

CHAPTER 5: CONSULTATION & COORDINATION

5.1 SCOPING

Scoping is an early and open process used to determine the breadth of environmental issues and alternatives to be addressed in an environmental assessment. External (public) scoping was conducted to inform various agencies and the public about the proposal to prepare a comprehensive plan for the Lake Area. Yellowstone National Park conducted both internal scoping with NPS staff and external scoping with the public, as well as interested and affected organizations and agencies. Public scoping for the Lake Area Comprehensive Plan began on July 6, 2010, with a media release and mailing to previously identified interested parties asking for help in identifying issues and concerns (Appendix A). Scoping was also done through the NPS Planning, Environment, and Public Comment (PEPC) website. Scoping ended on August 6, 2010. The scoping newsletter and the list of agencies and organizations contacted during preparation of the LACP/EA is included in Appendix A.

Internal scoping was conducted by an interdisciplinary team in Yellowstone National Park. Interdisciplinary team members met regularly throughout the course of this planning process to discuss the purpose and need for the project; various alternatives; potential environmental impacts; past, present, and reasonably foreseeable projects that may have cumulative effects; and possible mitigation measures. The team also gathered background information and conducted field visits and site surveys.

5.2 ENVIRONMENTAL ASSESSMENT REVIEW

The Environmental Assessment will be released for 30 days of public review from January 31 – March 2, 2012. To inform the public of the availability of the Environmental Assessment, the National Park Service published and distributed a letter and press release to various agencies, tribes, and members of the public on the park's mailing list, and developed a press release for publication in local newspapers. Copies of the Environmental Assessment/Assessment of Effect will be provided to interested individuals, upon request. Copies of the document will also be available for review on the Internet at <http://parkplanning.nps.gov/lakecompplan>.

The public is encouraged to submit their written comments to the National Park Service at the address provided at the beginning of this document. Following the close of the comment period, all public comments will be reviewed and analyzed, prior to the release of a decision document. The National Park Service will issue responses to substantive comments received during the public comment period, and will make appropriate changes to the Environmental Assessment, as needed.

5.3 RELATED LAWS, REGULATIONS AND POLICIES

The following laws, regulations and policies represent some of the guidance this plan must conform with which this LACP/EA must comply are described below.

NPS Guiding Laws, Regulations, and Policies

National Park Service Organic Act (1916) (16 USC 1) (NPS mission)

The key provision of the legislation establishing the NPS, referred to as the **1916 Organic Act**, is: *The National Park Service shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified . . . by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.*

1970 National Park Service General Authorities Act (as amended in 1978—Redwood Amendment)

This act prohibits the NPS from allowing any activities that would cause derogation of the values and purposes for which the parks have been established (except as directly and specifically provided by Congress in the enabling legislation for the parks). Therefore, all units are to be managed as national parks, based on their enabling legislation and without regard for their individual titles. Parks also adhere to other applicable federal laws and regulations, such as the Endangered Species Act, the National Historic Preservation Act, the Wilderness Act, and the Wild and Scenic Rivers Act. To articulate its responsibilities under these laws and regulations, the NPS has established management policies for all units under its stewardship (see **NPS Management Policies** below).

National Environmental Policy Act (NEPA) (42 USC 4341 *et seq.*)

NEPA requires the identification and documentation of the environmental consequences of federal actions. Regulations implementing NEPA are set forth by the President’s Council on Environmental Quality (CEQ) (40 CFR, Parts 1500–1508). CEQ regulations establish the requirements and process for agencies to fulfill their obligations under the act. The purposes of this Act are:

“To declare a national policy which will encourage productive and enjoyable harmony between man and his environment and biosphere and stimulate the health and welfare of man, to enrich the understanding of the ecological systems and natural resources important to the Nation, and to establish a Council on Environmental Quality.”

National Parks Omnibus Management Act of 1998

This act directs the NPS to use a broad program of the highest-quality science and information in managing and protecting units of the national park system.

Code of Federal Regulations, Revised July 2000

Title 36, Chapter 1, provides regulations “for the proper use, management, government, and protection of persons, property, and natural and cultural resources within areas under the jurisdiction of the National Park Service.”

NPS Management Policies 2006

The alternatives proposed by this LACP/EA and the assessment of their impacts are in part guided by NPS Management Policies 2006, which state that “The National Park Service will preserve the natural resources, processes, systems, and values of units in the national park system in an unimpaired condition, to perpetuate their inherent integrity and to provide present and future generations with the opportunity to enjoy them,” and “The National Park Service will protect, preserve, and foster appreciation of the cultural resources in its custody and demonstrate its respect

for the peoples traditionally associated with these resources through appropriate programs of research, planning, and stewardship.”

Other Applicable Federal Laws, Executive Orders, and Regulations

Historic Sites Act of 1935

This act declares as national policy the preservation for public use of historic sites, buildings, objects, and properties of national significance. It authorizes the Secretary of the Interior and the NPS to restore, reconstruct, rehabilitate, preserve, and maintain historic or prehistoric sites, buildings, objects, and properties of national historical or archeological significance.

National Historic Preservation Act of 1966, as Amended

Section 106 of this act requires federal agencies to consider the effects of their undertakings on properties listed or potentially eligible for listing on the National Register of Historic Places. All actions affecting the park’s cultural resources must comply with this legislation.

National Environmental Policy Act of 1969, as Amended

This act is implemented through regulations of the Council on Environmental Quality (40 CFR 1500–1508). The NPS has adopted procedures to comply with this act and the CEQ regulations, as found in Director’s Order 12, Conservation Planning, Environmental Impact Analysis, and Decision-Making, and its accompanying handbook.

Endangered Species Act of 1973, as Amended

This act requires all federal agencies to consult with the Secretary of the Interior on any project or proposal that could impact federally endangered or threatened plants and animals.

Section 404 of the Clean Water Act of 1977 (33 U.S.C. 403)

The objective of this act is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” NPS activities that involve the discharge of dredged or fill material into wetlands or other “waters of the United States” must comply with Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act (regulations and permit process are described in 33 CFR 320-331).

NPS Director’s Order 77, 1991

This director’s order (DO) provides guidance to park managers on the design, implementation, and evaluation of a comprehensive natural resource management program.

Director’s Order 77-1, Wetland Protection, and the accompanying Procedural Manual 77-1, Wetland Protection (Reissued February 2008)

These documents establish NPS policies, requirements, and standards for implementing Executive Order 11990: Protection of Wetlands (421 CFR 269611 see below). Included in DO 77-1 is adoption of a “no net loss of wetlands” goal, which was first proclaimed in 1989 by President George W. Bush and has been sustained by subsequent administrations.

Director’s Order 77-2, Floodplain Management and the accompanying Procedural Manual 77-2, Floodplain Management

These documents establish NPS procedures for implementing floodplain protection and management actions in units of the national park system as required by Executive Order 22988, Floodplain Management (see below).

Executive Order 11990, Protection of Wetlands

This executive order (EO) directs the NPS to avoid, to the extent possible, the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid the direct or indirect support of new construction in wetlands wherever there is a practicable alternative.

Executive Order 11988, Floodplain Management

This EO directs the NPS to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid the direct or indirect support of floodplain development wherever there is a practicable alternative.

Executive Order 11593, Protection and Enhancement of the Cultural Environment

This EO directs the NPS to support the preservation of cultural properties and to identify and nominate to the National Register cultural properties within the park and to “exercise caution . . . to assure that any NPS-owned property that might qualify for nomination is not inadvertently transferred, sold, demolished, or substantially altered.”

Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance

E.O. 13514 requires federal agencies to ensure new construction and major renovations comply with the 2006 Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (MOU). The MOU defined Guiding Principles for energy efficiency and sustainability and established the federal government’s leadership in ensuring that new direct and indirect federal undertakings meet those Guiding Principles. In 2008, the Office of Management and Budget issued guidance revising the Guiding Principles for New Construction and Major Renovation and adding Guiding Principles for Sustainable Existing Buildings.

5.4 LIST OF PREPARERS

Authors and Preparers

Eric Ackley, Landscape Architect Intern, Comprehensive Planning and Design

Eleanor Clark, Chief of Comprehensive Planning and Design

Robert Fuhrmann, Education Program Coordinator, Interpretation

Sean Heath, Outdoor Recreation Planner, Comprehensive Planning and Design

Alicia Murphy, Outdoor Recreation Planner, Comprehensive Planning and Design

Zehra Osman, Landscape Architect, Comprehensive Planning and Design

Larry Raffety, Environmental Protection Specialist, Comprehensive Planning and Design

Local Area Interdisciplinary Team, Yellowstone National Park

Katy Duffy, District Ranger, Interpretation

Maura Longdon, Lake District Ranger

Andrew Mitchell, Fire Ecologist, Wildland Fire

Patrick Perrotti, Resources Manager, Yellowstone Center for Resources (YCR)

Brad Ross, Lake District Ranger

Bruce Sefton, Maintenance

Becky Smith, Wildland Fire

Sue Williams, Concessions Management

Park-wide Interdisciplinary Team, Yellowstone National Park

Jim Evanoff, Environmental Protection Specialist, Maintenance
Mary Hektner, Botanist, YCR
Joe Krish, Fire Management Officer
Doug Madsen, Outdoor Recreation Planner, YCR
Linda Mazzu, Branch Chief of Compliance, YCR
Tim Reid, Chief Ranger
Dale Reinhart, Concessions Management
Dan Reinhart, Resource Management Operations Coordinator, YCR
Tobin Roop, Cultural Resources Branch Chief
Jo Suderman, Exhibit Technician, Interpretation
Nancy Ward, Deputy Chief of Maintenance

Contributors and Consultants, Yellowstone National Park

Heidi Anderson, Botanist, YCR
Colin Campbell, Acting Superintendent
Lynn Chan, Landscape Architect, Maintenance
Carrie Guiles, GIS Specialist, YCR
Kerry Gunther, Bear Management Specialist, YCR
Dave Hallac, Chief of YCR
Hank Heasler, Supervisory Geologist, YCR
George Helfrich, Chief of Concessions Management
Steve Iobst, Deputy Superintendent
Cheryl Jaworowski, Geologist, YCR
Bianca Klein, Environmental Qualities Specialist, YCR
Mary Murphy, Business Management Analyst, Concessions Management
Dan Rhodes, Landscape Architect, Maintenance
Ann Rodman, Supervisory GIS Specialist, YCR
Dan Wenk, Superintendent
Jennifer Whipple, Botanist, YCR
PJ White, Biologist, YCR

5.5 BIBLIOGRAPHY

Alexander, Christopher et al. *A Pattern Language*, New York: Oxford University Press, 1977, Patterns 120, 121, 124, 125.

Ashton, I.W. 2010. Observed and projected ecological response to climate change in the Rocky Mountains and Upper Columbia Basin: A synthesis of current scientific literature. Natural Resource Report NPS/ROMN/NRR-2010/220. National Park Service, Fort Collins, Colorado.

Ballard, W. B., J. S. Whitman, and C. L. Gardner. 1987. Ecology of an exploited wolf population in south-central Alaska. *Wildlife Monographs* 98:1–54.

Baril, L.M., L. Henry, and D.W. Smith. 2010. Yellowstone Bird Program 2009 Annual Report. National Park Service, Yellowstone Center for Resources, Yellowstone National Park, WY, YCR-2010-04.

Belt Collins West LTD. 2011. Fishing Bridge Historic District Cultural Landscape Inventory. Unpublished report for the National Park Service.

Bjornlie, D. and M. Haroldson. 2001. Grizzly bear use of insect aggregation sites documented from aerial telemetry and observations. Pages 44-51 in C. C. Schwartz and M. A. Haroldson, Eds. *Yellowstone grizzly bear investigations: Annual report of the Interagency Grizzly Bear Study Team*, 2000. U.S. Geological Survey, Bozeman, Montana.

Boyd, D., and D. H. Pletscher. 1999. Characteristics of dispersal in a colonizing wolf population in the central Rocky Mountains. *J. Wildl. Management* 63:1094–1108.

Breshears, D. D., N.S. Cobb, P.M. Rich, K.P. Price, C.D. Allen, R.G. Balice, W.H. Romme, J.H. Kastens, M.L. Floyd, J. Belnap, J.J. Anderson, O.B. Myers, and C.W. Meyer. 2005. Regional vegetation die-off in response to global-change-type drought. *Proceedings of the National Academy of Sciences of the United States of America* 102:15, 144-15, 148.

Carbyn, L.N. 1974. Wolf population fluctuations in Jasper National Park, Alberta, Canada. *Biological Conservation* 6:94-101.

Cayan, D. R., S. A. Kammerdiener, M. D. Dettinger, J. Caprio, and D. H. Peterson. 2001. Changes in the onset of spring in the western United States. *Bulletin of the American Meteorological Society* 82:399–415.

Chapman, R. C. 1977. The effects of human disturbance on wolves (*Canis lupus*). M.S. thesis, University of Alaska, Fairbanks.

Christiansen, R.L., and Blank, Jr., H.R., 1975, Geologic map of the Canyon Village Quadrangle, Yellowstone National Park, Wyoming: U.S. Geologic Quadrangle Map GQ-1192, Scale: 1:62,500.

Cordell, H.K., C.J. Betz, G.T. Green, and B. Stephens. 2008. Off-Highway vehicle recreation in the United States and its regions and states: A national report from the National Survey on Recreation and the Environment. U.S. Forest Service Internet Research Report Series.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. FWS/OBS-79/31.

Creel, S., J. E. Fox, A. Hardy, J. Sands, B. Garrott, and R. O. Peterson. 2002. Snowmobile activity and glucocorticoid stress responses in wolves and elk. *Conservation Biology* 16: 809-814.

Culpin, Mary Shivers. 2003. For the Benefit and Enjoyment of the People: A History of Concession Development in Yellowstone National Park, 1872–1966. Yellowstone National Park, Wyoming: Yellowstone Center for Resources.

Dennis, John C. and Boss, Stephen K., 2005, Impacts of roadway engineering on the shore of Yellowstone Lake, Yellowstone National Park: Annual Meeting of the Geological Society of America Abstracts with Programs, Salt Lake City, UT.

Dennis, John C. and Boss, Stephen K., 2009, Historical Documentation of Yellowstone Lake Shore, Yellowstone National Park, Wyoming: Annual Meeting of the Geological Society of America Abstracts with Programs, Portland, Oregon.

Diaz, H. F., and J. K. Eischeid. 2007. Disappearing “alpine tundra” Köppen climatic type in the western United States. *Geophysical Research Letters* 34:L18707.

Dratch, P. A., and P. J. P. Gogan. 2010. Bison conservation initiative. Bison conservation genetics workshop: Report and recommendations. Natural Resource Report NPS/NRPC/BRMD/NRR--2010/257. National Park Service, Fort Collins, Colorado.

Eberhardt, L. L. and R. Knight. 1996. How many grizzlies in Yellowstone? *J. Wildlife Management* 60:416-421.

Eberhardt, L. L. 2002. A paradigm for population analysis of long-lived vertebrates. *Ecology* 83:2841–2854.

Environmental Protection Agency, The Green Book Nonattainment Areas for Criteria Pollutants, <http://www.epa.gov/airquality/greenbook/index.html>, accessed 6/15/2011.

Farrell, Jamie, Smith, R.B., Taira, T., Chang, W.L., and Puskas, C.M., 2010, Dynamics and rapid migration of the energetic 2008-2009 Yellowstone Lake earthquake swarm, *Geophysical Research Letters*, v. 37, L19305, doi:10.1029/2010 GL044605.

Federal Transit Association. 2006. Transit noise and vibration impact assessment. <http://www.ntis.gov>, accessed 1/25/2012.

Fritts, S. H., and W. J. Paul. 1989. Interactions of wolves and dogs in Minnesota. *Wildlife Society Bulletin* 17:121–123.

Fuller, T. K., W. F. Berg, G. I. Radde, M. S. Lenarz, and G. B. Joselyn. 1992. A history and current estimate of wolf distribution and numbers in Minnesota. *Wildlife Society Bulletin* 20:42–55.

Great Plains Flora Association. 1986. *Flora of the Great Plains*. Lawrence: University Press of Kansas.

Gunther, K.A. 1994. Bear management in Yellowstone National Park, 1960–1993. *International Conference for Bear Resource Management* 9(1):549–560.

Gunther, K. A., and H. E. Hoekstra. 1998. Bear-inflicted human injuries in Yellowstone National Park, 1970-1994. *Ursus* 10:377-384.

Gunther, K.A., M. A. Haroldson, K. Frey, .L. Cain, J. Copeland, and C.C. Schwartz.. 2004. Grizzly bear–human conflicts in the Greater Yellowstone Ecosystem 1992–2000. *Ursus* 15(1):10–22.

Halbert, N. 2003. The utilization of genetic markers to resolve modern management issues in historic bison populations: Implications for species conservation. Dissertation, Texas A&M University, College Station, Texas.

Halbert, N., and J. Derr. 2007. A comprehensive evaluation of cattle introgression into US Federal bison herds. *Journal of Heredity* 98:1-12.

Hamlin, K.L. 2005. Monitoring and assessment of wolf–ungulate interactions and population trends within the greater Yellowstone area, southwestern Montana, and Montana statewide. Unpublished report to the Montana Fish, Wildlife and Parks, Helena, MT.

Haroldson, M.A. 2009. Assessing trend and estimating population size from counts of unduplicated females. Pages 9-14 in C.C. Schwartz, M.A. Haroldson, and K. West, editors. *Yellowstone grizzly bear investigations: Annual report of the Interagency Grizzly Bear Study Team, 2008*. U.S. Geological Survey, Bozeman, MT, USA.

Hardoldson, M.A. and S. Podruzny, and R. Renkin. 2003. Whitebark pine cone production. Pages 41-43 in C. C. Schwartz and M. A. Haroldson, eds. *Yellowstone grizzly bear investigations: annual report of the Interagency Grizzly Bear Study Team, 2002*. U.S. Geological Survey, Bozeman, MT.

Hilderbrand, G.V., S.G. Jenkins, C.C. Schwartz, T.A. Hanley, and C.T. Robbins. 1999. Effect of seasonal differences in dietary meat intake on changes in body mass and composition in wild and captive bears. *Can. J. Zool.* 77:1623-1630.

James R. McDonald Architects. 1997. *Historic Structures Report: Lake Lodge, Yellowstone National Park, Wyoming*. Unpublished report for TW Recreational Services and the National Park Service.

Jimenez, M. D. 1995. Tolerance and respect help Nine-Mile wolves recover. *International Wolf* 5:18–19.

Jimenez, M.D., D.W. Smith, D.R. Stahler, S.A. Becker, E. Albers, R.F. Krischke, S. Woodruff, R. McIntyre, M. Metz, J. Irving, R. Raymond, C. Anton, K. Cassidy-Quimby, and N. Bowersock. 2011. *Wyoming Wolf Recovery 2010 Annual Report*. Pages WY-1 to WY-30 in U.S. Fish and Wildlife Service *Rocky Mountain Wolf Recovery 2010 Annual Report*. USFWS, Ecological Services, 585 Sheppard Way, Helena, Montana, 59601

Joslin, G., and H. Youmans, coordinators. 1999. Effects of recreation on Rocky Mountain wildlife: A Review for Montana. Committee on Effects of Recreation on Wildlife, Montana Chapter of The Wildlife Society. 307 pp.

Knight, R. R., D. J. Mattson, and B. M. Blanchard. 1984. Movements and habitat use of the Yellowstone grizzly bear. Interagency Grizzly Bear Study Team, Montana State University, Bozeman, Montana.

Knowles, N., M. D. Dettinger, and D. R. Cayan. 2006. Trends in snowfall versus rainfall in the western United States. *Journal of Climate* 18:4,545–544,559.

Koch, E.D., and C.R. Peterson. 1995. Amphibians and reptiles of Yellowstone and Grand Teton national parks. University of Utah Press: Salt Lake City, UT.

Koel, T.M., P.E. Bigelow, P.D. Doepke, B.D. Ertel, and D.L. Mahony. 2005a. Nonnative lake trout result in Yellowstone cutthroat trout decline and impacts to bears and anglers. *Fisheries* 30(11):10-19.

Koel, T.M., J.L. Arnold, P.E. Bigelow, P.D. Doepke, B.D. Ertel, and D.L. Mahony. 2005b. Yellowstone Fisheries and Aquatic Sciences: annual report, 2004. National Park Service, Yellowstone Center for Resources, Yellowstone National Park, Wyoming, USA.

Koel, T.M., D.L. Mahony, K.K. Kinnan, C. Rasmussen, C.J. Hudson, S. Murcia, and B.L. Kerans. 2006. *Myxobolus cerebralis* in native cutthroat trout of the Yellowstone Lake ecosystem. *Journal of Aquatic Animal Health* 18:157-175.

Lentz, Catherine. 1991. HUDAT Archeology. Memorandum to Management Assistant from Cultural Resources Management Specialist, Yellowstone National Park, WY.

Manni, M.F., M. Littlejohn, J. Evans, J. Gramann, and S.J. Hollenhorst. 2007. Yellowstone National Park visitor study, summer 2006. Park Studies Unit, Visitor Services Project, Report 178. U.S. Department of the Interior, National Park Service, Washington, D.C.

Mattson, D.J., R.R. Knight, and B.M. Blanchard. 1987. The effects of developments and primary roads on grizzly bear habitat use in Yellowstone National Park, Wyoming. Pages 259-273 *in* Bears: their biology and management. Proceedings of the 7th International Conference on Bear Research and Management, Williamsburg, VA, USA.

Mattson, D.J. and R. R. Knight. 1991. Effects of access on human-caused mortality of Yellowstone grizzly bears. USDI National Park Service, Interagency Grizzly Bear Study Team Report 1991B.

Mattson, D.J., B. M Blanchard, and R. R. Knight. 1991. Food habits of Yellowstone grizzly bears, 1977-1987. *Canadian Journal Zoology* 69:1619-1629.

Mattson, D.J. and D. P. Reinhart. 1995. Influences of cutthroat trout (*Onchorhynchus clarki*) on behavior and reproduction of Yellowstone grizzly bears (*Ursus arctos*), 1975-1989. *Canadian Journal of Zoology* 73 :2072-2079.

Mattson, D. J. 1997. Selection of micro sites by grizzly bears to excavate biscuitroots. *Journal of Mammalogy* 78:228-238.

Mattson, D. J. and D. P. Reinhart. 1997. Excavation of red squirrel middens by Yellowstone Grizzly Bears. *Journal of Applied Ecology*. 34:926-940.

Mattson, D. J. 2001. Myrmecophagy by Yellowstone grizzly bears. *Canadian Journal of Zoology* 79:779-793.

Mattson, D. J., M. G. French, and S. P. French. 2002. Consumption of earthworms by Yellowstone grizzly bears. *Ursus* 13: 105-110.

McEneaney, T. 2006. Yellowstone bird report, 2005. CYR-2006-2, National Park Service, Yellowstone Center for Resources, Yellowstone National Park, WY.

McEneaney, T. 2007. Yellowstone bird report. National Park Service, Yellowstone Center for Resources, Yellowstone National Park, WY, YCR-NR-2007-01.

Meagher, M. 1973. The bison of Yellowstone National Park. National Park Service Scientific Monograph Series No. 1.

Mech, L. D., S. H. Fritts, G. L. Radde, and W. J. Paul. 1988. Wolf distribution and road density in Minnesota. *Wildlife Society Bulletin* 16:8-587.

Mech, L. D., and L. Boitani. 2003. Wolf social ecology. Pages 1-34 in L. D. Mech, and L. Boitani, eds. *Wolves: Behavior, Ecology, and Conservation*. The University of Chicago Press, Chicago.

Mladenoff, D. J., T. A. Sickley, R. G. Haight, and A. P. Wydeven. 1995. A regional landscape analysis and prediction of favorable gray wolf habitat in the northern Great Lakes region. *Conservation Biology* 9:279-294.

Mote, P. W., A. F. Hamlet, M. P. Clark, and D. P. Lettenmaier. 2005. Declining mountain snowpack in western North America. *Bulletin of the American Meteorological Society* 86:39-49.

Murphy, K.M., T. Potter, J. Halfpenny, K. Gunther, T. Jones, and P. Lundberg. 2004. The presence and distribution of Canada lynx (*Lynx canadensis*) in Yellowstone National Park, Wyoming. Unpublished final report, Yellowstone National Park, WY.

Nabokov, P. and L. Loendorf. 2002. American Indians and Yellowstone National Park. National Park Service, Yellowstone Center for Resources.

National Park Service. 1984. Fishing Bridge and the Yellowstone Ecosystem: A Report to the Director. Government Printing Office, Denver, CO.

National Park Service. 1997. Historic American and Engineering Record (HAER). Yellowstone National Park HAER History and Photographs of Bridges, Volumes I, II, and III, Library of Congress, Washington, D.C.

National Park Service. Management Policies 2006.

National Park Service (NPS), 2000. *Director's Order (D.O.) #47, Soundscape Preservation and Noise Management*.

National Park Service, U.S. Department of the Interior. 2010. Yellowstone resources and issues: An annual compendium of information about Yellowstone National Park. Yellowstone National Park, WY.

Natural Resource Council. 2002. Ecological dynamics on Yellowstone's northern range. The National Academics Press, Washington, D.C..

NPA Data Services. 2008. Montana population projections.

NPA Data Services. 2009. Montana population projection: percent change between census 2000 and NPA projections for 2030, map.

Paquet, P. C., and L. N. Carbyn. 2003. Gray wolf (*Canis lupus* and Allies). Pages 482–510 in G. A. Feldhamer, B. C. Thompson, and J. A. Thompson, eds. *Wild Mammals of North America*. The John Hopkins University Press, Baltimore.

Patla, D.A. and C.R. Peterson. 2004. Amphibian and Reptile Inventory and Monitoring, Grand Teton and Yellowstone National Park, 2000-2003 Final Report.

Pederson, G. T., L. J. Graumlich, D. B. Fagre, T. Kipfer, and C. C. Muhlfeld. 2010. A century of climate and ecosystem change in western Montana: What do temperature trends portend? *Climatic Change* 98:133–154.

Phillips, M.P., and D.W. Smith. 1996. *The wolves of Yellowstone*. Voyageur Press, Stillwater, Minnesota, USA.

Pierce, K.L., Despain, D., Whitlock, C., Cannon, K.P. Meyer, G.A., and Morgan L.A., 2003, Quaternary geology and ecology of the Greater Yellowstone area *in* Quaternary Geology of the United States (ed.) Don J. Easterbrook, 16th INQUA Congress, p. 313-344.

Plumb, G. E., and R. Sucec. 2006. A bison conservation history in the U.S. National Parks. *Journal of the West* 45:22-28.

Plumb, G. E., P. J. White, M. B. Coughenour, and R. L. Wallen. 2009. Carrying capacity, migration, and dispersal in Yellowstone bison. *Biological Conservation* 142:2377–2387.

Podruzny, S. and K. Gunther. 2001. Spring Ungulate Availability and Use by Grizzly Bears in Yellowstone National Park. Pages 33-36 *in* C.C. Schwartz and M.A. Haroldson, editors. *Yellowstone Grizzly Bear Investigations: Annual report of the Interagency Grizzly Bear Study Team, 2000*. U.S. Geological Survey. Bozeman, Montana.

Raffa, K. F., B. H. Aukema, B. J. Bentz, C. A.L., J. A. Hicke, M. G. Turner, and W. H. Romme. 2008. Cross-scale drivers of natural disturbances prone to anthropogenic amplification: Dynamics of biome-wide bark beetle eruptions. *BioScience* 58:501–517.

Reinhart, D. P., M. A. Haroldson, D. J. Mattson, and K. A. Gunther. 2001. Effects of exotic species on Yellowstone grizzly bears. *Western North American Naturalist* 61(3):227- 288.

Richmond, G.M., 1977, Surficial Geologic Map of the Canyon Village Quadrangle, Yellowstone National Park, Wyoming: U.S. Geologic Quadrangle Map I-652, Scale: 1:62,500.

Robison, H.L., c.c. Schwartz, J.D. Petty, and P.F. Brussard. 2006. Assessment of pesticide residues in army cutworm moths (*Euxoa auxiliaris*) from the Greater Yellowstone Ecosystem and their potential consequences to foraging grizzly bears (*Ursus arctos horribilis*). *Chemosphere* 64: 1704-1712.

Rodman, A., H.F. Shovic, and D. Thoma. 1996. Soils of Yellowstone National Park. Yellowstone Center for Resources, Yellowstone National Park, Wyoming, YCR-NRSR-96-2.

Ruediger, B. et al. 2000. Canada Lynx Conservation Assessment and Strategy. Unpublished report to the U.S. Forest Service, U.S. Fish and Wildlife Service, Bureau of Land Management, and National Park Service.

Sargent, Liz HLA, In association with Wiss, Janney, Elstner Associates, Inc. Lake Historic District CLI, 2012. Initial drafts prepared by Shapins Belt Collins of Boulder, CO in 2009.

Sargent, Liz HLA, In association with Wiss, Janney, Elstner Associates, Inc. Fishing Bridge Historic District CLI, 2012. Initial drafts prepared by Shapins Belt Collins of Boulder, CO in 2009

Schullery, P., and L. H. Whittlesey. 2006. Greater Yellowstone bison distribution and abundance in the early historical period. Pages 135-140 in A. W. Biel, editor. Greater Yellowstone public lands: proceedings of the eighth biennial scientific conference on the greater Yellowstone ecosystem, Yellowstone National Park, Wyoming.

Schwandt, J.W. 2006. Whitebark Pine in Peril: A case for restoration. USDA Forest Service, Report R1-06-28, Missoula, Montana.

Schwartz, C. C., M. A. Haroldson, K. A. Gunther, and D. Moody. 2002. Distribution of grizzly bears in the Greater Yellowstone Ecosystem, 1990–2000. *Ursus* 13:203–212

Schwartz, C. C., M. A. Haroldson, K. A. Gunther, and D. Moody. 2006b. Distribution of grizzly bears in the Greater Yellowstone Ecosystem in 2004. *Ursus* 17(1):63–66.

Schwartz, C. C., M. A. Haroldson, and G. C. White. 2006c. Survival of cub and yearling grizzly bears in the Greater Yellowstone Ecosystem, 1983–2001. Pages 33–43 in C. C. Schwartz, M. A. Haroldson, G. C. White, R. B. Harris, S. Cherry, K. A. Keating, D. Moody, and C. Servheen, authors. Temporal, spatial, and environmental influences on the demographics of grizzly bears in the Greater Yellowstone Ecosystem. *Wildlife Monographs* 161.

Stewart, I. T., D. R. Cayan, and M. D. Dettinger. 2005. Changes toward earlier streamflow timing across western North America. *Journal of Climate* 18:1136–1155.

Thiel, R. P., S Merrill, and L. D. Mech. 1998. Tolerance by denning wolves, *Canis lupus*, to human disturbance. *Canadian Field-Naturalist* 112:340–342.

Thurber, J. M. R. O. Peterson, T. D. Drummer, and S. A. Thomasma. 1994. Gray wolf response to refuge boundaries and roads in Alaska. *Wildlife Society Bulletin* 22:61–68.

Trettin, Carl. 1986. *Northern Forested Wetlands: Ecology and Management*. CRC Press. Boca Raton, FL.

United States Fish and Wildlife Service. 1982. *Grizzly Bear Recovery Plan*. USDI USFWS. Denver, CO.

U.S. Fish and Wildlife Service. 1993. *Grizzly bear recovery plan*. Missoula, MT, USA.

U.S. Fish and Wildlife Service. 2002. *Biological Opinion on greater Yellowstone ecosystem snowmobile use consultation*. Helena, MT, USA.

United States Fish and Wildlife Service. 2006. *The 2005 North American Trumpeter Swan Survey*.

United States Fish and Wildlife Service. 2007. *Endangered and threatened wildlife and plants; 90-day finding on a petition to list the Yellowstone National Park bison herd as endangered*. *Federal Register* 72:45717–45722.

U.S. Fish and Wildlife Service. 2011. *Grizzly Bear (Ursus arctos horribilis), 5-Year Review: Summary and Evaluation*. Missoula, MT, USA.

U.S. Fish and Wildlife Service, Montana Fish, Wildlife & Parks, Nez Perce Tribe, National Park Service, Blackfoot Nation, Confederated Salish and Kootenai Tribes, Wind River Tribes, Washington Department of Wildlife, Oregon Department of Wildlife, Utah Department of Natural Resources, and USDA Wildlife Services. 2011. *Rocky Mountain Wolf Recovery 2010 Interagency Annual Report*. C.A. Sime and E. E. Bangs, eds. USFWS, Ecological Services, 585 Shepard Way, Helena, Montana. 59601.

U.S. Forest Service. 2006a. *Final environmental impact statement, Forest plan amendment for grizzly bear habitat conservation for the greater Yellowstone area National Forests*.

U.S. Forest Service. 2009. *Draft supplemental environmental impact statement, Forest plan amendments for access management within the Selkirk and Cabinet-Yaak grizzly bear recovery zones*.

USGS, 2011, Interagency Grizzly Bear Study Team, <http://www.nrm-sc.usgs.gov/research/igbst-home.htm>

Varley, J.D. 1981. *A history of fish stocking activities in Yellowstone National Park between 1881 and 1980*. Information paper No. 35. Yellowstone National Park.

Varley, J.D., and P. Schullery. 1998. *Yellowstone fishes: Ecology, history, and angling in the park*. Stackpole Books, Mechanicsburg, Pennsylvania.

Westerling, A. L., H. G. Hidalgo, D. R. Cayan, and T. W. Swetnam. 2006. *Warming and earlier spring increase western US forest wildfire activity*. *Science* 313:940–943.

White, D., Jr., K.C. Kendall, and H.D. Picton. 1999. Potential energetic effects of mountain climbers on foraging grizzly bears. *Wildlife Society Bulletin* 27:146-151.

Whittlesey, Lee H. 2007. History of the Lake Area Prepared for the Lake Charette. Unpublished paper for the National Park Service, Yellowstone National Park Research Library, Gardiner, Montana.

Wyoming Natural Diversity Database. <http://uwadmnweb.uwyo.edu/wyndd/> (Wyoming Plant and Animal Species of Concern; accessed 2011).

Yellowstone National Park. 1973. Wilderness Recommendation.

1993. Draft Backcountry Management Plan.

2000. Long Range Interpretive Plan.

2002. Yellowstone Revegetation Guidelines.

2004. Yellowstone Lighting Guidelines.

Design Standards Websites:

Yellowstone Sign Code Standards

<http://www.nps.gov/yell/parkmgmt/loader.cfm?csModule=security/getfile&pageid=587948>

Yellowstone Vegetation Management

<http://www.nps.gov/yell/parkmgmt/loader.cfm?csModule=security/getfile&pageid=587952>

Yellowstone Outdoor Lighting Standards

<http://www.nps.gov/yell/parkmgmt/loader.cfm?csModule=security/getfile&pageid=587956>

Appendix A: Scoping and Consultation Correspondence

The following is a list of tribes, agencies, local government, and organizations that were sent a scoping letter. The names of private individuals have been omitted from this list.

Tribes

Assiniboine and Sioux Tribes, Fort Peck
Blackfeet Tribe
Cheyenne River Sioux Tribe
Chippewa Cree Tribe
Coeur d'Alene Tribe
Comanche Tribe of Oklahoma
Confederated Salish and Kootenai Tribes
Confederated Tribes of the Colville Indian Reservation
Confederated Tribes of the Umatilla Indian Reservation
Crow Creek Sioux Tribe
Crow Tribe
Eastern Shoshone Tribe
Flandreau Santee Sioux Tribe
Gros Ventre and Assiniboine Tribes
Kiowa Tribe of Oklahoma
Lower Brule Sioux Tribe
Nez Perce Tribe
Northern Arapaho Tribe
Northern Cheyenne Tribe
Oglala Sioux Tribe
Rosebud Sioux Tribe
Shoshone-Bannock Tribes
Sisselton-Wahpeton Sioux Tribe
Spirit Lake Sioux Tribe
Standing Rock Sioux Tribe
Turtle Mountain Band of Chippewa Indians
Yankton Sioux Tribe

Agencies/Federal

Federal Highway Administration
United States Army Corps of Engineers
United States Department of Agriculture, NRCS
United States Environmental Protection Agency, Region 8
United States Fish and Wildlife Service
United States Forest Service, Beaverhead NF, Bridger-Teton NF, Custer NF, Gallatin NF, Shoshone NF, Targhee NF

Local Government

Chamber of Commerce Billings, MT
Chamber of Commerce Bozeman, MT
Chamber of Commerce Cody, WY
Chamber of Commerce Cooke City, MT

Chamber of Commerce Gardiner, MT
Chamber of Commerce Idaho Falls, ID
Chamber of Commerce Jackson, WY
Chamber of Commerce Lander, WY
Chamber of Commerce Livingston, MT
Chamber of Commerce Pinedale, WY
Chamber of Commerce Red Lodge, MT
Chamber of Commerce Riverton, WY
Chamber of Commerce West Yellowstone, MT
Gallatin County Commissioners, MT
Governor's Upper Yellowstone River Task Force, MT
Historic Preservation Board, Teton County, WY
Idaho Department of Parks and Recreation
Idaho Fish and Game Department
Montana Fish, Wildlife and Parks
Montana State Clearinghouse
Park County Commissioners, MT
Park County Commissioners, WY
Park County, MT
State Historic Preservation Officer, ID
State Historic Preservation Officer, MT
State Historic Preservation Officer, WY
State Planning Coordinator, WY
Teton County Commissioners, WY
Town of West Yellowstone, MT
Wyoming Department of Environmental Services
Wyoming Game and Fish
Wyoming Travel Commission

Organizations

Advisory Council on Historic Preservation
Alliance for the Wild Rockies
American Fisheries Society
American Heritage Center
American Wildlands
Bear Creek Council
Beartooth Alliance
Billings Public Library
Bozeman Public Library
Buffalo Bill Historical Center
Californian's for Western Wilderness
Cheyenne High Plains Audubon Society
Citizens for Teton Valley
Clear Creek Consulting Solutions
Defenders of the Rockies
Defenders of Wildlife
Environmental Science and Research Foundation
Forest Ecosystems Consulting
Fremont County Audubon Society

Great Bear Foundation
Greater Yellowstone Coalition
Idaho State University
Idaho Wildlife Federation
Jackson Hole Alliance for Responsible Planning
Livingston Public Library
Montana Audubon Council
Montana State University Libraries
Montana Wildlife Federation
National Parks Conservation Association
National Wildlife Federation
Northern Plains Resource Council
Northern Rockies Conservation Cooperative
Northwestern Energy
PCIA
Public Employees for Environmental Responsibility
Qwest
Sierra Club
Snake River Audubon Society
Star Valley Development Association
Stone Fly Society
Teton County Public Library
The Nature Conservancy
The Wilderness Society
University of Wyoming Libraries
Upper Missouri Breaks Audubon Society
US West
Utah Audubon Society
West Yellowstone Public Library
Wild Forever
Wilderness Watch
Wyoming Outdoor Council
Wyoming State Library
Wyoming Wildlife Federation
Yellowstone Association
Yellowstone Park Foundation
Yellowstone Research Library
Yellowstone River Conservation District Council
Yellowstone Valley Audubon Society



Lake Area Comprehensive Plan

Dear Friends,

Yellowstone National Park (YNP) has begun developing a long range comprehensive plan for the Lake developed area, which includes Fishing Bridge, Bridge Bay, and Lake Village. This plan will focus on protecting the area's resources while responding to changing visitor and resource needs and conditions.

We invite your involvement early in this process to give you an opportunity to assist in developing the comprehensive plan. Your comments will help us protect the fundamental resources and values important to the Lake Area.

Visitors to the Lake Area experience the changing character and scenery of Yellowstone Lake, which showcases views across the water into remote areas of the park. The intersection of lake, river, and land provides a diversity of plant and animal life, including the Yellowstone cutthroat trout and the grizzly bear. This wealth of resources has provided connections to human occupation and inspiration for more than 11,000 years. More recently, this area plays an important role in the interpretation of the park's long history, including the evolution of fisheries management and wildlife conservation. Also of note, the Lake Hotel will be celebrating its 125th anniversary in 2016, coinciding with the 100th anniversary of the National Park Service. With its rich cultural and natural resources, the Lake Area continues to be a destination for visitors seeking serenity and solitude.

As facilities age and resources change, Yellowstone National Park seeks a plan to guide future decisions regarding preservation of park resources and enhancing visitor needs. Thank you for your participation in this effort.

Suzanne Lewis
Superintendent



Yellowstone National Park's Lake Area is characterized by tranquility and a sense of history.

What is the Purpose of the Plan?

This plan will provide a framework for future decisions that:

- Preserve important cultural, natural, and scenic resources within the Lake developed area.
- Protect wildlife habitat and aquatic systems.
- Determine ways to enhance the visitor experience at the Lake Area.
- Establish desired future conditions for the resources and visitor experience in the Lake Area.
- Develop guidelines to respond to changing visitor and resource needs.

Your involvement is important!

Please see the last page for information on how to send your comments or suggestions for consideration in this plan.

Why is this Action Needed?

- **Protect Area Habitat:** The Lake Area is prime habitat for a wide range of animal and plant communities; it is the fundamental mission of the park that future development avoid impacts to these important natural resources.
- **Enrich the Visitor Experience:** The Fishing Bridge RV Park and Bridge Bay Campground sites need to be evaluated based on updated standards. There are several historic buildings that need to be evaluated for adaptive use in order to better serve the visitor.
- **Enhance Vehicular and Pedestrian Circulation:** Existing circulation patterns complicate access to facilities in the area; vehicles enter from the back instead of the front of the Lake Hotel. The lakefront, which is currently partially edged with a roadway, is a scenic resource area that may require options to reduce impacts. Pedestrian connections, viewing opportunities, and access to the water is needed for visitors to further enjoy the lakefront and walk between lakeside facilities.
- **Improve Infrastructure:** Aging utilities in the area need upgrades. The area also lacks sufficient consolidated employee housing and year-round office space. A fire camp location is needed to serve the east side of the park where fire may threaten facilities in this area.



What is the Timeline for the Lake Area Plan/Environmental Assessment (EA)?

Project milestones include:

- Public Scoping – July 6 – August 6, 2010
 - Lake Mess Hall, July 20, 2010, 6-8pm
 - The Holiday Inn, Cody, WY, July 21, 2010, 6-8pm
 - Bozeman Public Library, Bozeman, MT, July 28, 2010, 6-8pm
- Preparation of EA – Fall 2011
- Public Review of EA – Spring 2011
- Analysis of Public Comments – Summer 2011
- Preparation of the Plan, environmental compliance and the expected announcement of the decision – Fall 2011

Resources & Concerns

The Plan/EA will analyze potential impacts to a number of resources, including:

- Geology, soils, and vegetation
- Wildlife and species of special concern
- Water resources, floodplains, and wetlands
- Cultural resources, including tribal values
- Air quality, night sky, soundscapes
- Visitor use and experience
- Scenic resources
- Park operations
- Public health and safety

What are the Plan Objectives?

What does the NPS wish to accomplish with this plan?

Visitor Use

- Provide the visitor with opportunities to experience and be inspired by the Lake Area's resources and values while ensuring resource protection
- Increase visitor understanding and appreciation of the Lake Area's resources
- Provide for vehicle and pedestrian circulation that addresses visitor use for the area while protecting resources

Public Health & Safety

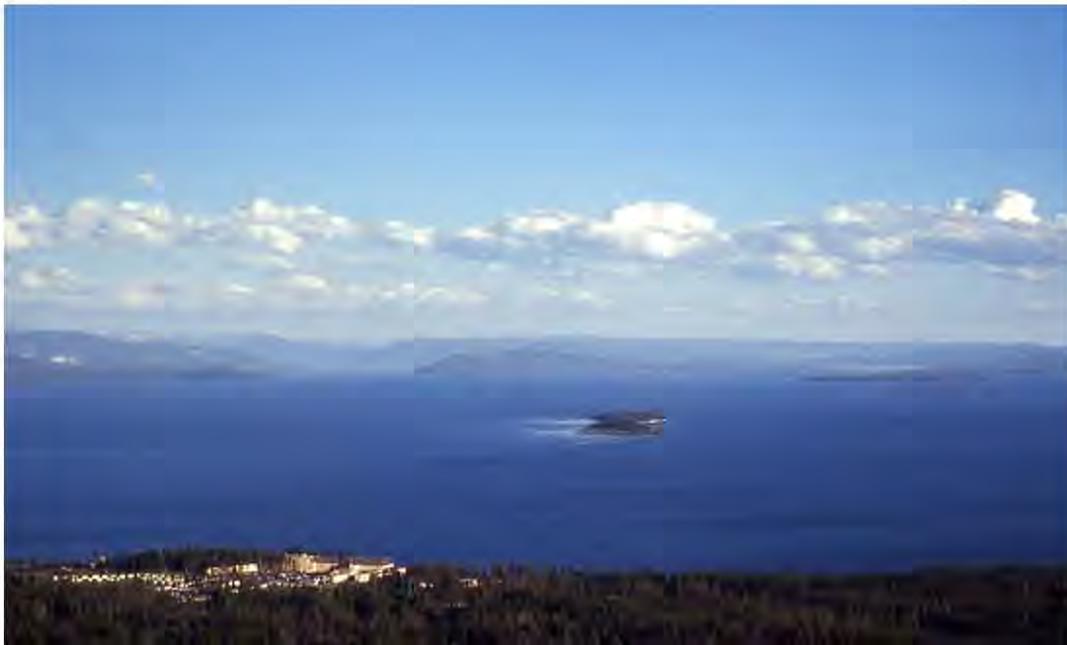
- Seek to manage the Lake Area for the safety of all visitors and employees
 - Provide safe access to the lakeshore
 - Prevent/reduce potential interactions between humans and wildlife

Resources

- Protect the Lake Area's natural, cultural, and scenic resources, including:
 - Diverse habitat associated with the intersection of lake, river, and land-based communities supporting extensive wildlife and native fisheries
 - Exceptional cultural resources such as the Lake Hotel, Fishing Bridge Museum, and rich human history
 - Unobstructed views across Yellowstone Lake
 - Protect the Lake Area's naturally-occurring sounds and dark night sky

Park Management/Operations

- Provide for replacement of aging facilities and infrastructure to better support visitor services



Your Input Counts

Suggestions and comments from the public are solicited during the public scoping period. This is the time when any interested individual, organization, or agency can provide relevant information or suggestions for consideration in this plan. Here are some questions to consider:

- *While visiting the Lake Village, Fishing Bridge, or Bridge Bay areas, what sights, sounds, and experiences are important to you?*
- *What are your additional issues/concerns about the plan that you think we should consider?*
- *Do you have other ideas, comments, or suggestions for us to consider during the development of the Lake Area Plan/EA?*

Written comments may be submitted through the NPS Planning, Environment and Public Comment (PEPC) website, <http://parkplanning.nps.gov>, hand-delivered to the park's headquarters in Mammoth Hot Springs, Wyoming, or mailed to:

Comprehensive Planning & Design
Lake Area Comprehensive Plan
P.O. Box 168
Yellowstone National Park, WY 82190

Comments will **not** be accepted by phone or e-mail. We strongly encourage you to submit your comments through PEPC. Simply select "Yellowstone NP" from the drop down box and follow the link for the Lake Area Comprehensive Plan.

All public comments must be received or postmarked by midnight, MST August 6th, 2010.



Please note that names and addresses of people who comment become part of the public record. We will make all submissions from organizations, businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses available for public inspection in their entirety. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. Although you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

**ARTS. PARKS.
HISTORY.**

Wyoming State Parks & Cultural Resources

State Historic Preservation Office
2301 Central Ave., Barrett Bldg, 3rd Floor
Cheyenne, WY 82002
307-777-5497
FAX: 307-777-6421
<http://wyoshpo.state.wy.us>

RECEIVED

DEC 21 2011

Superintendent's Office

Dec 19, 2011

Daniel Wenk
Superintendent
PO Box 168
Yellowstone National Park, WY 82190

re: Yellowstone National Park, Fishing Bridge Auto Repair Shop Rehabilitation (SHPO File # 1211BAB005)

Dear Mr. Wenk:

Thank you for consulting with the Wyoming State Historic Preservation Office (SHPO) regarding the above referenced undertaking. We have reviewed the associated report and find the documentation meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation (48 FR 44716-42). We concur with your finding that the Fishing Bridge Auto Repair Shop is a contributin element in the Fishing Bridge Historic District and will not be adversely affected by the undertaking as planned.

We recommend that Yellowstone National Park allow the undertaking to proceed in accordance with state and federal laws subject to the following stipulation:

If any cultural materials are discovered during construction, work in the area shall halt immediately, the federal agency and SHPO staff be contacted, and the materials be evaluated by an archaeologist or historian meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 22716, Sept. 1983).

This letter should be retained in your files as documentation of a SHPO concurrence with your finding of no historic properties affected. Please refer to SHPO project #1211BAB005 on any future correspondence regarding this undertaking. If you have any questions, please contact me at 307-777-8594.

Sincerely,



Brian Beadles
Historic Preservation Specialist



Matthew H. Mead, Governor
Milward Simpson, Director

