technology-based controls are not sufficient to achieve designated water quality standards.

**Watershed** ~ (1) The region draining into a river, river system, or body of water. (2) In this EIS, a watershed also refers specifically to a drainage area of approximately 50,000 to 100,000 acres, which is equivalent to a 5th-field Hydrologic Unit Code (HUC).

**Weed** ~ A plant considered undesirable, unattractive, or troublesome, usually introduced and growing without intentional cultivation.

**Wetland** ~ In general, an area soaked by surface or groundwater frequently enough to support vegetation that requires saturated soil conditions for growth and reproduction; generally includes swamps, marshes, springs, seeps, bogs, wet meadows, mudflats, natural ponds, and other similar areas. Legally, Federal agencies define wetlands as possessing three essential characteristics: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. The three technical characteristics specified are mandatory and must all be met for an area to be identified as

a wetland. *Hydrophytic vegetation* is defined as plant life growing in water, soil, or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. *Hydric soils* are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic (without oxygen) conditions in the upper part of the soil profile. Generally, to be considered a hydric soil, there must be saturation at temperatures above freezing for at least seven days. *Wetland hydrology* is defined as permanent or periodic inundation, or soil saturation to the surface, at least seasonally.

**Wilderness** ~ Area where the earth and its community of life have not been seriously disturbed by humans and where humans are only temporary visitors. In this document, when the term is capitalized, "Wilderness" refers to specific lands designated by Congress as Wilderness Areas and protected and managed to preserve their natural condition; when the term is not capitalized, "wilderness" refers to other areas that have pristine and natural characteristics.

**Wildfire** ~ A human or naturally caused fire that does not meet land management objectives.

**Windthrow** ~ Trees blown over by the wind.

**Woody** ~ Composed of wood or woody fibers.

**Xeric** ~ Very dry region or climate; tolerating or adapted to dry conditions.

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