

## REFERENCES

---



## REFERENCES

---

- Adams, R.A., and J.A. Simmons. 2002. Directionality of drinking passes by bats at water holes: is there cooperation? *Acta Chiropterologica* 4(2).
- Alley, W. 2003. *Desalination of Ground Water: Earth Science Perspective*. Fact Sheet 075–03. Washington, D.C.: U.S. Department of the Interior, U.S. Geological Survey.
- Anning, D.W., N.J. Bauch, S.J. Gerner, M.E. Flynn, S.N. Hamlin, S.J. Moore, D.H. Schaefer, S.K. Anderholm, and L.E. Spangler. 2007. *Dissolved Solids in Basin-Fill Aquifers and Major River Systems in the Southwestern United States*. Scientific Investigations Report 2006–5315. Denver: U.S. Department of the Interior, U.S. Geological Survey.
- Atwood, D., J. Holland, R. Bolander, B. Franklin, D.E. House, L. Armstrong, K. Thorne, and L. England. 1991. *Utah Threatened, Endangered, and Sensitive Plant Field Guide*. Ogden, Utah: U.S. Forest Service, Intermountain Region.
- Barnes, J.D., L.N. Miller, and E.W. Wood. 1976. *Prediction of Noise from Power Plant Construction*. Prepared for Empire State Electric Energy Research Corporation, Schenectady, New York. Cambridge, Massachusetts: Bolt Beranek and Newman, Inc.
- Barrett, S.C.H., and J.R. Kohn. 1991. Genetic and evolutionary consequences of small population size in plants: implications for conservation. In *Genetics and Conservation of Rare Plants*, edited by D.A. Falk and K.E. Holsinger, pp. 3–30. New York: Oxford University Press.
- Beck, T.D.I. 1977. Sage grouse flock characteristics and habitat selection during winter. *Journal of Wildlife Management* 41:18–26.
- Belant, J.L., P.P. Woronecki, R.A. Dolbeer, and T.W. Seamans. 1998. Ineffectiveness of five commercial deterrents for nesting starlings. *Wildlife Society Bulletin* 26(2): 264–268.
- Beranek, L.L. 1998. *Noise and Vibration Control*. Institute of Noise Control Engineering. McGraw Hill.
- Blackett, R. 1996. *Tar Sand Resources of the Uinta Basin, Utah: A Catalog of Deposits*. Open File Report 335. Salt Lake City: U.S. Department of the Interior, Utah Geological Survey.
- Blue Ribbon Advisory Council on Climate Change. 2007. Report to Governor Jon M. Huntsman, Jr., October 3, 2007. Available at: [http://www.deq.utah.gov/BRAC\\_Climate/final\\_report.htm](http://www.deq.utah.gov/BRAC_Climate/final_report.htm). Accessed June 21, 2011.
- Bomford, M., and P.H. O'Brien. 1990. Sonic deterrents in animal damage control: a review of device tests and effectiveness. *Wildlife Society Bulletin* 18(4):411–422.
- Bradley, A.B., and J.F. Mustard. 2006. Characterizing the landscape dynamics of an invasive plant and risk of using remote sensing. *Ecological Applications* 16(3):1132–1147.
- Briggs, P. 2004. Effect of barn conversion on bat roost sites in Hertfordshire, England. *Mammalia* 68(4):353–364.
- Brix, K.V., D.K. Deforest, A. Fairbrother, and W.J. Adams. 2000. Critical Review of Tissue-Based Selenium Toxicity Thresholds for Fish and Birds. Paper presented at 24th Annual British Columbia Mine Reclamation Symposium, Williams Lake, British Columbia.

- Brown, V., C. Yocom, and A. Starbuck. 1958. *Wildlife of the Intermountain West*. Happy Camp, California: Naturegraph Publishers.
- Bureau of Land Management (BLM). 1986. Visual Resource Contrast Rating. BLM Manual H-8431-1. Washington, D.C.: U.S. Department of the Interior, Bureau of Land Management.
- . 1989. BLM National Back Country Byway Notice of Dedication for Nine Mile Canyon Road and its Associated Scenic Corridor.
- . 1992. *Visual Resource Management*. BLM Manual 8400. Washington, D.C.: U.S. Department of the Interior, Bureau of Land Management, Visual Resource Management Program.
- . 1993. *Riparian Area Management—Process for Assessing Proper Functioning Condition*. Technical Reference 1737-9. Denver: U.S. Department of the Interior, Bureau of Land Management, Proper Functioning Condition Work Group.
- . 1994. Diamond Mountain Resource Area Resource Management Plan and Record of Decision. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal District Office.
- . 1997. Fundamentals of Rangeland Health and their Companion Rules; Standards for Rangeland Health and Guidelines for Grazing Management for BLM in Utah. Available at: [http://www.blm.gov/ut/st/en/prog/grazing/utah\\_standards\\_for.html](http://www.blm.gov/ut/st/en/prog/grazing/utah_standards_for.html). Last accessed December 19, 2011
- . 1998. *General Procedural Guidance for Paleontological Resource Management*. BLM Manual H-8270-1. Washington, D.C.: U.S. Department of the Interior, Bureau of Land Management.
- . 1999a. Final Environmental Assessment for Resource Development Group Uinta Basin Gas Project, Uintah County, Utah. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal District Office.
- . 1999b. *Final Environmental Impact Statement, Ferron Natural Gas Project, Vol. 1*. Price, Utah: U.S. Department of the Interior, Bureau of Land Management, Price Field Office.
- . 1999c. *Nine Mile Canyon – know before you go: touring the Nine Mile Canyon backcountry byway*. Available at: <http://www.blm.gov/ut/st/en/fo/price/recreation/9mile.html>. Accessed August 2, 2007.
- . 2000. Soils Suitability Extension (SSE), version 1.0. ArcView tool. Denver: U.S. Department of the Interior, Bureau of Land Management, National Science and Technology Center.
- . 2001. *Biological Soil Crusts: Ecology and Management*. Technical Reference 1730-2. BLM/ID/ST-01/001+1730. Denver: U.S. Department of the Interior, Bureau of Land Management, National Science and Technology Center.
- . 2002a. Final Mineral Potential Report for the Vernal Planning Area Encompassing Approximately 5.1 Million Acres in Duchesne, Daggett, Uintah, and Grand Counties. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- . 2002b. *Threatened and endangered species plants GIS layer*. Unpublished data on file, U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office, Vernal, Utah.

- . 2003. Prairie dog/burrowing owl GIS layer. Unpublished data on file, U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office, Vernal, Utah.
- . 2004a. National Sage-Grouse Habitat Conservation Strategy—1.4.1. Guidance for the Management of Sagebrush Plant Communities for Sage-Grouse Conservation. Washington, D.C.: U.S. Department of the Interior, Bureau of Land Management.
- . 2004b. Revised Mineral Potential Report for the Vernal Planning Area Encompassing Approximately 5.1 Million Acres in Duchesne, Daggett, Uintah, and Grand Counties. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- . 2005a. *Draft Resource Management Plan and Environmental Impact Statement*. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- . 2005b. Final Environmental Impact Statement and Record of Decision for Castle Peak and Eightmile Flat Oil and Gas Expansion Project. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- . 2005c. Utah Land Use Plan Amendment for Fire and Fuels Management. UT-USO-04-01.
- . 2005d. Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement. DES 05-56. Washington, D.C.: U.S. Department of the Interior, Bureau of Land Management.
- . 2006a. *Gasco Production Company's Proposed Natural Gas Well Drilling Project: Riverbend Unit*. Environmental Assessment UT-080-2005-0322. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- . 2006b. *Chapita Wells/Stagecoach Area Draft Environmental Impact Statement*. UTU-080-2005-0010. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- . 2006c. *Oil Shale and Tar Sand Leasing Programmatic Environmental Impact Statement: Oil Shale and Tar Sand Resources*. Available at: [http://ostseis.anl.gov/documents/docs/OSTS\\_Overview\\_slides.pdf](http://ostseis.anl.gov/documents/docs/OSTS_Overview_slides.pdf). Accessed August 3, 2007.
- . 2006d. Bureau of Land Management land and mineral records-LR2000. Available at: <http://www.blm.gov/lr2000>. Accessed November 1, 2007.
- . 2006e. *Resource Development Group Uinta Basin Natural Gas Project Final Environmental Impact Statement*. UT-080-2003-0300V. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- . 2006f. Raptor nest GIS layer. Unpublished data on file. U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office, Vernal, Utah.
- . 2006g. *Utah National Environmental Policy Act (NEPA) Guide Book*. Available at: [http://www.blm.gov/pgdata/etc/medialib/blm/ut/natural\\_resources/nepa.Par.45418.File.dat/utahblmNEPAguidebook.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/ut/natural_resources/nepa.Par.45418.File.dat/utahblmNEPAguidebook.pdf). Accessed December 16, 2011.
- . 2007a. *Gasco Production Company's Wilkin Ridge Exploratory Drilling Project*. Draft Environmental Assessment UT-080-2006-329. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.

- . 2007b. Pariette Wetlands. Available at: [http://www.blm.gov/ut/st/en/fo/vernal/recreation\\_/pariette\\_wetlands.html](http://www.blm.gov/ut/st/en/fo/vernal/recreation_/pariette_wetlands.html). Accessed August 1, 2007.
- . 2007c. Price Field Office. Available at: <http://www.blm.gov/ut/st/en/fo/price.html>. Accessed August 1, 2007.
- . 2007d. Utah State Office. Utah BLM archaeological, historic, and paleontological attractions. Available at: <http://www.ut.blm.gov/antiquitiescentennial/places.htm>. Accessed August 1, 2007.
- . 2007e. *Wilderness Characteristics Review of the Desolation Canyon Area*. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- . 2008a. Approved Resource Management Plan Amendments/Record of Decision for Oil Shale and Tar Sands Resources to Address Land Use Allocations in Colorado, Utah, and Wyoming and Final Programmatic Environmental Impact Statement. BLM-WO-GI-09-001-3900. Washington, D.C.: U.S. Department of the Interior, Bureau of Land Management.
- . 2008b. *Vernal Field Office Record of Decision and Approved Resource Management Plan*. BLM-UT-PL-09-003-1610. UT-080-2005-71. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- . 2008c. *Vernal Field Office Proposed Resource Management Plan and Final Environmental Impact Statement*. BLM-UT-PL-09-003-1610. UT-080-2005-71. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- . 2008d. West Tavaputs Plateau Natural Gas Full Field Development Plan Draft Environmental Impact Statement. UT-070-05-055. Price, Utah: U.S. Department of the Interior, Bureau of Land Management, Price Field Office.
- . 2009. *Vernal Field Office Interagency 2008 Fire Management Plan*. May 2009. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- . 2010a. *West Tavaputs Plateau Natural Gas Full Field Development Plan Final Environmental Impact Statement*. UT-070-05-055. Available at: [http://www.blm.gov/ut/st/en/fo/price/energy/Oil\\_Gas/wtp\\_final\\_eis.html](http://www.blm.gov/ut/st/en/fo/price/energy/Oil_Gas/wtp_final_eis.html). Accessed December 15, 2011.
- . 2010b. *Greater Natural Buttes Draft Environmental Impact Statement*. DES 10-31. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office. Available at: [http://www.blm.gov/ut/st/en/fo/vernal/planning/nepa\\_/greater\\_natural\\_buttes.html](http://www.blm.gov/ut/st/en/fo/vernal/planning/nepa_/greater_natural_buttes.html). Accessed December 08, 2011.
- . 2011a. *Greater Natural Buttes Supplement to the Draft Environmental Impact Statement*. DES 10-31. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office. Available at: [http://www.blm.gov/ut/st/en/fo/vernal/planning/nepa\\_.html](http://www.blm.gov/ut/st/en/fo/vernal/planning/nepa_.html). Accessed August 17, 2011.
- . 2011b. *West Tavaputs Plateau Natural Gas Full Field Development Plan Final Environmental Impact Statement*. UT-070-05-055. Price, Utah: U.S. Department of the Interior, Bureau of Land Management, Price Field Office.

- Buto, S.G., T.A. Kenney, and S.J. Gerner. 2010. Land Disturbance Associated with Oil and Gas Development and Effects of Development-related Land Disturbance on Dissolved-solids Loads in Streams in the Upper Colorado River Basin, 1991, 2007, and 2025. Scientific Investigations Report No. 2010-5064. Reston, Virginia: U.S. Department of the Interior, U.S. Geological Survey.
- Cashion, W.B. 1967. Geology and Fuel Resources of the Green River Formation, Southeastern Uinta Basin, Utah and Colorado. Professional Paper 548. U.S. Department of the Interior, U.S. Geological Survey. Reston, Virginia.
- . 1973. Geologic and structure map of the Grand Junction quadrangle, Colorado and Utah. Miscellaneous Geologic Investigations Map I-736. Scale 1:250,000. Washington, D.C.: U.S. Department of the Interior, U.S. Geological Survey.
- Center for Climate Strategies. 2007. Utah Greenhouse Gas Inventory and Reference Case Projections, 1990–2020. Available at: <http://www.climatestrategies.us/library/library/download/409>. Accessed June 21, 2011.
- Center for Native Ecosystems. 2006. Black-tailed prairie dog. Available at: [http://www.nativeecosystems.org/species/black-tailed-prairie-dog/index\\_html/](http://www.nativeecosystems.org/species/black-tailed-prairie-dog/index_html/). Accessed August 11, 2006.
- Chenoweth, W. 1992. Uranium mining in the Uinta Basin, Utah. In *Hydrocarbon and Mineral Resources of the Uinta Basin, Utah and Colorado*, edited by Y. Fouch, V. Nuccio, and T. Chidsey, Jr. UGA-20. Salt Lake City: Utah Geological Association.
- Christensen, G.E. 1994. Earthquake ground shaking in Utah. *Utah Geological and Mineral Survey Public Information Series 29:4*.
- Clark, W.D., and J.R. Karr. 1979. Effects of highways on red-winged blackbird and horned lark populations. *Wilson Bulletin* 91:143–145.
- Clem, K. 1985. Oil and gas production summary of the Uinta Basin. In *Geology and Energy Resources, Uinta Basin of Utah*, edited by M.D. Picard. UGA-12. Salt Lake City: Utah Geological Association.
- Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. *Wildlife Society Bulletin* 28(4):967–985.
- Council on Environmental Quality. 1997. Environmental Justice: Guidance under the National Environmental Policy Act. Washington, D.C.: Council on Environmental Quality.
- . 2010. Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions. Available at: [http://ceq.hss.doe.gov/nepa/regs/Consideration\\_of\\_Effects\\_of\\_GHG\\_Draft\\_NEPA\\_Guidance\\_FINAL\\_02182010.pdf](http://ceq.hss.doe.gov/nepa/regs/Consideration_of_Effects_of_GHG_Draft_NEPA_Guidance_FINAL_02182010.pdf). Accessed December 15, 2011.
- Crawford, A. 1960. *Gilsonite and Related Hydrocarbons of the Uinta Basin, Utah*. Reprint No. 18-a. Salt Lake City: Utah Geological and Mineralogical Survey.

- Crawford, J.A., R.A. Olson, N.E. West, J.C. Mosley, M.A. Schroeder, T.D. Whitson, R.F. Miller, M.A. Gregg, and C.S. Boyd. 2004. Ecology and management of sage-grouse and sage-grouse habitat. *Journal of Rangeland Management* 57(1):2–19.
- Dechant, J.A., M.L. Sondreal, D.H. Johnson, L.D. Igl, C.M. Goldade, P.A. Rabie, and B.R. Euliss. 1999 (revised 2002). *Effects of Management Practices on Grassland Birds: Burrowing Owl*. Jamestown, North Dakota: Northern Prairie Wildlife Research Center.
- Doherty, K.E., D.E. Naugle, B.L. Walker, and J.M. Graham. 2008. Greater sage-grouse winter habitat selection and energy development. *Journal of Wildlife Management* 72:187–195.
- Donovan, T.M., F.R. Thompson III, J. Faaborg, and J.R. Probst. 1995. Reproductive success of migratory birds in habitat sources and sinks. *Conservation Biology* 9(6):1380–1395.
- Duchesne County. 2005. Duchesne County government web site. Available at: <http://duchesne.utah.gov/> Accessed August 1, 2007.
- Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1988. *The Birder's Handbook: A Field Guide to the Natural History of North American Birds*. New York: Simon and Schuster, Inc.
- Environmental Protection Agency (EPA). 1971. *Noise from Construction Equipment and Operations Building Equipment and Home Appliances*. NTID300.1 Prepared for the U.S. Environmental Protection Agency, Office of Noise Abatement and Control, Washington, D.C. Bolt, Beranek, and Newman.
- . 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. EPA 550/9-74-004. Washington, D.C.: U.S. Environmental Protection Agency, Office of Noise Abatement and Control.
- . 1994. Executive Order 12898 of February 11, 1994: Federal Actions to Address Environmental Justice in Minority Population and Low-Income Populations. Available at: <http://www.epa.gov/fedrgstr/eo/eo12898.htm>. Accessed September 1, 2009.
- . 1998. Interagency Workgroup on Air Quality Modeling: Phase II Summary Report and Recommendations for Modeling Long Range Transport Impacts. EPA-454/R/98-019. Research Triangle Park, North Carolina: U.S. Environmental Protection Agency, Air Quality Modeling Group.
- . 2004a. *Addendum User's Guide for the AMS/EPA Regulatory Model – AERMOD*. EPA-454/B-03-001. Research Triangle Park, North Carolina: Office of Air Quality Planning and Standards Air Quality Assessment Division.
- . 2004b. *Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs*. EPA-816-R-04-003. Washington, D.C.: U.S. Environmental Protection Agency, Office of Water, Office of Ground Water and Drinking Water, Drinking Water Protection Division, Prevention Branch.
- . 2007a. Current national recommended water quality criteria. Available at: <http://www.epa.gov/waterscience/criteria/wqcriteria.html>. Accessed July 2, 2007.

- . 2007b. Dose-response assessment for assessing health risks associated with exposure to hazardous air pollutants, Tables 1 and 2. Available at: <http://www.epa.gov/ttn/atw/toxsource/summary.html>. Accessed December 15, 2011.
- . 2007c. Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM<sub>2.5</sub>, and Regional Haze. EPA-454/B-07-002. Research Triangle Park, North Carolina: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Air Quality Analysis Division, Air Quality Modeling Group.
- . 2008. Integrated risk information system database. Available at: <http://cfpub.epa.gov/ncea/iris/index.cfm?fuseaction=iris.showSubstanceList>. Accessed December 15, 2011.
- . 2010a. *Notice Regarding Modeling for New Hourly NO<sub>2</sub> NAAQS*. Updated February 25, 2010. Available at: [http://www.epa.gov/scram001/no2\\_hourly\\_NAAQS\\_aermod\\_02-25-10.pdf](http://www.epa.gov/scram001/no2_hourly_NAAQS_aermod_02-25-10.pdf). Accessed December 15, 2011.
- . 2010b. State of knowledge: climate change, science. Available at: <http://www.epa.gov/climatechange/science/stateofknowledge.html>. Accessed August 8, 2010.
- . 2011a. 2011 U.S. greenhouse gas inventory report. Available at: <http://www.epa.gov/climatechange/emissions/usinventoryreport.html>. Accessed May 17, 2011.
- . 2011b. STORET data warehouse. Available at: <http://www.epa.gov/storet/dbtop.html>. Accessed July 20, 2011.
- . 2011c. Greenhouse gas equivalencies calculator. Available at: <http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results>. Accessed October 26, 2011.
- . 2011d. *Hydraulic Fracturing Research Study*. Available at: <http://www.epa.gov/safewater/uic/pdfs/hfresearchstudyfs.pdf>. Accessed December 15, 2011.
- Esmoil, B.J., and S.H. Anderson. 1995. Wildlife mortality associated with oil pits in Wyoming. *Prairie Naturalist* 27(2):81–88.
- Euliss, N.H., and R.L. Jarvis. 1991. Feeding ecology of waterfowl wintering on evaporation ponds in California. *Condor* 93:582–590.
- Federal Land Managers' Air Quality Related Values Workgroup (FLAG). 2000. *Phase I Report*. Denver: U.S. Department of the Interior, National Park Service, Air Resources Division. Available at: <http://199.128.173.141/Flag2000.pdf>. Accessed November 1, 2007.
- . 2010. *Guidance on Nitrogen and Sulfur Deposition Analysis Thresholds*. Available at: <http://www.nature.nps.gov/air/Pubs/pdf/flag/nsDATGuidance.pdf>. Accessed August 16, 2011.
- Fertig, W., R. Black, and P. Wolken. 2005. *Rangewide Status Review of Ute Ladies'-tresses* (*Spiranthes diluvialis*). Prepared for U.S. Fish and Wildlife Service and Central Utah Water Conservancy District.
- Fitzgerald, J.P., C.A. Meaney, and D.M. Armstrong. 1994. *Mammals of Colorado*. Denver: Denver Museum of Natural History; Niwot, Colorado: University Press of Colorado.

- Forman, R.T.T., and L.E. Alexander. 1998. Roads and their major ecological effects. *Annual Review of Ecology and Systematics* 29:207–231.
- Forman, R.T.T., D. Sperling, J.A. Bissonette, A.P. Clevenger, C.D. Cutshall, V.H. Dale, L. Fahrig, R. France, C.R. Goldman, K. Heanue, J.A. Jones, J. Swanson, J. Frederick, T. Turrentine, T.C. Winter, and C. Thomas. 2003. *Road Ecology: Science and Solutions*. Washington, D.C.: Island Press.
- Fox, D.G., A.M. Bartuska, J.G. Byrne, E. Cowling, R. Fisher, G.E. Likens, S.E. Lindberg, R.A. Linthurst, J. Messer, and D.S. Nichols. 1989. *A Screening Procedure to Evaluate Air Pollution Effects on Class I Wilderness Areas*. General Technical Report RM-168. Fort Collins, Colorado: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station.
- Franklin, M.A. 1992. *Schoenocrambe argillacea*. Unpublished report prepared by the Utah Natural Heritage Program. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office.
- Fukui, D., M. Murakami, S. Nakano, and T. Aoi. 2006. Effect of emergent aquatic insects on bat foraging in a riparian forest. *Journal of Animal Ecology* 75:1252–1258.
- Gelbard, J.L., and J. Belnap. 2003. Roads as conduits for exotic plant invasions in a semiarid landscape. *Conservation Biology* 17(2):420–432.
- Glisson, B. 2007. Final Report for Uinta Basin Hookless Cactus (*Sclerocactus wetlandicus* Hochstätter) Reconnaissance Survey of Habitat Areas along the Green River, Utah. Prepared for U.S. Fish and Wildlife Service, Utah Field Office, West Valley City, Utah.
- Guo, Q. 2004. Slow recovery in desert perennial vegetation following prolonged human disturbance. *Journal of Vegetation Science* 15:757–762.
- Haug, E.A., B.A. Millsap, and M.S. Martell. 1993. Burrowing owl (*Speotyto cunicularia*). In *The Birds of North America*, No. 149. Philadelphia: Academy of Natural Sciences; Washington, D.C.: American Ornithologists Union.
- Heil, K.D., and J.M. Porter. 1993. *Status report for Sclerocactus glaucus (K. Schum.) L. Benson*. Prepared for U.S. Fish and Wildlife Service. Farmington, New Mexico: Ecosphere Environmental Services, Inc.
- . 1994. *Sclerocactus* (Cactaceae): a revision. *Haseltonia—Yearbook of the Cactus and Succulent Society of America* 2.
- . 2004. *Sclerocactus*. In *Flora of North America: North of Mexico*, Vol. 4, edited by Flora of North America Editorial Committee, pp. 98–99, 199–201. New York: Oxford University Press.
- Herbst, D.B. 2006. Salinity controls on trophic interactions among invertebrates and algae of solar evaporation ponds in the Mojave Desert and relation to shorebird foraging and selenium risk. *Wetlands* 26:475–485.
- Hintze, L. 1988. *Geologic History of Utah*. Geology Studies Special Publication 7. Provo, Utah: Brigham Young University.

- Hochstätter, F. 1989. *Nieubeschrijving Sclerocactus wetlandicus species nova-een nieuwe Sclerocactus uit Uintah County, Utah, USA*. (English reprint in Hochstätter 1993a.) *Succulenta* (Netherlands) 68:123–124.
- . 1993a. *The Genus Sclerocactus (Revised)*. Manheim, Germany: F. Hochstätter.
- . 1993b. *Sclerocactus een revisie 3*. (English reprint in Hochstätter 1993a.) *Succulenta* (Netherlands) 72:82–92.
- Holzworth, G.C. 1972. *Mixing Heights, Wind Speeds, and Potential for Urban Air Pollution throughout the Contiguous United States*. Research Triangle Park, North Carolina: U.S. Environmental Protection Agency, Office of Air Programs.
- Incardona, J.P., M.G. Carls, H. Teraoka, C.A. Sloan, T.K. Collier, and N.L. Scholz. 2005. Aryl hydrocarbon receptor-independent toxicity of weathered crude oil during fish development. *Environmental Health Perspectives* 113(12):1755–1762.
- Independent Petroleum Association of Mountain States. 2009. *Uinta Basin Air Quality Study*. Denver: ENVIRON International Corporation. Available at: <ftp://ftp.environ.org/pub/webaccess/UBAQS/>. Accessed September 18, 2009.
- Intergovernmental Panel on Climate Change (IPCC). 2007a. Contribution of working group I to the fourth assessment report of the IPCC. In *Climate Change 2007: The Physical Science Basis*, edited by S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Avery, M. Tignor, and H.L. Miller. Cambridge, United Kingdom: Cambridge University Press; New York: Cambridge University Press. Available at: [http://www.ipcc.ch/publications\\_and\\_data/ar4/wg1/en/contents.html](http://www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html). Accessed May 17, 2011.
- . 2007b. *Climate Change 2007 Synthesis Report and IPCC Fourth Assessment Report*. Available at: [http://www.ipcc.ch/publications\\_and\\_data/ar4/syr/en/contents.html](http://www.ipcc.ch/publications_and_data/ar4/syr/en/contents.html). Accessed May 17, 2011.
- Jorns, W.V., C.H. Hembree, and G.L. Oakland. 1965. *Water Resources of the Upper Colorado River Basin—Technical Report*. Professional Paper 441. U.S. Department of the Interior, U.S. Geological Survey. Reston, Virginia.
- Jackrel, S.L., and R.S. Matlack. 2010. Influence of surface area, water level and adjacent vegetation on bat use of artificial water sources. *American Midland Naturalist* 164:74–79.
- Jacobson, S.L. 2005. *Mitigation Measures for Highway-caused Impacts to Birds*. General Technical Report PSW-GTR-191. U.S. Department of Agriculture, Forest Service. Washington, D.C.
- James, J.B., E.C. Hellgren, and R.E. Masters. 1999. Effects of deterrents on avian abundance and nesting density in electrical substations in Oklahoma. *Journal of Wildlife Management* 63(3):1009–1017.
- Karl, T.R., J.M. Melillo, and T.C. Peterson (eds.). 2009. *Global Climate Change Impacts in the United States*. Cambridge University Press.
- Kaufman, K. 1996. *Lives of North American Birds*. Boston: Houghton Mifflin.
- Kenney, T.A., S.J. Gerner, S.G. Buto, and L.E. Spangler. 2009. Spatially Referenced Statistical Assessment of Dissolved-solids Load Sources and Transport in Streams of the Upper Colorado River Basin. Scientific Investigations Report 2009-5007. U.S. Department of the Interior, U.S. Geological Survey. Reston, Virginia.

- Kingery, H.E. (ed.). 1998. *Colorado Breeding Bird Atlas*. Colorado Bird Atlas Partnership, Durango, and Colorado Division of Wildlife, Denver, Colorado.
- Klute, D.S., L.W. Ayers, M.T. Green, W.H. Howe, S.L. Jones, J.A. Shaffer, S.R. Sheffield, and T.S. Zimmerman. 2003. *Status Assessment and Conservation Plan for the Western Burrowing Owl in the United States*. Biological Technical Publication FWS/BTP-R6001-2003. Washington, D.C.: U.S. Department of the Interior, U.S. Fish and Wildlife Service.
- Knick, S.T., D.S. Dobkin, J.T. Rotenberry, M.A. Schroeder, W.M. Vander Hagen, and C. Van Riper, III. 2003. Teetering on the edge or too late? Conservation and research issues for avifauna of sagebrush habitats. *Condor* 105:611–634.
- Kruger, O. 2002. Analysis of nest occupancy and nest reproduction in two sympatric raptors: common buzzard *Buteo buteo* and goshawk *Accipiter gentilis*. *Ecography* 25(5):523–532.
- Kufeld, R.C. 1973. Foods eaten by the Rocky Mountain elk. *Journal of Range Management* 26:106–113.
- Liebermann, T.D., D.K. Mueller, J.E. Kircher, and A.F. Choquett. 1989. Characteristics and Trends of Streamflow and Dissolved Solids in the Upper Colorado River Basin, Arizona, Colorado, New Mexico, Utah, and Wyoming. Water-Supply Paper 2358. U.S. Department of the Interior, U.S. Geological Survey. Reston, Virginia.
- Little, E.E., J.F. Fairchild, and A.J. DeLonay. 1993. Behavioral methods for assessing impacts of contaminants on early life state fishes. *American Fisheries Society Symposium* 14:67–76.
- Luce, R.L., M.A. Bogan, M.J. O'Farrell, and D.A. Keinath. 2004. *Species Assessment for Spotted Bat (Euderma maculatum) in Wyoming*. Prepared for U.S. Department of the Interior, Bureau of Land Management, Wyoming State Office, Cheyenne.
- Lustick, S. 1976. Wetting as a means of bird control. *Bird Control Seminars Proceedings* 7:41–47.
- Lyon, A.G., and S.H. Anderson. 2003. Potential gas development impacts on sage grouse nest initiation and movement. *Wildlife Society Bulletin* 31:486–491.
- Lyon, L.J. 1983. Road density models describing habitat effectiveness for elk. *Journal of Forestry* 81:592–596.
- MacMahon, J.A. 1988. Warm deserts. In *North American Terrestrial Vegetation*, edited by M.G. Barbour and W.D. Billings, pp. 285–322. New York: Cambridge University Press.
- Manning, A.E. E., and C.M. White. 2001. Breeding biology of mountain plovers (*Charadrius montanus*) in the Unita Basin. *Western North American Naturalist* 61(2):223–228.
- Marsh, R.E., V.A. Erickson, and T.P. Salmon. 1991. *Bird Hazing and Frightening Methods and Techniques (with Emphasis on Containment Ponds)*. Davis, California: University of California, Department of Wildlife and Fisheries Biology.
- Meteyer C.U., R.R. Dubielzig, F.J. Dein, L.A. Baeten, M.K. Moore, J.R. Jehl, Jr., and K. Wesenberg. 1997. Sodium toxicity and pathology associated with exposure of waterfowl to hypersaline playa lakes of southeast New Mexico. *Journal of Veterinary Diagnostic Investigation* 9:269–280.

- Myers, M.S., C.M. Stehr, O.P. Olson, L.L. Johnson, B.B. McCain, S.L. Chan, and U. Varanasi. 1994. Relationships between toxicopathic hepatic lesions and exposure to chemical contaminants in English sole (*Pleuronectes vetulus*), starry flounder (*Platichthys stellatus*), and white croaker (*Genyonemus lineatus*) from selected marine sites on the Pacific Coast, USA. *Environmental Health Perspectives* 102(2):200–215.
- Naftz, D.L., T.D. Bullen, B.J. Stolp, and C.D. Wilkowske. 2008. Utilizing geochemical, hydrologic, and boron isotopic data to assess the success of a salinity and selenium remediation project, Upper Colorado River Basin, Utah. *The Science of the Total Environment* 392(1):1–11.
- National Academy of Sciences. 2010. *Advancing the Science of Climate Change*. Washington, D.C.: National Academic Press.
- National Biological Service. 1995. *Status Report of the San Juan River Studies*. Columbia, Missouri: National Biological Service, Midwest Science Center.
- National Climatic Data Center. 2003. Climate of 2003: June Utah drought. Available at: <http://www.ncdc.noaa.gov/oa/climate/research/2003/jun/st042dv00pcp200306.html>. Accessed August 2, 2007.
- National Oceanic and Atmospheric Administration. 2010. Mauna Loa CO<sub>2</sub> annual mean. Available at: <http://www.esrl.noaa.gov/gmd/ccgg/trends/>. Accessed January 11, 2011.
- National Park Service. 1990. *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. National Register Bulletin No. 38. Washington D.C.: U.S. Department of the Interior, National Park Service.
- National Scenic Byways. 2011. America's byways: Nine Mile Canyon backway. Available at: <http://www.byways.org/explore/byways/15780/>. Accessed May 5, 2011.
- Natural Resources Conservation Service (NRCS). 1996. *National Soil Survey Handbook* 430-VI. Washington, D.C.: U.S. Department of Agriculture, Natural Resources Conservation Service, U.S. Government Printing Office.
- . 2003. *Soil Survey of Uintah Area, Utah—Parts of Daggett, Grand, and Uintah Counties*. Washington, D.C.: U.S. Department of Agriculture, Natural Resources Conservation Service, in cooperation with Utah Agriculture Experiment Station, U.S. Department of the Interior—Bureau of Land Management, Bureau of Indian Affairs, U.S. Fish and Wildlife Service, Uintah Soil Conservation District, and the Daggett Soil Conservation District.
- . 2005. Electronic field office technical guide for Uintah County, Utah. Available at: <http://efotg.nrcs.usda.gov/treemenuFS.aspx?Fips=49047&MenuName=menuUT.zip>. Accessed October 2005.
- . 2006. Soil survey geographic database. Available at: <http://soildatamart.nrcs.usda.gov>. Accessed August 2, 2007.

- NatureServe. 2007. Encyclopedia of life. Available at: <http://www.natureserve.org/explorer>. Accessed October 8, 2007.
- . 2011. Plants/animals data search. Available at: <http://www.natureserve.org/explorer/servlet/NatureServe?init=Species>. Accessed October 13, 2011.
- Navarra, K.J., and R.J. Nelson. 2007. The dark side of light at night: physiological, epidemiological, and ecological consequences. *Journal of Pineal Research* 43(3):215–224.
- Neese, E., and F. Smith. 1982. Threatened and Endangered Plant Inventory for the Oil Shale Resource Management Plan—Final Report. Vernal, Utah: U.S. Department of the Interior, Bureau of Land Management, Vernal District Office, Book Cliffs Resource Area.
- Neuweiler, G. 2000. *The Biology of Bats*. Translated by E. Covey. New York: Oxford University Press.
- Novotny, V., and H. Olem. 1994. Water Quality: Prevention, Identification, and Management of Diffuse Pollution. New York: John Wiley & Sons, Inc.
- O'Dell, S. 1997. Polynuclear Aromatic Hydrocarbon Study: 1996 Annual Report on Data Collection Activities Concerning Suspected Contributions of Polynuclear Aromatic Hydrocarbons by Oil and Gas Leasing on Public Lands in the San Juan Basin, New Mexico. Prepared for U.S. Department of the Interior, Bureau of Land Management, Farmington District, Farmington, New Mexico.
- O'Farrell, M.J., E.H. Studier, and W.G. Ewing. 1971. Energy utilization and water requirements of captive *Myotis thysanodes* and *Myotis lucifugus* (Chiroptera). *Comparative Biochemistry and Physiology* 39A:549–552.
- Parrish, J.R., F.P. Howe, and R.E. Norvell. 1999. *Utah Partners in Flight Draft Avian Conservation Strategy*. Publication No. 99–40. Salt Lake City: Utah Division of Wildlife Resources, Utah Partners in Flight Program.
- . 2002. *Utah Partners in Flight Avian Conservation Strategy Version 2.0*. Publication Number 02-27. Salt Lake City: Utah Division of Wildlife Resources, Utah Partners in Flight Program.
- Patterson, J.J., A. Thomas, R. Stash, and J. Fritz. 2011. *Gasco Energy's Uinta Basin Natural Gas Development Project Class I Cultural Resource Literature Review*. Prepared for Gasco. Submitted to U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office, Vernal, Utah, and State of Utah School and Institutional Trust Lands Administration, Salt Lake City. Moab, Utah: Montgomery Archaeological Consultants, Inc.
- Patterson, R.L. 1952. *The Sage Grouse in Wyoming*. Denver: Sage Books, Inc.
- Peterson, J.A., and A.V. Nebeker. 1992. Estimation of waterborn selenium concentrates that are toxicity thresholds for wildlife. *Archives of Environmental Contamination and Toxicology* 23:154–162.
- Poole, G.C., and C.H. Berman. 2000 (submitted). Pathways of human influence on water temperature dynamics in stream channels. *Environmental Management*. Available at: [http://www.krisweb.com/biblio/gen\\_usepa\\_pooleetal\\_2000\\_pathways.pdf](http://www.krisweb.com/biblio/gen_usepa_pooleetal_2000_pathways.pdf). Accessed December 15, 2011.

- Porter, J.M., M.S. Kinney, and K.D. Heil. 2000. Relationships between *Sclerocactus* and *Toumeyia* (Cactaceae) based on chloroplast TRNL-TRNF sequences. *Haseltonia—Yearbook of the Cactus and Succulent Society of America* 7:8–23.
- Porter, J.M., J. Cruse-Sanders, and R. Lauri. 2006. A preliminary assessment of genetic relationships among *Sclerocactus brevispinus* S. *wetlandicus* Hochstatter, and *S. glaucus*. U.S. Fish and Wildlife. Unpublished
- Pruitt, R. 1961. *The Mineral Resources of Uintah County*. Bulletin 71. Salt Lake City: Utah Geological and Mineralogical Survey.
- Rasmussen, D.T., G.C. Conroy, A.R. Friscia, K.E. Townsend, and M.D. Kinkel. 1999. Mammals of the middle Eocene Uinta Formation. *Vertebrate Paleontology in Utah: Utah Geological Survey Miscellaneous Publication* 99(1):401–420.
- Read, J.L. 1999. A strategy for minimizing waterfowl deaths on toxic waterbodies. *Journal of Applied Ecology* 36(3):345–350.
- Reimschuessel, R., R.O. Bennett, E.B. May, and M.M. Lipsky. 1993. Pathological alterations and new nephron development in rainbow trout (*Oncorhynchus mykiss*) following tetrachloroethylene contamination. *Journal of Zoo and Wildlife Medicine* 24(4):503–507.
- Richardson, C.T., and C.K. Miller. 1997. Recommendations for protecting raptors from human disturbance: a review. *Wildlife Society Bulletin* 25(3):634–638.
- Ronconi, R.A., and C.C. St. Clair. 2006. Efficacy of a radar-activated on-demand system for deterring waterfowl from oil sands tailings ponds. *Journal of Applied Ecology* 43:111–119.
- Rowland, M.M. 2004. *Effects of Management Practices on Grassland Birds: Greater Sage-grouse*. Jamestown, North Dakota: Northern Prairie Wildlife Research Center.
- Rowley, P.D., W.R. Hansen, O. Tweto, and P.E. Carrara. 1985. Geologic map of the Vernal 1° × 2° quadrangle, Colorado, Utah, and Wyoming. Miscellaneous Investigations Map I-1526. Scale 1:250,000. Reston, Virginia: U.S. Geological Survey.
- Sawyer, H., and R. Nielson. 2005. Seasonal Distribution and Habitat Use Patterns of Elk in the Jack Morrow Hills Planning Area. Cheyenne, Wyoming: Western Ecosystems Technology, Inc.
- Sawyer, H., R.M. Nielson, F. Lindzey, and L.L. McDonald. 2006. Winter habitat selection of mule deer before and during development of a natural gas field. *Journal of Wildlife Management* 70(2):396–403.
- Schnell, R.C., S.J. Oltmans, R.R. Neely, M.S. Endres, J.V. Molenaar, and A.B. White. 2009. Rapid photochemical production of ozone at high concentrations in a rural site during winter. *Nature Geoscience*. Available at: <http://www.nature.com/ngeo/journal/v2/n2/full/ngeo415.html>, Accessed August 8, 2011.
- Seidel, J.W. 1977. Elk calving behavior in west central Colorado. In *Proceedings of the Western States Elk Workshop*, edited by R.W. Nelson, pp. 38–40. Denver: Colorado Division of Wildlife.
- Sharifi, M.A., A.C. Green, and P.W. Rundel. 1997. Surface dust impacts on gas exchange in Mojave Desert shrubs. *Journal of Applied Ecology* 34(4):837–846.

- Sheffield, S.R. 1997. Current status, distribution, and conservation of the burrowing owl in Midwestern North America. In *Biology and Conservation of Owls of the Northern Hemisphere*, edited by J.R. Duncan, D.H. Johnson, and T.H. Niccolls, pp. 399–407. General Technical Report NC-190. St. Paul, Minnesota: U.S Department of Agriculture, Forest Service, North Central Forest Experiment Station.
- Shultz, L.M., and K.M. Mutz. 1979. Threatened and Endangered Plants of the Willow Creek Drainage. Vols. I and II. Submitted to U.S. Department of the Interior, Bureau of Land Management, Vernal District Office, Contract #YA-512-CT9-105. Bountiful, Utah: Meiji Resource Consultants.
- Sigler, W.F., and J.W. Sigler. 1996. *Fishes of Utah: A Natural History.* Salt Lake City: University of Utah Press.
- Singer, F.J., L.C. Zeigenfuss, and L. Spicer. 2001. Role of patch size, disease, and movement in rapid extinction in bighorn sheep. *Conservation Biology* 15(5):1347–1354.
- Smith, R.A., G.E. Schwarz, and R.B. Alexander. 1997. Regional interpretation of water-quality monitoring data. *Water Resources Research* 33(12):2781–2798.
- Spangler, J.D. 1995. Paradigms and Perspectives: A Class I Overview of Cultural Resources in the Uinta Basin and Tavaputs Plateau. Vol. 2. Salt Lake City, Utah: Uinta Research.
- Stokes, W.L. 1986. *Geology of Utah.* Salt Lake City: University of Utah.
- SWCA Environmental Consultants (SWCA). 2005a. *Assessment of Potential Mexican Spotted Owl Nesting Habitat on BLM-administered Lands in Northeastern Utah.* On file, U.S. Department of the Interior, Bureau of Land Management, Vernal Field Office, Vernal, Utah.
- . 2005b. *Sclerocactus wetlandicus* and *S. brevispinus* surveys. Unpublished data on file, SWCA Environmental Consultants, Salt Lake City, Utah.
- . 2006. Raptor nest GIS layer. Unpublished data on file, SWCA Environmental Consultants, Salt Lake City, Utah.
- . 2007. *Sclerocactus wetlandicus* and *S. brevispinus* surveys. Unpublished data on file, SWCA Environmental Consultants, Salt Lake City, Utah.
- Tanner, R., E.P. Glenn, and D. Moore. 1999. Food chain organisms in hypersaline industrial evaporation ponds. *Water Environment Research* 71:494–505.
- Tepedino, V.J., T.L. Griswold, and W.R. Bowlin. 2010. Reproductive biology, hybridization, and flower visitors of rare *Sclerocactus* taxa in Utah's Uinta Basin. *Western North American Naturalist* 70(3):377–386.
- Trinity Consultants, and C. Nicholls. 2005. Air Quality Assessment Report—Vernal and Glenwood Springs Resource Management Plans. Available at: <http://www.blm.gov/utah/vernal/airquality/airquality.htm>. Accessed December 18, 2007.
- Uintah County. 2003. Uintah County government. Available at: <http://www.co.uintah.ut.us/>. Accessed August 1, 2007.
- . 2005. *Uintah County General Plan Update.* Vernal, Utah.

- U.S. Census Bureau. 1990. U.S. Census 1990: profile of general demographic characteristics. Available at: [http://www.census.gov/Press-Release/www/2002/dp\\_comptables.html](http://www.census.gov/Press-Release/www/2002/dp_comptables.html). Accessed August 2, 2006.
- . 2000a. American Fact Finder Census 2000. Available at: [http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en). Accessed April 1, 2011.
- . 2000b. Poverty thresholds 2000. Available at: <http://www.census.gov/hhes/www/poverty/data/threshld/index.html>. Accessed May 11, 2011.
- . 2000c. U.S. Census 2000: profile of general demographic characteristics. Available at: <http://www.census.gov/prod/cen2000/dp1/2kh49.pdf>. Accessed August 2, 2006.
- . 2006. Population estimates. Available at: <http://www.census.gov/popest/estimates.php>. Accessed August 2, 2006.
- U.S. Department of Energy (DOE). 1998. Comprehensive National Energy Strategy. Washington, D.C.: U.S. Department of Energy.
- . 2006. *Annual Energy Outlook 2006*. Energy Information Administration. Available at: [http://www.scag.ca.gov/rcp/pdf/publications/1\\_2006AnnualEnergyOutlook.pdf](http://www.scag.ca.gov/rcp/pdf/publications/1_2006AnnualEnergyOutlook.pdf). Accessed November 1, 2007.
- . 2010. *CO<sub>2</sub> Stationary Source Emission Estimation Methodologies Summary*. National Energy Technology Laboratory Carbon Sequestration Program. Available at: [http://www.netl.doe.gov/technologies/carbon\\_seq/refshelf/atlasIII/2010AtlasIII\\_AppendixA.pdf](http://www.netl.doe.gov/technologies/carbon_seq/refshelf/atlasIII/2010AtlasIII_AppendixA.pdf). Accessed May 17, 2011.
- U.S. Department of the Interior (USDOI). 2003. *Quality of Water, Colorado River Basin*. Progress Report No. 21. U.S. Department of the Interior, Bureau of Reclamation. Denver, Colorado.
- U.S. Department of the Interior and U.S. Department of Agriculture. 2007. *Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development*. BLM/WO/ST-06/021+3071. Denver: U.S. Department of the Interior, Bureau of Land Management.
- U.S. Departments of the Interior, Agriculture, and Energy. 2003. *Scientific Inventory of Onshore Federal Lands' Oil and Gas Resources and Reserves and the Extent and Nature of Restrictions or Impediments to Their Development: The Paradox/San Juan, Uinta/Piceance, Greater Green River, and Powder River Basins and the Montana Thrust Belt*. Available at: <http://www.blm.gov/energy/epca/ExecSum.pdf>. Accessed December 1, 2011.
- U.S. Fish and Wildlife Service (USFWS). 1979. Determination that the Uinta Basin hookless cactus (*Sclerocactus glaucus*) is a threatened species, final rule. *Federal Register* 44:58867–58870.
- . 1983. *Northern States Bald Eagle Recovery Plan*. Prepared by Northern States Bald Eagle Recovery Team. Prepared for U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.
- . 1990a. *Bonytail Chub Recovery Plan*. Prepared by Colorado River Fishes Recovery Team, Denver. Prepared for U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.
- . 1990b. *Humpback Chub (Gila cypha) Recovery Plan*, 2nd rev. ed. Prepared for U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.

- . 1990c. *Uinta Basin Hookless Cactus (Sclerocactus glaucus) Recovery Plan*. Prepared for U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.
- . 1991. *Colorado Pikeminnow Recovery Plan*. Prepared by Colorado River Fishes Recovery Team, Denver. Prepared for U.S. Fish and Wildlife Service, Region 6, Washington, D.C.
- . 1994a. Endangered and threatened wildlife and plants. Determination of critical habitat for the Colorado River endangered fishes: razorback sucker, Colorado squawfish, humpback chub, and bonytail chub. Federal Register 59:13374–13400.
- . 1994b. Utah Reed-mustards: Clay Reed-mustard (Schoenocrambe argillacea), Barneby Reed-mustard (Schoenocrambe barnebyi), Shrubby Reed-mustard (Schoenocrambe suffrutescens) Recovery Plan. Prepared for U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.
- . 1995a. *Recovery Plan for the Mexican Spotted Owl, Vol. I*. Albuquerque.
- . 1995b. *Ute ladies'-tresses (Spiranthes diluvialis) Agency Review Draft Recovery Plan*. Prepared for U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.
- . 1998. *Razorback Sucker Recovery Plan*. Prepared for U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.
- . 1999. *Razorback Sucker Recovery Plan*. Prepared by the Colorado River Fishes Recovery Team, Denver. Prepared for U.S. Fish and Wildlife Service, Region 6, Washington, D.C.
- . 2000. *Wildlife Mortality Risk in Oil Field Waste Pits*. Available at: <http://www.fws.gov/mountain-prairie/contaminants/papers/pitrisk.pdf>. Accessed August 3, 2007.
- . 2002a. *Bonytail (Gila elegans) Recovery Goals: Amendment and Supplement to the Bonytail Chub Recovery Plan*. Prepared for U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.
- . 2002b. *Colorado Pikeminnow (Ptychocheilus lucius) Recovery Goals: Amendment and Supplement to the Colorado Squawfish Recovery Plan*. Prepared for U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.
- . 2002c. *Humpback Chub (Gila cypha) Recovery Goals: Amendment and Supplement to the Humpback Chub Recovery Plan*. Prepared for U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.
- . 2002d. *Razorback Sucker (Xyrauchen texanus) Recovery Goals: Amendment and Supplement to the Razorback Sucker Recovery Plan*. Prepared for U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.
- . 2002e. *Birds of Conservation Concern 2002*. Arlington, Virginia: Division of Migratory Bird Management. Available at: <http://www.fws.gov/migratorybirds/reports/BCC02/BCC2002.pdf>. Accessed November 1, 2007.
- . 2004. *Draft Environmental Assessment for Designation of Critical Habitat for the Mexican Spotted Owl*. Prepared for U.S. Fish and Wildlife Service, Region 2.
- . 2005. *Biological Opinion for Castle Peak Eightmile Flat Oil and Gas Expansion Project*. 6-UT-05-012-05-600. West Valley City, Utah: U.S. Fish and Wildlife Service, Utah Field Office.

- . 2006a. Endangered and threatened wildlife and plants; proposed threatened status for *Penstemon grahamii* (Graham's beardtongue) with critical habitat proposed rule. *Federal Register* 71:3158–3196.
- . 2006b. Ouray National Wildlife Refuge. Available at: <http://ouray.fws.gov/>. Accessed August 23, 2006.
- . 2006c. 90-day finding on a petition to remove the Uinta Basin hookless cactus from the list of endangered and threatened plants; 90-day finding on a petition to list the Pariette cactus as threatened or endangered. *Federal Register* 71:75215–75220.
- . 2006d. Review of native species that are candidates or proposed for listing as endangered or threatened; annual notice of findings on resubmitted petitions; annual description of progress on listing actions. *Federal Register* 71:53755–53835.
- . 2007a. 12-Month finding on a petition to list *Sclerocactus brevispinus* (Pariette cactus) as endangered or threatened; taxonomic change from *Sclerocactus glaucus* to *Sclerocactus brevispinus*, *S. glaucus*, and *S. wetlandicus*. *Federal Register* 72:53211–53222.
- . 2007b. Commercial oil field waste disposal facilities. Available at: <http://www.fws.gov/mountain-prairie/contaminants/contaminants1b.html>. Accessed August 3, 2007.
- . 2007c. Mexican spotted owl (*Strix occidentalis lucida*). Critical Habitat Portal. Available at: <http://criticalhabitat.fws.gov/>. Accessed September 26, 2007.
- . 2007d. Removing the bald eagle in the lower 48 states from the list of endangered and threatened wildlife; final rule. *Federal Register* 72:37345–37372.
- . 2008. *Birds of Conservation Concern 2008*. Arlington, Virginia: U.S. Fish and Wildlife Service.
- . 2009a. Review of native species that are candidates for listing as endangered or threatened; annual description of progress on listing actions. *Federal Register* 74:57803–57878.
- . 2009b. Taxonomic change of *Sclerocactus glaucus* to three separate species. *Federal Register* 74:47112–47117.
- . 2010a. Greater sage-grouse. USFWS endangered species, Mountain-Prairie Region. Available at: <http://www.fws.gov/mountain-prairie/species/birds/sagegrouse/>. Accessed December 15, 2011.
- . 2010b. *Recovery Outline for the Sclerocactus brevispinus (Pariette cactus)*. Utah Ecological Services Field Office.
- . 2010c. *Recovery Outline for the Sclerocactus wetlandicus (Uinta Basin hookless cactus)*. West Valley City, Utah: Utah Ecological Services Field Office.
- . 2010d. *Schoenocrambe suffrutescens (Shrubby Reed-mustard) Five-year Review: Summary and Evaluation*. West Valley City, Utah: Utah Ecological Services Field Office.
- . 2011a. 2010 occupied *Sclerocactus* habitat polygon. Unpublished data developed by U.S. Fish and Wildlife Service, Utah Field Office, with assistance from Bureau of Land Management Vernal Field Office.

- . 2011b. Draft five-year review: summary and evaluation. Unpublished. West Valley City, Utah: Utah Ecological Services Field Office.
- . 2011c. News Release: Fish and Wildlife Service Determines the Mountain Plover Does Not Warrant Protection Under the Endangered Species Act. May 11, 2011. Available at: <http://www.fws.gov/mountain-prairie/species/birds/mountainplover/PressRelease05112011.pdf>. Accessed July 20, 2011.
- . 2011d. *Schoenocrambe argillacea* (Clay Reed-mustard) Draft Five-year Review: Summary and Evaluation. Unpublished. West Valley City, Utah: Utah Ecological Services Field Office.
- U.S. Forest Service (USFS). 1996. *Potential Fossil Yield Classification (PFYC)*. Developed by the Paleontology Center of Excellence and the U.S. Forest Service Region 2 Paleo Initiative.
- . 1999. *Dust Palliative Selection and Application Guide*. Prepared by P. Bolander and A. Yamada. USFS Technology and Development Center. Available at: <http://www.fs.fed.us/eng/pubs/html/99771207/99771207.html#Pall>. Accessed August 8, 2011.
- U.S. Geological Survey (USGS). 1995. Ground water atlas of the United States: Arizona, Colorado, New Mexico, Utah. HA 730-C. Prepared by S.G. Robson and E.R. Banta. Available at: [http://capp.water.usgs.gov/gwa/ch\\_c/index.html](http://capp.water.usgs.gov/gwa/ch_c/index.html). Accessed July 17, 2006.
- . 2002. *Biological Soil Crusts, Webs of Life in the Desert*. USGS Fact Sheet FS-065-01. July 2001, reprinted May 2002. Available at: <http://fresc.usgs.gov/products/fs/fs-065-01.pdf>. Accessed November 1, 2007.
- . 2005. Southwest Regional GAP Analysis Project—land cover descriptions. Logan, Utah: RS/GIS Laboratory, College of Natural Resources, Utah State University.
- U.S. Global Change Research Program. 2009. Global climate change impacts in the U.S. Available at: <http://www.globalchange.gov/what-we-do/assessment/previous-assessments/global-climate-change-impacts-in-the-us-2009>. Accessed August 8, 2011.
- Utah Department of Environmental Quality (UDEQ). 2002. Standards of quality for waters of the state. Available at: <http://www.rules.utah.gov/publicat/code/r317/r317-002.htm>. Accessed November 1, 2007.
- . 2004. Uinta Watershed Management Unit Water Quality Assessment 2004 305(b). Division of Water Quality.
- . 2006. Utah's 2006 Integrated Report, Vol. II: 303(d) List of Impaired Waters. Division of Water Quality.
- . 2008. Authorization to Discharge under the Utah Pollutant Discharge Elimination System—Storm Water General Permit for Construction Activities, Permit No. UTR300000. Division of Water Quality. Available at: <http://www.waterquality.utah.gov/UPDES/stormwater/documents/GeneralConstructionPermiUTR3000000t.pdf>. Accessed December 15, 2011.
- . 2010a. Part 3 Draft 2010 Utah Integrated Report: 303(d) List of Impaired Waters.
- . 2010b. Total Maximum Daily Loads (TMDLs) for Total Dissolved Solids, Selenium, and Boron in the Pariette Draw Watershed.

- Utah Department of Motor Vehicles. 2008. Off-road vehicle registrations by county and vehicle type. Available at: <http://tax.utah.gov/esu/motor/registration/2008OffroadCountyType.pdf>. Accessed December 3, 2008.
- Utah Department of Natural Resources (UDNR). 1987. Base of Moderately Saline Ground Water in the Uintah Basin, Utah, with an Introductory Section Describing the Methods Used in Determining its Position. Technical Publication No. 92. Open-File Report 87-394. U.S. Geological Survey, Reston, Virginia.
- Utah Department of Transportation (UDOT). 2006. Traffic on Utah highways 2006. Available at: <http://www.udot.utah.gov/main/uconowner.gf?n=94221010834443783>. Accessed November 1, 2007.
- . 2007. Utah traffic map 2007. Available at: <http://www.udot.utah.gov/main/f?p=100:pg:0:::V,T:,528>. Accessed June 15, 2011.
- . 2008. Utah traffic map 2008. Available at: <http://www.udot.utah.gov/main/f?p=100:pg:0:::V,T:,528>. Accessed June 15, 2011.
- . 2009. Utah traffic map 2009. Available at: <http://www.udot.utah.gov/main/f?p=100:pg:0:::V,T:,528>. Accessed June 15, 2011.
- Utah Department of Workforce Services (UDWS). 2005a. Duchesne County Demographic and Economic Profile. Available at: [http://pioneer.utah.gov/research/utah\\_counties/duchesne.html#census](http://pioneer.utah.gov/research/utah_counties/duchesne.html#census). Accessed December 19, 2011.
- . 2005b. Uintah County Demographic and Economic Profile. Available at: [http://pioneer.utah.gov/research/utah\\_counties/uintah.html](http://pioneer.utah.gov/research/utah_counties/uintah.html). Accessed December 19, 2011.
- . 2006. Uintah County wage and employment data 2005. Available at: <http://jobs.utah.gov/jsp/wi/utalmis/countyprofile.do>. Accessed September 18, 2006.
- Utah Division of Water Resources (UDWaR). 1999. *Utah State Water Plan, Uinta Basin*. Salt Lake City: Utah Department of Natural Resources, Utah Board of Water Resources.
- Utah Division of Water Rights. 2011. Water rights shapefile. Accessed January 6, 2011.
- Utah Division of Wildlife Resources (UDWR). 1999a. *Utah Cougar Management Plan*. Publication N-99-1. Salt Lake City: State of Utah Department of Natural Resources, Utah Division of Wildlife Resources.
- . 1999b. *Utah Statewide Management Plan for Bighorn Sheep*. Salt Lake City: State of Utah Department of Natural Resources, Utah Division of Wildlife Resources.
- . 2000. *The Bats of Utah: A Literature Review by George V. Oliver*. Publication No. 00-14. Prepared for the Utah Reclamation Mitigation and Conservation Commission and the U.S. Department of the Interior. Salt Lake City: State of Utah Department of Natural Resources, Utah Division of Wildlife Resources.
- . 2002a. Utah conservation data center. Available at: <http://dwrcdc.nr.utah.gov/ucdc/>. Accessed February 2005.

- . 2002b. *Strategic Management Plan for Sage-Grouse*. Publication 02-20. Salt Lake City: State of Utah Department of Natural Resources, Utah Division of Wildlife Resources.
- . 2003a. *Statewide Management Plan for Mule Deer*. Salt Lake City: State of Utah Department of Natural Resources, Utah Division of Wildlife Resources.
- . 2003b. *Vertebrate Information Compiled by the Utah Natural Heritage Program: A Progress Report*. Publication No. 03-45. Salt Lake City: State of Utah Department of Natural Resources, Utah Division of Wildlife Resources.
- . 2004. Utah conservation data center. Available at: <http://dwrcdc.nr.utah.gov/ucdc>. Accessed October 8.
- . 2005b. *Statewide Management Plan for Elk*, State of Utah Department of Natural Resources, UDWR Salt Lake City, Utah.
- . 2006a. Sage grouse lek GIS layer. Unpublished data. State of Utah Department of Natural Resources, Utah Division of Wildlife Resources, Salt Lake City.
- . 2006b. Utah sensitive species list. Salt Lake City: State of Utah Department of Natural Resources, Utah Division of Wildlife Resources.
- . 2006c. Raptor nest GIS layer. Unpublished data. State of Utah Department of Natural Resources, Utah Division of Wildlife Resources, Salt Lake City.
- . 2007. Utah Conservation Data Center. Available at: <http://dwrcdc.nr.utah.gov/ucdc>. Accessed October 8, 2007.
- . 2011. Utah sensitive species list and appendices. Salt Lake City: State of Utah Department of Natural Resources, Utah Division of Wildlife Resources. March 29. Available at: <http://dwrcdc.nr.utah.gov/ucdc/ViewReports/SSLAppendices20110329.pdf>. Accessed February 14, 2012.
- . 2011a. Utah conservation data center. Available at: <http://dwrcdc.nr.utah.gov>. Accessed December 15, 2011.
- . 2011b. Sage grouse habitat GIS layer. Unpublished data. State of Utah Department of Natural Resources, Utah Division of Wildlife Resources, Salt Lake City.
- Utah Energy Office. 2004. *Economic Impact Analysis of the Drilling and Completion of a Natural Gas Well in the Uinta Basin*. Prepared by the Utah Energy Office, Utah Department of Natural Resources.
- Utah Native Plant Society. 2003–2011. *Utah Rare Plant Guide*. Salt Lake City. Available at: <http://www.utahrareplants.org>. Accessed November 9, 2011.
- Utah State Tax Commission. 2006. *Utah Property Tax Annual Statistical Report*. Prepared by Property Tax Division, Utah State Tax Commission. Available at: <http://propertytax.utah.gov/finalannualstats/2005annual.pdf>. Accessed August 8, 2006.
- . 2007. Duchesne and Uintah County Share of Federal Royalties: February 2001–December 2006. Utah State Tax Commission.

- Utah Travel Industry. 2006. Official website of the Utah Travel Industry. Available at: <http://www.utah.com>. Accessed August 1, 2007.
- . 2007. Other playgrounds, Pariette Wetlands. Utah Travel Council. Available at: [http://www.utah.com/playgrounds/pariette\\_wetlands.htm](http://www.utah.com/playgrounds/pariette_wetlands.htm). Accessed August 1, 2007.
- Ute Tribe. 2007. Official website of the Ute Indian Tribe. Available at: <http://www.utetribe.com/>. Accessed August 2007.
- Vanden Berg, M. 2008. Basin-wide Evaluation of the Uppermost Green River Formation's Oil-shale Resources, Uinta Basin, Utah and Colorado. Utah Geological Survey Special Study 128.
- . 2011. Water-related Issues Affecting Conventional Oil and Gas Recovery and Potential Oil-Shale Development in the Uinta Basin, Utah. Quarterly Report January–March 2011.
- Verbeek, E. and M. Grout, 1993. Geometry and Structural Evolution of Gilsonite Dikes in the Eastern Uinta Basin, Utah. USGS Bulletin 1787.
- Wehausen, J.D., V.C. Bleich, and R.R. Ramey II. 2005. Correct nomenclature for Sierra Nevada bighorn sheep. *California Fish and Game* 91:216–218.
- Welsh, S.L., N.D. Atwood, S. Goodrich, and L.C. Higgins (eds.). 2003. *Sclerocactus*. In *A Utah Flora*, 3rd ed., rev. Provo, Utah: Print Services, Brigham Young University.
- Western Regional Climate Center (WRCC). 2006. Utah climate summaries. Available at: <http://www.wrcc.dri.edu/summary/climsmut.html>. Accessed November 1, 2007.
- . 2007. Historical climate data for Nutters Ranch, Utah. Available at: <http://www.wrcc.dri.edu>. Accessed December 15, 2011.
- . 2011. Historical temperature, precipitation, and snowfall data for Myton, Utah. Available at: <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ut5969>. Accessed June 21, 2011.
- Wilson, R.M., J.D. Lusk, S. Bristol, B. Waddell, and C. Wiens. 1995. Environmental Contaminants in Biota from the San Juan River and Selected Tributaries in Colorado, New Mexico, and Utah. Submitted to U.S. Fish and Wildlife Service, San Juan River Basin Recovery Implementation Program, Albuquerque.
- Windingstad, R.M., F.X. Kartch, R.K. Stroud, and M.R. Smith. 1987. Salt toxicosis in waterfowl in North Dakota. *Journal of Wildlife Diseases* 23(3):443–446.
- Witkind, I.J. 1995. Geologic map of the Price 1° × 2° Quadrangle, Utah. Miscellaneous Investigations Map I-2462. Scale 1:250,000. U.S. Geological Survey.
- Wyoming Game and Fish Department. 2004. Minimum Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats on BLM Lands. Cheyenne, Wyoming: Wyoming Game and Fish Department.
- Zero Fatalities. 2007. 2006 Utah fatalities data analysis, fatalities by county. Available at: [http://www.zerofatalities.com/statistics\\_utah.php](http://www.zerofatalities.com/statistics_utah.php). Accessed November 1, 2007.

**Personal Communication**

Adams, A. 2006. Bureau of Land Management, Price Field Office. Personal communication with Kendy Radasky, SWCA Environmental Consultants.

Adams, C. 2011. Utah Department of Water Quality. Personal communication with E. Gaddis, SWCA Environmental Consultants. January.

Ferguson, T. 2007. Uintah County Road Department. Personal communication with E. Wardle, SWCA Environmental Consultants. July.

Hanks, S. 2011. Personal communication with S. Hanks, environmental engineer, Utah Division of Air Quality. June 28.

Hill, B. 2011. Utah Division of Oil, Gas, and Mining. Personal communications with C. Garrett, SWCA Environmental Consultants, April 26, and with G. Larson, SWCA Environmental Consultants, October 20.

Howe, F. 2007. Utah Department of Wildlife Resources. Personal communication with G. Weekley, SWCA Environmental Consultants. November 28.

Johnson, B. 2006. Uintah County, Vernal City Economic Development. Personal communication with E. Wardle, SWCA Environmental Consultants. October.

Kamp, J. 2006. Gasco. Personal communication with L. Burch, SWCA Environmental Consultants. August 8.

Megown, B. 2007. U.S. Fish and Wildlife Service. Personal communication with J.H. Hornbeck, SWCA Environmental Consultants. September 26.

———. 2007. U.S. Fish and Wildlife Service. Personal communication with G. Larson, SWCA Environmental Consultants. November 23.

Naumann, T. 2007. Personal communication with J. Salix, Bureau of Land Management. November.

Rainbolt, P. 2011. UDWR Impact Analysis Biologist. Personal communication with A. Christensen, SWCA Environmental Consultants. March 10.

Roe, A. 2011. Personal communication with J. Guinn, SWCA Environmental Consultants. October.

Williar, C. 2011. Indian Health Service. Personal communication with C. Garrett, SWCA Environmental Consultants. April 5.

Woodard, S. 2006. Second Nature. Personal communication with K. Radasky, SWCA Environmental Consultants.