

# THE GRAND CANON

A Worldwide Bibliography

*of the*

Grand Canyon *and* Lower Colorado River  
Regions in the United States and Mexico

16<sup>th</sup> to 21<sup>st</sup> Centuries

**Volume 1, Part B: Bibliography**

FIFTH EDITION

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THE GRAND CANON : A WORLDWIDE BIBLIOGRAPHY OF THE GRAND CANYON AND LOWER  
COLORADO RIVER REGIONS IN THE UNITED STATES AND MEXICO, 16th TO 21st CENTURIES  
Volume 1, Part B: Bibliography  
Fifth Edition

CATALOGERS NOTE  
canon: *a standard or  
essential list of works*

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**The Grand Canon**  
*not* The Grand Canyon

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# THE GRAND CANON

A WORLDWIDE BIBLIOGRAPHY OF THE GRAND CANYON AND LOWER COLORADO RIVER REGIONS  
IN THE UNITED STATES AND MEXICO

## 18

### PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**Physical, chemical, and comparable aspects of land, water, and atmospheric environments of the Grand Canyon region; interdisciplinary research of the environment in the Grand Canyon region and the Colorado River corridor through the Grand Canyon; and atmospheric and climatological investigations relating to the Colorado River Basin or the American Southwest that embrace the Grand Canyon and the hydrographically defined Lower Colorado River Basin**

PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**OVERVIEW.** This part includes environmental studies that are not organismically specific and publications that address general environmental issues, including water-quality studies, atmospheric, climatology, and astronomy. Broadly based investigations embracing the Southwest are included here so as to accommodate the hydrographically defined Lower Colorado River Basin. Documents that are **Environmental Impact Statements**, and similar administrative and guidance documents, are included in [PART 13 \(ADMINISTRATIVE AND MANAGEMENT ISSUES\)](#) because they usually embrace multiple areas of administrative oversight, are not solely focused on ecological concerns as might be inferred from the title, and may offer a variety of management alternatives. **EXCEPTIONS** are those documents that are specifically biological in perspective, which are included in either [Part 11/Section 1](#) (ENVIRONMENT, ECOLOGY AND BIOLOGY IN THE LOWER COLORADO RIVER REGION) or [Part 19](#) (BIOLOGY AND ECOLOGY OF THE GRAND CANYON REGION) of this bibliography. Items that relate to astronomical observations and “dark sky” issues, and the science of astronomy generally, are included here in Part 18. Items that relate to the scientific study of ambient noise and the natural soundscape of Grand Canyon are included in Part 18; but items that relate specifically to non-environmental management issues of “noise” are relegated to Part 13, and items that relate specifically to sociological responses to these issues are consolidated with [PART 14](#) (SOCIOLOGY, RECREATION, EDUCATION, ECONOMICS, AND RELATED SUBJECTS). Items relating to environmental responsibility particularly by government agencies, such as the use of hybrid electric vehicles, are included in Part 18.

Items relating to the hydrology of the Colorado River basin, and aspects of drought effects and forecasting, are listed in [PART 12/SECTION 1](#) (WATER SUPPLY AND MANAGEMENT, etc.).

See the [Appendix to Part 17](#) (*The Supai Weekly News* and *The Supai News*, 1957–1959), an informal serial produced by missionaries at Supai, Havasupai Indian Reservation). Most issues included an “Official Weather Report” (“Official Altitude—3,205 feet above sea level”). Each report listed the high and low temperatures and precipitation amount for each day; the records are virtually complete, except for times when the reporters were not present.

**(continued)**

PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**RELATED MATERIAL**

[PART 2](#). GENERAL PUBLICATIONS for items pertaining to astronomical meetings and events held at Grand Canyon (for example, Grand Canyon Star Party) and similarly items that pertain to one-time plans to build a great observatory at Desert View

[PART 3](#). *THE NEW YORK TIMES* for additional items that relate to this part of the bibliography

[PART 11, SECTION 1](#). LOWER COLORADO RIVER—NATURAL HISTORY for items pertaining to natural history and physical environment in the lower Colorado River corridor from Lake Mead to the Colorado River delta, including matters that relate to human health concerns in this region

[PART 13](#). ADMINISTRATIVE AND MANAGEMENT ISSUES for items relating to natural quiet in Grand Canyon that specifically address management issues, and also Environmental Impact Statements and similar administrative and guidance documents

[PART 14](#). SOCIOLOGY, RECREATION, EDUCATION, ECONOMICS, AND RELATED SUBJECTS for items relating to natural quiet in Grand Canyon that specifically address human responses and perceptions of these issues

[PART 15](#). HEALTH AND SAFETY for items on physical and chemical studies in the region that relate to human health concerns

[PART 19](#). BIOLOGY AND ECOLOGY for items on chemical studies in the region that rely on the analysis of organisms

[PART 21](#). GEOLOGY AND PALEONTOLOGY for physical and geological environmental issues, including geochemistry of ground waters as affected by geological conditions; also items relating to geomagnetism and studies of terrestrial gravity

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PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

[GO TO END OF ANONYMOUS IN THIS PART](#)

## ANONYMOUS

### PUBLICATION NOT DATED: DATE ESTIMATED, ATTRIBUTED, OR KNOWN FROM ORIGINAL RECEIPT

- NO DATE 18.1 *Grand Canyon climates.* Grand Canyon Natural History Association, folded pamphlet, [4] pp. [1980s.]  
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-9]
- NO DATE 18.2101 Sound studies compare noise levels. *Listen Up!* (U.S. National Park Service), 1(1): [2]. [Ca. 1995.]
- NO DATE 18.2102 Grand Canyon leads national parks in use of quiet technology. *Listen Up!* (U.S. National Park Service), 1(1): [3]. [Ca. 1995.]
- NO DATE 18.2103 Sound studies compare noise levels. *Listen Up!* (U.S. National Park Service), 1(2): [2]. [Ca. 1995.] [The same as which appeared in 1(1) [see ITEM NO. 18.2101]. Issue no. 2 as a whole mostly contains texts repeated from Issue no. 1, although they are reset.]
- NO DATE 18.2104 Grand Canyon leads national parks in use of quiet technology. *Listen Up!* (U.S. National Park Service), 1(2): [3]. [Ca. 1995.] [Nearly the same as which appeared in 1(1) [see ITEM NO. 18.2102]. Issue no. 2 as a whole mostly contains texts repeated from Issue no. 1, although they are reset.]
- NO DATE 18.1254 «تدفق الطاقة وحمايه البيئة معا النقاد» جران كانيونر [tadaffuq altaqat wahammayuh albiyat maeaan alniiqadh] جران كانيونر. [Energy and environmental protection flow together to save the "Grand Canyon".] مجلة وهج الثقافة [Majallat wahaj al-thaqāfah] [Glow of Culture Magazine] (published by The Cultural Club), (3) (Rajab/Shabān): 10-11. [2008.] [Glen Canyon Dam test flow.] [In Arabic.]

### DATED PUBLICATIONS, GROUPED BY YEAR

- 1907 18.2498 [Summary of the article by J. Koenigsberger (1907).] *In:* Kleinere Mitteilungen [SECTION]. *Meteorologische Zeitschrift* (Braunschweig), 12(1) (January): 423-424. [Koenigsberger, 1907, ITEM NO. 18.1277.] [In German.]
- 1908 18.1280 [Brief abstract of the article by J. Koenigsberger (1907).] *In:* Grünbaum (Dr.) (compiler), *Physikalische Untersuchungen aus der Elektrizitätslehre* [SECTION]; Anhang. Elektrische Einheiten und Benennungen [SUBSECTION]. *Fortschritte der Elektrotechnik* (Berlin), 21 [for 1907]: 278. [Koenigsberger, 1907, ITEM NO. 18.1277.] [In German.]

PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**Anonymous (continued)**

1920	18.1570	Bumpiness in flying. <i>Illustrated World</i> , 33(5) (July/August): 858-859. [See p. 859: "Lieut. R. O. Searles, the flying commander of the De Haviland Squadron which made the trip to the Pacific Coast and back, stated that on the 24th and 26th of February, 1919, it was impossible to enter the Grand Canyon with a plane but that it was an easy possibility on the 25th. The explanation of this is that the pressure distribution of the atmosphere had its effect." (ENTIRE NOTE)]
1929	18.3	Favorable snow conditions. <i>Grand Canyon Nature Notes</i> , 3(8) (February 28): 6. ≡ CROSS-LISTINGS [CITED» GCNHA Monograph 2: page 118] [CITED» GCNHA Monograph 8: page 12-8]
1930	18.4	Left-overs. <i>Grand Canyon Nature Notes</i> , 4(7) (May 31): 47. [Includes brief note of heavy snow during the week ended May 9, and more on May 17.] ≡ CROSS-LISTINGS [CITED» GCNHA Monograph 2: page 118] [CITED» GCNHA Monograph 8: page 12-8]
1930	18.1949	[Ice floes on Colorado River.] <i>Grand Canyon Nature Notes</i> , 5(2) (December 31): 20. ["On the 24th and 25th of December large cakes of ice were observed floating down the Colorado River. The cakes were so large that they could easily be seen from the rim of the Canyon. At times, the stretch of river just above Hermit Rapids was almost completely blocked by the floes." (ENTIRE ITEM)]
1932	18.1952	[Snowstorm of January 18-21 covered ground even in the bottom of Grand Canyon.] <i>In</i> : Field Observations [SECTION]. <i>Grand Canyon Nature Notes</i> , 6(4): 34. [Two to three inches of snow at Phantom Ranch.]
1932	18.1883	Field observations. <i>Grand Canyon Nature Notes</i> , 7(4) (July):. ("By Naturalist Staff.") ["On June 3rd and 4th, natives of Grand Canyon were greatly surprised to be greeted by a cold spell accompanied by flurries of snow. On both days patches of ground near Grand View Point were actually white with snow." (ENTIRE NOTE)]
1933	18.1884	A new "low" for recent years. <i>In</i> : Miscellany [SECTION]. <i>Grand Canyon Nature Notes</i> , 7(12) (March):. [Temperature at Grand Canyon Village on February 9, 1933, reached -14° F.]
1934	18.5	Meteorological data. <i>Grand Canyon Nature Notes</i> , 9(5) (August): 315. [Snow on both rims on June 6; and regional drought affecting Colorado River flow.] ≡ CROSS-LISTINGS [CITED» GCNHA Monograph 2: page 118] [CITED» GCNHA Monograph 8: page 12-8]
1938	18.1596	Grand Canyon, Arizona. <i>In</i> : Here and There on the Desert [SECTION]. <i>Desert Magazine</i> , 1(3) (January): 22. [U.S. Weather Bureau station established to aid in regional air travel.]



PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**Anonymous (continued)**

1948	18.1546	Severe local storms for August 1948. <i>Monthly Weather Review</i> , 102(5) (August): 173-176. [See p. 173: Inner Canyon and North Rim of Grand Canyon; [August] 4; Early afternoon; 2,000 [value of property destroyed]; Thunderstorm and flash flood. 0.80 inch of rain in 55 minutes damaged powerhouse and government installations on North Rim of Grand Canyon and in canyon bottom. Large sections of flume washed away, and creek bottom in several places dammed by rock and mud slides. Power and water supplies disrupted for 2 days." (ENTIRE NOTE)]
1980	18.1757	Protecting clean air in national parks. <i>EPA Journal</i> (U.S. Environmental Protection Agency, Office of Public Awareness), 6(3) (March): 6-7. [Grand Canyon noted, <i>in passing</i> , but also with full-page photo (p. 6), "Riders look down into the Grand Canyon from the Bright Angel Trail."]
1982	18.2276	Arizona Strip U-mining. <i>In</i> : Hazardous News Briefs [SECTION]. <i>Arizona Hazardous Waste News</i> (Sierra Club, Grand Canyon Chapter), 2(3) (Winter): 6. ["Danab Creek Wilderness Study Area" ( <i>sic</i> ); Kanab Creek.]
1981	18.2544	Changing the river at Glen Canyon Dam. <i>National Parks</i> , 56(7/8) (July/August): 37-38
1984	18.1764	The Grand Canyon area in Arizona. On the clearest days, visibility in some parts of the Southwestern U.S. can approach 200 miles. <i>EPA Journal</i> (U.S. Environmental Protection Agency, Office of Public Affairs), 10(7) (September): inside back cover, back cover. [Color photograph of Grand Canyon.]
1985	18.8	"Uranium rush" threatens Grand Canyon region. <i>National Wildlife</i> , 24 (December 1985/January 1986): 33. <span style="margin-left: 2em;">≡ CROSS-LISTINGS  CITED» GCNHA Monograph 8: page 4-31 </span>
1985	18.2597	<i>2nd Workshop on Climate Variability fo the Eastern North Pacific and Western North America : 19 to 23rd 1985, Asilomar Conference Center, Pacific Grove, California.</i> [No imprint], 75 pp. [Colorado River basin, <i>passim</i> .]
1986	18.1582	Smoke management. <i>From</i> : Research Activities [SECTION]. <i>In</i> : Shelton, Napier (ed.), Pollution in parks; a report on National Park Service activities to maintain environmental quality in the National Park System. <i>Park Science</i> (U.S. National Park Service), 6(4) (Summer, insert): 9. [Prescribed-fires smoke management at Grand Canyon National Park.] [The "Pollution in Parks" report is a separately paginated insert in this issue of <i>Park Science</i> .]
1986	18.1583	Visibility and particulate monitoring. <i>From</i> : Research Activities [SECTION]. <i>In</i> : Shelton, Napier (ed.), Pollution in parks; a report on National Park Service activities to maintain environmental quality in the National Park System. <i>Park Science</i> (U.S. National Park Service), 6(4) (Summer, insert): 9-10. [Activities of NPS Air Quality Division. Includes note of Grand Canyon.] [The "Pollution in Parks" report is a separately paginated insert in this issue of <i>Park Science</i> .]
1988	18.10	Glen Canyon Dam: problems of 20 years. <i>National Parks</i> , (March/April): 14.

PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**Anonymous (continued)**

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| 1988 | 18.2109 | Dam fine physics. <i>Science News</i> , 134: (September 17): 188. [Neutrinoless-decay research conducted inside Hoover Dam.]   |
| 1988 | 18.2120 | Hoover Dam holds key to the fate of the universe. <i>New Scientist</i> , 120 (October): 29. [Neutrinoless-decay research conducted inside Hoover Dam.]                                       |
| 1988 | 18.2415 | Double-beta decay study in Hoover Dam. <i>Sky and Telescope</i> , 76(5) (November): 461. [Double beta decays studied within a chamber in Hoover Dam, using the mass of the dam as a shield.] |
| 1988 | 18.11   | GCES. <i>Grand Canyon River Guides</i> [newsletter], 1(2) (November): 4. [Glen Canyon Environmental Studies.]  |
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| 1989 | 18.12   | [Introduction.] <i>Glen Canyon Environmental Studies Update</i> , (January): 1.   |
| 1989 | 18.13   | 1982 to the present. <i>Glen Canyon Environmental Studies Update</i> , (January): 2.  |
| 1989 | 18.14   | Study teams. <i>Glen Canyon Environmental Studies Update</i> , (January): 2-3.  |
| 1989 | 18.15   | Meetings. <i>Glen Canyon Environmental Studies Update</i> , (January): 3.   |
| 1989 | 18.16   | Environmental study team. <i>Glen Canyon Environmental Studies Update</i> , (March): 2.   |
| 1989 | 18.17   | Economic study team. <i>Glen Canyon Environmental Studies Update</i> , (March): 2.  |
| 1989 | 18.18   | Glen Canyon Environmental Studies report list. <i>Glen Canyon Environmental Studies Update</i> , (March): 3-4.  |
| 1989 | 18.19   | Reclamation appoints senior scientist to assist Glen Canyon Environmental Studies. <i>Glen Canyon Environmental Studies Update</i> , (May): 1.  |
| 1989 | 18.20   | Meeting summaries. <i>Glen Canyon Environmental Studies Update</i> , (May): 1-2.  |
| 1989 | 18.21   | Glen Canyon Environmental Studies Phase II program organization. <i>Glen Canyon Environmental Studies Update</i> , (May): 2-3.  |
| 1989 | 18.22   | Grand Canyon uranium mining assessed. <i>National Parks</i> , 63(5/6) (May/June): 13-14.<br><span style="color: #A52A2A;">≡</span> <span style="color: #A52A2A;">CROSS-LISTINGS</span> <span style="color: #A52A2A;"> </span> <span style="color: #A52A2A;">CITED»</span> <span style="color: #A52A2A;">GCNHA Monograph 8: page 4-31</span> |
| 1989 | 18.2279 | Power plant's fingerprints found on Grand Canyon haze and what you can do to make them clean up. <i>Canyon Echo</i> (Sierra Club, Grand Canyon Chapter), 25(6) (June): 1, 3. [Navajo Generating Station.]   |
| 1989 | 18.23   | Study finds source of canyon haze. <i>National Parks</i> , 63(7/8) (July/August): 10.<br><span style="color: #A52A2A;">≡</span> <span style="color: #A52A2A;">CROSS-LISTINGS</span> <span style="color: #A52A2A;"> </span> <span style="color: #A52A2A;">CITED»</span> <span style="color: #A52A2A;">GCNHA Monograph 8: page 4-31</span>    |
| 1989 | 18.25   | Hydrology update for Glen Canyon Dam. <i>Glen Canyon Environmental Studies Update</i> , (August): 2.  |
| 1989 | 18.26   | The GCES integrated research plan. <i>Glen Canyon Environmental Studies Update</i> , (August): 2-3.   |

PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**Anonymous (continued)**

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| 1989 | 18.27   | Summary of GCES river research trips. <i>Glen Canyon Environmental Studies Update</i> , (August): 3-5.   |
| 1989 | 18.28   | Emissions fog Grand Canyon. <i>ENR</i> (Engineering News-Record), 223 (September): 14.<br><span style="color: #A52A2A;">≡ CROSS-LISTINGS  CITED» GCNHA Monograph 8: page 4-31 </span>  |
| 1989 | 18.1457 | Haze over the canyon. <i>Time</i> , (September 11):.   |
| 1989 | 18.29   | EPA proposes findings on Arizona power plant responsible for damaging visibility in Grand Canyon. <i>Pollution Engineering</i> , 21 (November): 31-32. [Environmental Protection Agency.]<br><span style="color: #A52A2A;">≡ CROSS-LISTINGS  CITED» GCNHA Monograph 8: page 4-31 </span> |
| 1989 | 18.30   | Glen Canyon Dam flow studies initiated. <i>Glen Canyon Environmental Studies Update</i> , (December): 1-3.   |
| 1989 | 18.32   | Summary of the recent GCES river research trips. <i>Glen Canyon Environmental Studies Update</i> , (December): 4-6.  |
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| 1990 | 18.1580 | [Navajo Generating Plant and wintertime haze at Grand Canyon.] <i>In</i> : Information Crossfile [SECTION]. <i>Park Science</i> (U.S. National Park Service), 10(3) (Summer): 16.  |
| 1990 | 18.2545 | Incinerator planned near Pipe Spring. <i>In</i> : NPCA News [SECTION]. <i>National Parks</i> , 64(7/8) (July/August): 13-14. [The Kaibab Paiute tribe “may allow construction of a hazardous waste incinerator on their reservation, which surrounds Pipe Spring National Monument.”] [National Parks and Conservation Association.] |
| 1990 | 18.41   | Glen Canyon Environmental Studies research flows. <i>Colorado River Studies Office, Newsletter</i> (U.S. Bureau of Reclamation), 2 (November): 6.<br><span style="color: #A52A2A;">≡ CROSS-LISTINGS  CITED» GCNHA Monograph 8: page 4-31 </span>   |
| 1990 | 18.42   | The Integrated Research Plan. <i>Colorado River Studies Office, Newsletter</i> (U.S. Bureau of Reclamation), 2 (November): 6.<br><span style="color: #A52A2A;">≡ CROSS-LISTINGS  CITED» GCNHA Monograph 8: page 4-31 </span>   |
| 1990 | 18.35   | Scoping period update. <i>Colorado River Studies Office, Newsletter</i> (U.S. Bureau of Reclamation), 1: 1-2.<br><span style="color: #A52A2A;">≡ CROSS-LISTINGS  CITED» GCNHA Monograph 8: page 4-10 </span>   |
| 1990 | 18.36   | Colorado River Studies Program. <i>Colorado River Studies Office, Newsletter</i> (U.S. Bureau of Reclamation), 1: 3.<br><span style="color: #A52A2A;">≡ CROSS-LISTINGS  CITED» GCNHA Monograph 8: page 4-10 </span>  |
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|------|---------|--|
| 1991 | 18.1579 | [Navajo Generating Plant and wintertime haze at Grand Canyon.] <i>In</i> : Information Crossfile [SECTION]. <i>Park Science</i> (U.S. National Park Service), 11(1) (Winter): 10.    |
| 1991 | 18.1759 | On a clear day. <i>EPA Journal</i> (U.S. Environmental Protection Agency), 17(1) (January/February): 63. [Air pollution, Navajo Generating Station. Includes photo of Grand Canyon.] |
| 1991 | 18.43   | Grand Canyon visibility tied to lowering SO <sub>2</sub> . <i>ENR</i> (Engineering News-Record), 226 (February 11): 15-16.   |

PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**Anonymous (continued)**

- ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.44 EPA requires 70% reductions on SO<sub>2</sub> from Navajo Power Plant—Grand Canyon Trust urges 90%. *Colorado Plateau Advocate*, 2(4): 1-2. [Environmental Protection Agency.]  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.46 Glen Canyon Dam water operations. *Colorado River Studies Office, Newsletter* (U.S. Bureau of Reclamation), 3 (March): 2, 17.  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.47 Description of power system adjustments. *Colorado River Studies Office, Newsletter* (U.S. Bureau of Reclamation), 3 (March): 5. [Glen Canyon Dam Environmental Impact Statement.]  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.48 Glen Canyon Dam operations—Scientists recommend interim flows. *Colorado Plateau Advocate*, 2(5): 3.  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.49 Kaibab Paiutes reject incinerator—Trust helps look for alternatives. *Colorado Plateau Advocate*, 2(5): 4. [Grand Canyon Trust.]  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.50 The Kaibab Paiute Tribe kills waste dump plans. *The News* (Grand Canyon River Guides), 4(2) (Summer): 18.
- 1991 18.51 Emissions from Navajo Power Plant to be cut 90%. *The News* (Grand Canyon River Guides), 4(3) (Summer) (Interim Edition): 4. [Navajo Generating Station.]
- 1991 18.52 Navajo cited for canyon haze. *Electrical World*, 205(3): 16-. [Navajo Generating Station.]  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.53 LA smog pollutes Grand Canyon air. *Southwestern Pay Dirt*, (607): 14A. [Los Angeles, California.]  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.54 EPA to limit canyon haze. *Public Utilities Fortnightly*, 127 (March 15): 16. [Navajo Generating Station.] [Environmental Protection Agency.]  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.55 EPA proposes regulations to clear Grand Canyon air. *Air and Waste Management Association, Journal*, 41 (April): 485-487. [Environmental Protection Agency.]  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.56 Secretary of the Interior Lujan announces additional test flows. *Glen Canyon Environmental Studies Update*, (Summer): 1.
- 1991 18.57 MIPS: Images! Images! Images! *Glen Canyon Environmental Studies Update*, (Summer): 3.
- 1991 18.58 Quick reference for aerial photography and video records. *Glen Canyon Environmental Studies Update*, (Summer): 4.

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**Anonymous (continued)**

- 1991 18.59 GCES long-term monitoring program. *Glen Canyon Environmental Studies Update*, (Summer): 5.
- 1991 18.60 EPA debates controls for Grand Canyon air. *National Parks*, 66 (July/August): 11.  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.61 Arizona powerplant to cut Grand Canyon pollution. *ENR* (Engineering News-Record), 227 (August 19): 11. [Navajo Generating Station.]  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1991 18.1756 Grand Canyon visibility to improve under EPA rule. *In*: Newslines [SECTION]. *EPA Journal* (U.S. Environmental Protection Agency, Office of Communications and Public Affairs), 17(4) (September/October): 2.
- 1991 18.2546 Relief in sight for Grand Canyon. *In*: NPCA News [SECTION]. *National Parks*, 63(11/12) (November/December): 8-9. [Regarding actions to curtail air pollution and the effects of Glen Canyon Dam on the Colorado River.] [National Parks and Conservation Association.]
- 1991 18.62 Glen Canyon Dam Operating Authority; producing electricity and protecting the Grand Canyon environment. *Land and Water Law Review*, 26: 183-221.  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
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- 1992 18.65 Monitoring programs. *Colorado River Studies Office, Newsletter* (U.S. Bureau of Reclamation), 4: 2.  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1992 18.66 Grand Canyon cleanup challenged. *High Country News*, 24(2) (February 10): 4. [Air quality.]  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1992 18.983 Monitoring network design. *IMPROVE* (Interagency Monitoring of Protected Visual Environments), 1(1) (March 1): 4-5.
- 1992 18.67 Interim operating criteria monitoring. *Colorado River Studies Office, Newsletter* (U.S. Bureau of Reclamation), 5 (Spring/Summer): 3.  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-31|
- 1992 18.68 Glen Canyon Environmental Studies scientific data management and the Geographic Information System. *Glen Canyon Environmental Studies Update*, (Spring): 4.
- 1992 18.69 The bright edges; visions of the future. *Colorado Plateau Advocate*, (Summer): 3. [Air quality.]
- 1992 18.70 Visibility commission adopts work plan; industry lobby strikes out. *Colorado Plateau Advocate*, (Summer): 4. [Air quality.]
- 1992 18.984 Grand Canyon Visibility Transport Commission. *IMPROVE* (Interagency Monitoring of Protected Visual Environments), 1(4) (Summer) (October 15): 2-3.
- 1992 18.1034 Carving up the canyon. *Multinational Monitor*, 13(9): 27.

PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**Anonymous (continued)**

1992	18.1906	The EPA settlement agreement requiring reduction of emissions at the Navajo Generating Station: Setting a critical precedent for the protection of visibility at national parks. <i>Hofstra Environmental Law Digest</i> (Hofstra University, School of Law, Environmental Law Society), 9: 17-. [Environmental Protection Agency.]
1993	18.985	IMPROVE, the first three years. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 1(5) (Fall 1992) (January 1993): 2-7.
1993	18.72	Fire on the rim! <i>Regarding</i> (Grand Canyon Natural History Association), (May): 2-5.
1993	18.986	Visibility interpretive display installed at Grand Canyon National Park. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 2(3) (Summer) (October): 1.
1993	18.74	Geographic Information System sites. <i>Scientific Information Management</i> (Glen Canyon Environmental Studies), 1(1): 2. [Glen Canyon Environmental Studies.]
1994	18.1794	Looking for limestone in all the wrong places? <i>Colorado Plateau Advocate</i> , (Winter): 7, 11. [Navajo Generating Station.]
1994	18.75	Limited water flow planned in Grand Canyon. <i>ENR</i> (Engineering News-Record), 232(3) (January 17): 14.
1994	18.76	Science and our future. <i>Boatman's Quarterly Review</i> , 7(3): 9.
1994	18.78	Steps taken to aid Grand Canyon. <i>National Parks</i> , 68(3/4) (March/April): 10. [Glen Canyon Dam.]
1994	18.1363	[Recyclable trash in national parks.] <i>In</i> : Signposts [SECTION]. <i>Backpacker</i> , 22(7) (September): 20. [In 1993 Grand Canyon National Park generated 364,490 pounds of recyclable trash, superseded only by the National Mall in Washington, D.C. (1 million pounds).]
1994	18.77	American Rivers weighs in on "water spreading". <i>American Rivers</i> , 22(3) (Fall): 8.
1994	18.79	Field observations. <i>In</i> : Lamb, Susan (ed.), <i>The best of Grand Canyon Nature Notes</i> . Grand Canyon, Arizona: Grand Canyon Natural History Association, p. 47. [Reprinted from <i>Grand Canyon Nature Notes</i> , February, 1932; snow at Phantom Ranch.]
1994	18.80	Chart showing minimum temperatures during past five years; South Rim of Grand Canyon. <i>In</i> : Lamb, Susan (ed.), <i>The best of Grand Canyon Nature Notes</i> . Grand Canyon, Arizona: Grand Canyon Natural History Association, p. 47. [Reprinted from <i>Grand Canyon Nature Notes</i> , March, 1933.]
1995	18.81	Flood flow cancelled. <i>Boatman's Quarterly Review</i> , 8(1): 2.
1995	18.82	[Note of contribution to the Grand Canyon Conservation Fund by the Tides Foundation.] <i>In</i> : Instream cash flow [SECTION]. <i>American Rivers</i> , (Summer): 11.
1995	18.987	Interpretive visibility displays in our national parks. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 3(6) [ <i>sic</i> , should be 4(2)] (Spring) (July): 2-3.

PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**Anonymous (continued)**

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| 1995 | 18.83 | Horn Creek water. <i>Grand Canyon Field Notes</i> (Center for Resource Interpretation, Grand Canyon National Park, Technical Paper Series), (1) (September 1): [2]. [See also correction, (3) (September 22): [1].] |
| 1995 | 18.85 | Teachers study Glen Canyon ecology. <i>Scanner</i> (Flagstaff Unified School District), (October): 1, 6-7.  |
| 1995 | 18.84 | Fake flood. <i>Grand Canyon Field Notes</i> (Center for Resource Interpretation, Grand Canyon National Park, Technical Paper Series), (4) (October 1): 1.   |
| 1995 | 18.86 | Simulated flooding to give Colo. R. a wild look. <i>U.S. Water News</i> , 12(6) (December): 1, 4.   |
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| 1996 | 18.87   | Rising waters. <i>Grand Canyon Field Notes</i> (Center for Resource Interpretation, Grand Canyon National Park), (9) (January 17): [1].  |
| 1996 | 18.1795 | Grand Canyon development hinges on wells. <i>U.S. Water News</i> , 12(8) (February): 1, 12.  |
| 1996 | 18.1477 | Not just water over the dam. <i>Time</i> , (March 26):. [Experimental flood from Glen Canyon Dam.]   |
| 1996 | 18.88   | Pollution clouds plateau visibility. <i>Colorado Plateau Advocate</i> , (Spring): 10-11.   |
| 1996 | 18.90   | Colorado River workshop; the future of basin management. <i>Colorado Plateau Advocate</i> , (Spring): 11.  |
| 1996 | 18.91   | Grand Canyon Visibility Transport Commission proposal: Canyon at risk? <i>Grand Canyon Field Notes</i> (Center for Resource Interpretation, Grand Canyon National Park, Technical Paper Series), (17) (April 10): [1-4]. |
| 1996 | 18.92   | Biodiversity [heading]. <i>World Rivers Review</i> , (April): 13. [Colorado River controlled flood.]   |
| 1996 | 18.988  | Carl Bowman sees Grand Canyon National Park as flagship. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 5(1) (Winter) (April): 2-3.   |
| 1996 | 18.96   | [Colorado River controlled flood.] <i>Watershed Events</i> , (Spring): 17.   |
| 1996 | 18.93   | "Precedent-setting" proposals approved for improving air quality at parks. <i>Western Governors' Report</i> , (July): 2.   |
| 1996 | 18.937  | Restoring habitat and clean air in the Grand Canyon. <i>EDF Letter</i> (Environmental Defense Fund), 27(4) (July): 1, 3.   |
| 1996 | 18.989  | Grand Canyon Visibility Transport Commission recommends strategy for the Colorado Plateau. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 5(2) (Spring) (July): 2.                            |
| 1996 | 18.990  | Wildland fires influence western visibility. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 5(2) (Spring) (July): 3.  |

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**Anonymous (continued)**

1996	18.94	Glen Canyon Dam water release floods Colorado River. <i>American Rivers</i> , 24(2) (Summer): 10.
1996	18.95	Grand Canyon test deemed success. <i>Headwaters</i> , (Summer): 4. [Experimental flood from Glen Canyon Dam.]
1996	18.97	Grand Canyon flooding "a success". <i>U.S. Water News</i> , (August): 3. [Experimental flood from Glen Canyon Dam.]
1996	18.1058	Flushing the Colorado. <i>Darter Newsletter</i> (North American Native Fishes Association), (July/August):. [Experimental flood from Glen Canyon Dam.]
1996	18.99	Picturing the Glen Canyon floods using GIS. <i>ARC News</i> (Environmental Systems Research Institute, Inc.), 18(3) (Fall): 5. [Experimental flood from Glen Canyon Dam.] [NOTE: Cites "Glen Canyon River".]
1996	18.100	NPCA Park News [SECTION]. <i>National Parks</i> , 70(9/10): 11. [Visibility.]
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1997	18.1800	A conversation with Betsy Rieke. <i>Chronicle of Community</i> (Northern Lights Institute), 1(2) (Winter): 36-40. [Interview with former Assistant Secretary of the Interior for Water and Science. Experimental flood from Glen Canyon Dam mentioned in introductory paragraph, p. 36.]
1997	18.101	Successor to Grand Canyon Visibility Transport Commission to meet. <i>Western Governors' Report</i> , (February): 4.
1997	18.102	Glen Canyon and the 1996 Colorado River flood. <i>The Ol' Pioneer</i> (Grand Canyon Pioneers Society, Newsletter), 8(3): 1.
1997	18.103	A new look downstream; the environmental consequences of dams. <i>People, Land and Water</i> (U.S. Department of the Interior), 4(3): 12. [Notice of U.S. Geological Survey, Circular 1126.]
1997	18.104	Let the rivers run. <i>People, Land and Water</i> (U.S. Department of the Interior), 4(3): 26.
1997	18.105	Symposium on the 1996 controlled flood. <i>People, Land and Water</i> (U.S. Department of the Interior), 4(3): 26. [Announcement.]
1997	18.991	Grand Canyon enhances monitoring station. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 6(1) (Winter) (April): 1.
1997	18.2221	Deluge in the Grand Canyon—a new twist on an old story. <i>Nonpoint Source News-Notes</i> (U.S. Environmental Protection Agency), (48) (April/May): 5-7. [Controlled flood in Colorado River.]
1997	18.106	Some facts about the Colorado River flood. <i>The Ol' Pioneer</i> (Grand Canyon Pioneers Society), 8(5): 3.
1997	18.107	Northern Arizona residents support the environment. <i>Colorado Plateau Advocate</i> , (Spring): 5. [With photograph of Tanner Flats, Grand Canyon.]



PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**Anonymous (continued)**

1997	18.109	Grand Canyon Monitoring and Research Center; research and data collection activities. <i>Federal Register</i> , 62(131) (July 9): 36842.
1997	18.110	Grand Canyon controlled floods studied. <i>Environment News</i> (Northern Arizona University), (September): 5.
1997	18.111	Picture perfect project; Salt River Project is spending \$470 million to retrofit a coal-burning powerplant with scrubbers to protect Grand Canyon views. <i>ENR</i> (Engineering News-Record), 238(10): cover, 30.
1997	18.2306	Eine erfrischende Spülung für den Grand Canyon; Ergebnisse der kontrollierten Flut des Frühjahrs 1996. <i>Neue Zürcher Zeitung</i> (Zürich), 1997(6): 4. [Controlled flood in Colorado River.] [In German.]
1998	18.992	Grand Canyon Regional Air Quality Visibility Study (GRAVS). <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 7(2) (Spring) (July): 3.
1999	18.993	IMPROVE aerosol site clusters selected. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 8(1) (Winter) (April): 3.
1999	18.2282	When the view ain't so grand. <i>Canyon Echo</i> (Sierra Club, Grand Canyon Chapter), 35(3) (April): 3.
1999	18.2283	U.S. EPA releases report showing Mohave Generating Station impacts on Grand Canyon. <i>Canyon Echo</i> (Sierra Club, Grand Canyon Chapter), 35(4) (May/June): 3. [Environmental Protection Agency.]
1999	18.994	EPA issues final regional haze regulations for protection of visibility in Class I areas. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 8(2) (Spring) (July): 2-5. [Environmental Protection Agency.]
1999	18.995	Project MOHAVE final report available. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 8(2) (Spring) (July): 6. [Measurement Of Haze And Visual Effects.]
1999	18.996	Network sites stand up to disasters. <i>The Monitor</i> (U.S. National Park Service, Air Quality Station Operators Newsletter), 3(1) (Fall): 4.
1999	18.2284	Mohave Generating Station to clean up emissions. <i>Canyon Echo</i> (Sierra Club, Grand Canyon Chapter), 35(9) (November): 1.
2000	18.997	Assortment of interpretive air quality exhibits promote understanding in national parks. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 9(3) (Summer): 3-5.
2000	18.998	Transmissometer data files undergo change. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 9(3) (Summer): 5.
2000	18.999	Agencies join visibility monitoring effort to expand the IMPROVE Protocol network. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 9(3) (Summer): 6.

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**Anonymous (continued)**

2000	18.1000	NPS photographic spectrums now complete. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 9(3) (Summer): 7. [National Park Service.]
2001	18.1001	IMPROVE optical monitoring network captures Asian dust event. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 10(2) (Spring): 2-3.
2001	18.968	Grand Canyon; reviving the dying heart of the Colorado. <i>Living Rivers Currents</i> , 1(3) (Fall): 2-3.
2001	18.1180	[Grand Canyon ecosystem on the verge of crisis.] <i>NEDO U.S. Information Center, Biweekly</i> (New Energy and Industrial Technology Development Organization, Tokyo) (May 7): 13. [In Japanese.]
2001	18.2515	KC Plant technology reduces bus emissions. <i>DOE This Month</i> (U.S. Department of Energy, Office of Public Affairs, Washington, D.C.), 24(7) (August): 6. [Inventor Dwayne Fosseen worked through a technology transfer program with the U.S. Department of Energy's Kansas City Plant, part of the National Nuclear Security Administration, to commercialize his DriverMax throttle modulator. DriverMax was "tested with National Parks transportation service buses in the Grand Canyon, where it performed beyond researchers' expectations, reducing park bus exhaust by more than half and improving mileage by eight percent. DriverMax currently is being used on buses in Louisville, Ky., in the Grand Canyon, and in several cities in Iowa."]
2002	18.981	Electroshock in the Grand Canyon. <i>Living Rivers Currents</i> , 2(1) (January): 1.
2002	18.982	Grand Canyon crisis; LR calls for immediate action. <i>Living Rivers Currents</i> , 2(1) (January): 1.
2002	18.1190	Regional planning organizations. Part 5: Western Regional Air Partnership. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 11(1) (1st Quarter): 6-7.
2002	18.1191	Grand Canyon, Joshua Tree, Mammoth Cave National Parks join Web cam network. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 11(2) (2nd Quarter): 6-7. [Air quality monitoring.]
2002	18.1018	Simulated floods; no help for the Grand Canyon. <i>Living Rivers Currents</i> , 2(4) (May): 2.
2002	18.1192	Asian dust event generates studies of aerosols and visibility across the U.S. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 11(4) (4th Quarter): 4-6. [Includes Grand Canyon monitoring data.]
2002	18.1046	Can floods revive the Grand Canyon? <i>Nature</i> (London), 420(6914): 356.
2003	18.1671	Pollution abroad blows ill winds at home; U.S. businesses may bear the brunt of cleaning up pollution formed overseas. <i>The Telescope: Environment Issues On the Horizon</i> (U.S. Chamber of Commerce, Division of Environment, Technology and Regulatory Affairs), (1) (May): [1]-[2]. [Grand Canyon, in passing.]

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**Anonymous (continued)**

2003	18.1075	First in nation conservation partnership. <i>The Wild Thing</i> (Grand Canyon Wildlands Council Newsletter), (Fall): 13.
2004	18.1079	Grand Canyon updates. <i>Colorado Plateau Advocate</i> , (Winter): 4-5. [Colorado River, seeps and springs, California condors, fire management.]
2004	18.1094	History of Colorado River provides case study for threats. <i>American Rivers</i> , 32(2) (Spring): 4-.
2004	18.1644	Saving Grand Canyon once and for all. <i>Waterkeeper Magazine</i> (Waterkeeper Alliance, New York), 1(1) (Summer): 32-33.
2004	18.1193	Indian Gardens nephelometer supplements in-canyon monitoring. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 13(4) (4th Quarter): 3.
2005	18.1261	Colorado River. <i>Lower Owens River Project, Newsletter</i> (Ecosystem Sciences, Boise, Idaho), (2): 2-3.
2005	18.1195	Grand Canyon visibility reaches unacceptable levels. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 14(2) (2nd Quarter): 3. [Fire-related air-quality impairment.]
2005	18.1480	High flow test in the Grand Canyon. <i>In: On the Ground</i> [SECTION]. <i>Southwest Hydrology</i> , (May/June): 8-9.
2005	18.1488	Results unclear from Glen Canyon flow experiments. <i>River Report</i> , (Winter 2005-2006): 3.
2007	18.1213	Concession environmental audits; years in review—2005 and 2006. <i>GreenLine</i> (U.S. National Park Service, Concession Program), 7(1): 1, 3. [Includes concessions at Grand Canyon National Park and Lake Mead National Recreation Area.]
2007	18.1214	Taking care of what you care about. <i>GreenLine</i> (U.S. National Park Service, Concession Program), 7(1): 4. [Arizona Raft Adventures, AzRA.]
2007	18.1215	Saving energy—room by room. <i>GreenLine</i> (U.S. National Park Service, Concession Program), 7(1): 4-5. [Xanterra, Grand Canyon National Park.]
2007	18.1196	IMPROVE: The early years; a look back at the first years of the IMPROVE program, from 1985-1992. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 16(3) (3rd Quarter): 4-6.
2007	18.1197	IMPROVE: Development and expansion; a look back at the 5th through 10th years of the program, from 1993-1997. <i>IMPROVE</i> (Interagency Monitoring of Protected Visual Environments), 16(4) (4th Quarter): 4-6.
2008	18.2151	Grand Canyon transport to be all CNG. <i>NGVAmerica Member Newsletter</i> (Natural Gas Vehicles for America, Washington, D.C.), 11(21) (May 30): [1]-[2]. [Notes issues of air pollution and noise.] [Compressed natural gas.]

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**Anonymous (continued)**

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| 2008 | 18.2115 | High tide; model analysis in Grand Canyon "flood" helps protect river's ecosystem. <i>In: University News Briefs [SECTION]. ASU Magazine (Arizona State University), 11(4) (June): 11. [Focus on the work of Mark Schmeeckle.]</i> |
| 2008 | 18.1198 | National Park Service and Olympus partner for air quality Webcam network. <i>IMPROVE (Interagency Monitoring of Protected Visual Environments), 17(3) (3rd Quarter): 2.</i>  |
| 2008 | 18.1217 | Global warming solutions for Arizona; a regional approach to global warming. <i>Environment Arizona, 2(3) (Fall): 1.</i>   |
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| 2009 | 18.1616 | Grand Canyon Visitor Center goes solar. <i>Under the Sun (Arizona Solar Energy Association, Scottsdale), 5(1) (January): 2.</i>  |
| 2009 | 18.2418 | Grand Canyon lodges help protect grand sky views. <i>Nightscape (International Dark-Sky Association, Tucson), (100) (Spring): [3]. [Grand Canyon National Park Lodges, in partnership with the National Park Service, installing dark sky compliant lamps and fixtures in outdoor lights.]</i> |
| 2009 | 18.1635 | <i>National parks in peril : the threats of climate disruption. State fact sheet: Arizona, Nevada, and Utah. [No place]: The Rocky Mountain Climate Organization, and Natural Resources Defense Council, 5 pp. (September 2009.)</i>   |
| 2009 | 18.1262 | Reclamation/Colorado River/Glen Canyon Dam. <i>Western States Water (Western States Water Council, Murray, Utah), (1857) (December 18): [1]-[2].</i>   |
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| 2010 | 18.1398 | Rivers worldwide in peril. पर्यावरण विमर्श [ <i>Paryavaran Vimarsh</i> ] [ <i>Environmental Discussions</i> ] (New Delhi), (October): 10. [Grand Canyon and Colorado River, <i>in passing.</i> ] [Article in English; serial in Hindi.] |
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| 2012 | 18.2379 | 地球環境問題のいろいろ ⑨～異常気象～ [Chikyūkankyōmondai no iroiro. 9~ ijō kishō ~] [ <i>Various global environmental problems. 9. Unusual weather.</i> ] さとのかぜ [ <i>Satokaze</i> ] (発行 千葉県いすみ環境と文化のさとセンター [Chiba ken isumikankyōtobunkanosato sentā] [Chiba Prefecture Isumi Environmental and Cultural Center, Japan]), (178) (January 1): 7. [Includes brief note of Lake Mead low water level.] [ <i>In Japanese.</i> ]   |
| 2012 | 18.2084 | Transborder drought monitor. Drought, initiated by a strong La Niña during the winter of 2010-2011, intensified rapidly during spring 2011 and has persisted, especially throughout the eastern part of the transborder region. <i>Transborder Climate: Adaptation Without Boundaries (University of Arizona, Institute for the Environment), 1(1) (February): 3.</i>  |
| 2012 | 18.2632 | Csökken a Grand Canyoni uránbányászat. <i>In: Kishírek a Nagyvilágból [SECTION]. Atomerőmű (Paksi Atomerőmű Zártkörűen Működő Részvénytársaság, Paks, Hungary), 35(2) (February): 17. [Regarding the federal withdrawal of lands near Grand Canyon from new mining for 20 years. In noting Senator John McCain's reaction, notes (<i>in translation here</i>), "The senator also believes that mining does not affect the quality of drinking water and has fallen victim to an emotional PR campaign that exploits the public's love for the Grand Canyon."]</i> [ <i>In Hungarian.</i> ] |

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2012	18.1959	Correction. <i>Boatman's Quarterly Review</i> , 26(1) (Spring): 46. [Correction for photos in article by Robert H. Webb <i>et al.</i> (2012, <a href="#">ITEM NO.</a> 18.1436).]
2012	18.1726	Important findings released about the impacts of Navajo Generating Station on visibility. <i>CAP Tribal Confluences</i> (Central Arizona Project), (April): [unpaginated].
2012	18.2085	Transborder drought monitor (analysis through 31 August 2012). While summer monsoon precipitation has brought some short-term and local drought relief in southern Arizona, Sonora and Sinaloa, extensive areas of arid North America are still experiencing the long-term effects of drought. <i>Transborder Climate: Adaptation Without Boundaries</i> (University of Arizona, Institute for the Environment), 1(2) (September): 3.
2012	18.2086	Monitor transfronterizo de la sequía (análisis al 31 de agosto 2012). Mientras que el verano la precipitación monozónica ha traído un poco de alivio de la sequía a corto plazo y locales en el sur de Arizona, Sonora y Sinaloa, extensas áreas de América del Norte árido aún experimenta los efectos a largo plazo de la sequía. <i>Clima Transfronterizo: Adaptación sin Fronteras</i> (University of Arizona, Institute for the Environment), 1(2) (September): 3. <a href="#">[In Spanish.]</a>
2012	18.1432	Brilliant stars over Grand Canyon await you. <i>Canyon Views</i> (Grand Canyon Association), 19(3) (Fall): 3. [Regarding dark skies and a challenge grant toward light-polution solutions.]
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2013	18.1640	GCA dark skies experience. <i>Pinyon Press</i> (Xanterra South Rim, L.L.C., Grand Canyon), 2013(1) (January 9): 3. [Grand Canyon National Park solicitation of International Dark Sky Parks certification.]
2013	18.2087	Transborder drought monitor (analysis through December 2012). Despite the relief provided to parts of the region during the 2012 summer monsoon season, precipitation was below average across most of the region during Fall 2012. <i>Transborder Climate: Adaptation Without Boundaries</i> (University of Arizona, Institute for the Environment), 2(1) (January): 3.
2013	18.2088	Monitor transfronterizo de la sequía (análisis hasta Diciembre 2012). A pesar de la ayuda proporcionada a las partes de la región durante la temporada del monzón de verano de 2012, las precipitaciones fueron inferiores a la media en la mayor parte de la región durante el otoño de 2012. <i>Clima Transfronterizo: Adaptación sin Fronteras</i> (University of Arizona, Institute for the Environment), 2(1) (January): 3. <a href="#">[In Spanish.]</a>
2013	18.1451	The new shale energy deveopment threat: The oil shale and tar sands. <i>Colorado Plateau Advocate Express</i> , (March): [3]. [Illustrated with photo of Colorado River as viewed from Nankoweap granaries, by Michael Quinn, "Colorado River could be contaminated from Utah oil sands production." Item focuses on upper Colorado River and tributaries.]
2013	18.1452	Pollution proceeds to assist Hopi and Navajo renewable energy projects. <i>Colorado Plateau Advocate Express</i> , (March): [4]. [Regarding clean-air violations from Mohave Generating Station, Laughlin, Nevada.]
2013	18.1633	Time for clean air at the Grand Canyon; Arizona's dirtiest power plant fuels air pollution. <i>Environment Arizona</i> , 7(3) (Fall): [1]. [Navajo Generating Station.]

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2013	18.1497	Protect the grandest watershed of all! <i>Canyon Echo</i> (Sierra Club, Grand Canyon Chapter), (Winter): 9. [Proposed Grand Canyon Watershed National Monument.]
2014	18.1634	Breath of fresh air for the Grand Canyon; citizens urge EPA to move forward on clean air rules. <i>Environment Arizona</i> , 8(1) (Winter): [1]. [Environmental Protection Agency.]
2014	18.1647	Dark sky refuge in Colorado Plateau national parks. <i>Field Report</i> (National Parks Conservation Association, Southwest Region), (Spring): 1, 3-4.
2014	18.1659	Achieving permanent protection of the Grand Canyon watershed. <i>BlackHawk Watch</i> (Northern Arizona Audubon Society), 43(4) (March/April): 1. [Proposed Grand Canyon Watershed National Monument.]
2014	18.1881	A new feature in US national and state parks—CO <sub>2</sub> savings. Xanterra is the largest park concessionaire in the US, operating hotels, restaurants, retail stores, marinas and transportation systems. <i>WWF Climate Savers</i> (World Wildlife Fund), (April), 2 pp. [Fact sheet.] [See p. 2: "At the South Rim of the Grand Canyon, Xanterra installed 325 occupancy-sensing, digitally-programmable thermostats." (ENTIRE NOTE)]
2014	18.1740	Clearing pollution at the Grand Canyon. <i>Environment Arizona</i> , 8(3) (Fall): [2]. [Navajo Generating Station.]
2015	18.1878	Sinjin makes "The Wonder List". <i>Angling Trade</i> (Boulder, Colorado), (Fall): 8. [Sinjin Eberle of American Rivers succeeds in having the Colorado River, the #1 Most Endangered River, featured on CNN's "The Wonder List", hosted by Bill Weir, which includes Grand Canyon, Lake Mead, and Hoover Dam.]
2015	18.2112	ClimateAnalyzer.org now available to the MOJN parks: Quick, easy access to park-specific climate information. <i>The Oasis</i> (U.S. National Park Service, Mojave Desert Network, Inventory and Monitoring Program, Boulder City, Nevada), (Fall): 1, 3.
2016	18.1823	Leaving a legacy: One man's passion helps save the night sky. <i>In</i> : National Park Service interns; inspiring our next generation. <i>Canyon Views</i> (Grand Canyon Association), 23(1) (February): 12-13. [Joe Orr bequest to Grand Canyon Association contributing to studies of light pollution in Grand Canyon National Park.]
2013	18.2218	Alternative fuels help ensure America's national parks stay green for another century. <i>Clean Cities Now</i> (U.S. Department of Energy), 20(1) (Summer): cover, 8-13. [See p. 12, "Spotlight: Zion National Park", which reports on the use of plug-in hybrid electric vehicles in the "Zion Group" that includes Pipe Spring National Monument.]
2017	18.1976	Grand Canyon; uranium decisions loom large. <i>In</i> : Postcards from the Field [SECTION]. <i>Colorado Plateau Advocate</i> , (Spring): 28.
2017	18.2143	Protecting the night sky; your support means tomorrow's children will know the wonder of stargazing. <i>Canyon Views</i> (Grand Canyon Association), 24(1) (April): 3-5.

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**Anonymous (continued)**

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|-------|---------|---|
| 2017  | 18.2145 | Get involved! Great ways to support dark skies at Grand Canyon. <i>Canyon Views</i> (Grand Canyon Association), 24(1) (April): 10.  |
| <hr/> |         |   |
| 2018  | 18.2247 | Night moves; for night sky photographer Harun Mehmedinovic, Arizona has a truly awesome dark side. <i>Outside</i> , (December): [46]. [Features dark skies, principally at Vermilion Cliffs. Item is labeled "Branded Content", a promotional item that directs to web pages of Arizona Office of Tourism; also with facing promotional page [p. [47].] |

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North American Continent Between 25° and 50° N Lat.” (shaded lithographical presentation); “Plate XIII”, a single, one-sided leaf between pp. 496/497 presenting graphical data for a few recording stations worldwide: “Daily Curve of Atmospheric Pressure” and “Curve of Atmospheric Pressure Among the Months”.]

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| 1861 | 18.2440 | Map of the United States showing the Temperature And the Annual Fall of Rain by Lorin Blodget Author of 'Am. Climatology['] The Wind Rose J. H. Coffin, L.L.D. Professor in Lafayette Coll. Pa." <i>Inset map in:</i> U.S. National Observatory, Superintendent, <i>The Washington Map of the United States by the Superintendent U.S. National Observatory Washington D.C. 1861.</i> ("S. Taintor & C <sup>o</sup> 36, Dey, St. New York. Publishers.") ("Holmes, Harrison & C <sup>o</sup> London.") ("Entered according to Act of Congress in the year 1861 by Robert P. Smith in the Clerks Office of the District Court of the Eastern District of Pennsylvania.") [The same inset map is also presented in the 1864 ed. of <i>The Washington Map.</i> ] |
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**Blumenfeld, Jared**

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| 2010 | 18.1305 | Source specific federal implementation plan for implementing best available retrofit technology for Four Corners Power Plant: Navajo Nation. <i>Federal Register</i> , 75(201) (October 19): 64221-64235. |
| 2013 | 18.1453 | Approval of air quality implementation plans; Navajo Nation; regional haze requirements for Navajo Generating Station. <i>Federal Register</i> , 78(24) (February 5): 8274-8294.                          |
| 2014 | 18.1602 | Promulgation of air quality implementation plans; Arizona; Regional Haze and Interstate Visibility Transport Federal Implementation Plan. <i>Federal Register</i> , 79(32) (February 18): 9318-9378.      |

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| 1986 | 18.1584 | Grand Canyon wind study aids in smoke management. <i>Park Science</i> (U.S. National Park Service), 6(4) (Summer): 18-19. [Regarding prescribed-fires smoke management.] |
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- 1896 18.1460 Arizona weather. *University of Arizona, Agricultural Experiment Station, Bulletin 20*, 38 pp.
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- 1986 18.1627 Rainfall pH in Tombstone, Arizona, 1968-81. *Hydrology and Water Resources in Arizona and the Southwest*, 16: 85-93. [Includes Navajo Generating Plant and National Atmospheric Deposition Program station at Grand Canyon.]
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- 1994 18.167 Technical approaches to the problem of water supply. *In*: Durdu, Susan, and Patrick, Ruth (eds.), *Proceedings of the Fifth National Conference [on Environmental Issues] : Water: Our Next Crisis?* Academy of Natural Sciences. Philadelphia: Academy of Natural Sciences [of Philadelphia], pp. 53-64. [See p. 55, Colorado River and Grand Canyon, *in passing*.]
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**Bonacci, Ognjen**

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- 1977 18.168 Colorado River campsite inventory. *In*: Proceedings, Symposium [on] River Recreation, Management and Research, January 24-27, 1977, Minneapolis, Minnesota. *U.S. Forest Service, North Central Forest Experiment Station, General Technical Report 28*, pp. 226-231. (Symposium sponsored by North Central Forest Experiment Station, Backcountry River Recreation Management Research Project.)
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**Bowman, Isaiah**

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**Bowman, Margaret**

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**Braasch, Gary**

- 2011 18.2408 Images d’une évolution; un photographe témoigne d’un monde qui se réchauffe. *Bulletin* (Organisation Météorologique Mondiale, Genève), 60(1): 23-33. [See photo, p. 26, “En octobre 2010, le niveau de l’eau du lac Mead était le plus bas jamais atteint depuis la construction du barrage dans les années 1930. Situé sur le fleuve Colorado entre le Nevada et l’Arizona, aux États-Unis, le lac perd son eau rapidement en raison de la sécheresse qui sévit de longue date dans la région.”] [In French.]

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- 1982 18.1863 Long range transport of visibility reducing pollutants in the Southwest. *In: Preprint Volume : AMS/APCA Third Joint Conference on Applications of Air Pollution Meteorology, San Antonio, Texas, January 12-15, 1982*, [2] pp. [American Meteorological Society; Air Pollution Control Association.]

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**Bray, Wade R.**

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**Breitenbach, Benedickt**

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- 2014 18.1727 *Downscaled CMIP3 and CMIP5 climate projections : release of hydrology projections, comparison with preceding information, and summary of user needs.* [No place]: U.S. Bureau of Reclamation, Climate Analytics Group, Climate Central, Lawrence Livermore National Laboratory, National Center for Atmospheric Research, Santa Clara University, Scripps Institution of Oceanography, U.S. Army Corps of Engineers, U.S. Geological Survey, SEPARATELY PAGINATED SECTIONS [111 pp. total]. [Coupled Model Intercomparison Project, World Climate Research Programme.]

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- 1984 18.176 *1983 Colorado River beach campsite inventory : Grand Canyon National Park, Arizona.* [U.S. National Park Service,] Grand Canyon National Park, Division of Resources Management, 56 pp.
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**Brickler, Stanley K., AND Tunnicliff, Brock**

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- 2004 18.1095 Drought: The ultimate wrench in the Colorado River system. *World Rivers Review*, 19(3) (June): 6-7.
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- 1985 18.2385 The wildlife time warp. *Arizona Wildlife* (Arizona Game and Fish Department), 1985: 3. [Director's introduction to annual report. Includes brief note of environmental changes and concerns for the Colorado River in Grand Canyon, Lee's Ferry fishery, and Lake Mead bass fishery.]
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- 1983 18.2220 *Volatile organic chemicals in the atmosphere: An assessment of available data.* Menlo Park, California: SRI International, Atmospheric Science Center, for U.S. Environmental Protection Agency, Office of Research and Development, Environmental Sciences Research Laboratory, Research Triangle Park, North Carolina, ix, 198, [8] pp. + magnetic tape. (EPA/600/09.) (EPA/DF-83/005a.) (Documentation, PB83-195503.) (Magnetic tape, PB83-195511. "Source tape is in ASCII character set. Character set restricts preparation to 9 track, one-half inch tape only.") [Monitoring sites for some chemicals include Grand Canyon.]
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- 1994 18.224 Protecting crystal clear vistas at the Canyon. *Colorado Plateau Advocate*, (Spring/Summer): 4.
- 1994 18.225 Protecting the Canyon's natural quiet; solitude, wilderness lost in the roar. *Colorado Plateau Advocate*, (Spring/Summer): 11.
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introducing this issue, which focuses environmental research, stewardship and outreach, including Native American relations. Includes (p. 2): “Some GRCA staff joined me on a nine-day river mission with senior staff from the Bureau of Reclamation and scientists from the U.S. Geological Survey and the U.S. Fish and Wildlife Service. Reclamation is engaged in a series of related planning processes for managing water in the Colorado River basin. Our river mission gave park staff and scientists a tremendous opportunity to educate Reclamation staff on climate change impacts in the Grand Canyon.” [See also Shalla (2024, [ITEM NO. 18.2605](#)).]

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Canyon, Milkweed Spring, Big Spring, Boucher East Spring, Burro Spring, Clear Creek, Diamond Creek Spring, Grapevine East Spring, Grapevine Main Spring, Havasu Spring, Hawaii Spring, Hermit Spring, Hindu Canyon Spring, Indian Garden Spring, JT Spring, Lonetree Spring, Meriwhitica Spring, Mines Spring, Monument Spring, Peach Springs, Pipe Creek, Pumphouse Spring, Red Canyon Spring, Ribbon Creek, Roaring Springs, Salt Creek Spring, Tapeats Creek, Thunder River, Vaseys Paradise, Artesian Spring at River Mile 183, Bridge Canyon Spring, Granite Spring Canyon Spring, Travertine Canyon Spring, Warm Springs at Lava Falls, Ridenour Mine Spring, Caly Tank Canyon Spring, Fern Spring, Horse Flat Canyon Spring.]

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- 1982 18.2329 *Lower Colorado River Proposed General Permit : Main Report and Final Environmental Impact Statement : counties of Coconino, Mohave, Yuma, Arizona; San Bernardino, Riverside, Imperial, California; Clark, Nevada.* Los Angeles: U.S. Army Engineer District, Los Angeles, SEPARATELY PAGINATED SECTIONS [296 pp. total]. [Grand Canyon and lower Colorado River to the U.S.-Mexico boundary. "The Los Angeles District of the Corps of Engineers . . . has permitting control over all construction projects within or over the lower Colorado River, and the discharge of fill materials into the river and its adjacent wetlands." (p. 1)] [Preparers (pp. EIS-30 to EIS-32): Corps of Engineers: Joan Drake, Glenn Emigh, Kris Nielsen, Andrea Pickart, Clifford Rader, Steven Schwartz, Robert Wood (Project Manager); Consultants (WESTEC Services, Inc.): Deanna Carhill, Richard Carrico, Jack Fisher, Nancy Goldberg, Kurt Kline, Steve Lacy, Helen Molletta, Frank Norris, Michael O'Farrell, Jerry Owyang, Thomas Ryan, Diane Schmidt, John Westermeier, Connie Willens.]

**U.S. Bureau of Land Management**

- 1987 18.2261 *Draft : Hermit Project : EA No. AZ-010-87-013 : a major modification to the Hunt Project Plan of Operations for uranium ore extraction, AS-010-82-24P/Amended, the Hermit Mine.* [No place]: U.S. Bureau of Land Management, 74 pp. [Cover title: *Hermit : EA No. AZ-010-87-013 : The Hermit Project Draft Environmental Assessment : a major modification to the Hunt Project Plan of Operations for uranium ore extraction.*] [Also with references to Hack Canyon Mine, Kanab North Mine, Pigeon Mine, Pine Nut Mine, Orphan Mine, and Canyon Mine.]

**U.S. Bureau of Land Management, AND U.S. National Park Service**

- NO DATE 18.2630 *Grand Canyon-Parashant National Monument, Arizona, Science Plan.* [No place]: U.S. Bureau of Land Management, and U.S. National Park Service, 68 pp. [2023.]



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[Includes a section on “Air Resources (including Weather, Climate, Air Quality, Soundscapes, Light Pollution)”.]

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**U.S. Bureau of Land Management, Western Region, Office of Surface Mining, Reclamation and Enforcement; AND U.S. Bureau of Indian Affairs**

2014 18.1638 EPA’s Regional Haze rule and the Navajo Generating Station. *Navajo Generating Station-Kayenta Mine Complex Project*, 1(1) (May): 3. [Environmental Protection Agency.]

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**U.S. Bureau of Reclamation**

1992 18.2197 *CRSS : Colorado River Simulation System : hydrologic flow and salt data base for the Lower Colorado Region, Lees Ferry to Imperial Dam*. [No place]: U.S. Bureau of Reclamation, SEPARATELY PAGINATED SECTIONS [160 pp. total].

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**U.S. Bureau of Reclamation, Navajo Generating Station-Kayenta Mine Complex Project**

2014 18.1649 *Navajo Generating Station-Kayenta Mine Complex Project Environmental Impact Statement*. [U.S. Bureau of Reclamation, Phoenix Area Office], 4 pp. [Fact sheet.]

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**U.S. Bureau of Reclamation, Remote Sensing and Geographic Information Group**

1997 18.702 USBR Remote Sensing and Geographic Information Group D-8260 executive summary on mapping the controlled flood event. *Glen Canyon Dam beach/habitat-building flow : abstracts and executive summaries, April 1997* [symposium convened by the Grand Canyon Monitoring and Research Center, Department of the Interior, Flagstaff, Arizona, April 8-10, 1997, Flagstaff]. [No imprint, convenor from separate proceedings volume], pp. 133-137.

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**U.S. Bureau of Reclamation, Upper Colorado Region**

1989 18.2125 *Public involvement plan for Glen Canyon Environmental Impact Statement and Glen Canyon Environmental Studies*. U.S. Bureau of Reclamation, Upper Colorado Region, revised, 16 pp.

1990 18.2126 *Management plan for preparation of Glen Canyon Dam Environmental Impact Statement*. U.S. Bureau of Reclamation, Upper Colorado Region, 35 pp.

1991 18.2127 *Glen Canyon Dam Interim Operating Criteria supporting document : August 1991*. U.S. Bureau of Reclamation, Upper Colorado Region, SEPARATELY PAGINATED SECTIONS.

2005 18.2026 *Quality of water : Colorado River basin : progress report no. 22*. [No place]: U.S. Department of the Interior, 89 pp. [Includes Lower Basin.] [NOTE: For earlier reports see U.S. Department of the Interior.]

2008 18.2128 *Environmental Assessment : experimental releases from Glen Canyon Dam, Arizona, 2008 through 2012*. U.S. Bureau of Reclamation, Upper Colorado Region, 57 pp. [For proposed conservational water releases.]

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- 2008 18.2129 *Final Environmental Assessment : experimental releases from Glen Canyon Dam, Arizona, 2008 through 2012.* U.S. Bureau of Reclamation, Upper Colorado Region, 59 pp. + appendices. [For proposed conservational water releases.]
- 2011 18.2033 *Quality of water : Colorado River basin : progress report no. 23.* [No place]: U.S. Department of the Interior, 76 pp. [Includes Lower Basin.]
- 2011 18.2124 *Environmental Assessment : development and implementation of a protocol for high-flow experimental releases from Glen Canyon Dam, Arizona, 2011 through 2020.* Salt Lake City: U.S. Bureau of Reclamation, Upper Colorado Region, SEPARATELY PAGINATED SECTIONS [546 pp. total].
- 2013 18.2034 *Quality of water : Colorado River basin : progress report no. 24.* [No place]: U.S. Department of the Interior, 124 pp. [Includes Lower Basin.]
- 2017 18.2035 *Quality of water : Colorado River basin : progress report no. 25.* [No place]: U.S. Department of the Interior. [Includes Lower Basin.]

**U.S. Bureau of Reclamation, Upper Colorado Region; AND U.S. Bureau of Reclamation, Lower Colorado Region**

- NO DATE 18.2130 *Colorado River system consumptive uses and losses report 1976-1980.* U.S. Bureau of Reclamation, Upper Colorado Region and Lower Colorado Region, 49 pp.
- 1991 18.2131 *Colorado River system consumptive uses and losses report 1981-1985.* U.S. Bureau of Reclamation, Upper Colorado Region and Lower Colorado Region, 51 pp.
- 1998 18.2132 *Colorado River system consumptive uses and losses report .* U.S. Bureau of Reclamation, Upper Colorado Region and Lower Colorado Region, 51 pp.
- 2006 18.2133 *Development of Lower Basin shortage guidelines and coordinated management strategies for Lake Powell and Lake Mead, particularly under low reservoir conditions.* U.S. Bureau of Reclamation, Upper and Lower Colorado Regions, 20 volumes in 9.
- 2007 18.2134 *Colorado River interim guidelines for lower basin shortages and coordinated operations for Lake Powell and Lake Mead : Draft Environmental Impact Statement.* Boulder City, Nevada: U.S. Bureau of Reclamation, Lower Colorado Regional Office.
- 2007 18.2135 *Colorado River interim guidelines for lower basin shortages and coordinated operations for Lake Powell and Lake Mead : Final Environmental Impact Statement.* [No place]: U.S. Bureau of Reclamation, Upper and Lower Colorado Regions, 4 volumes, SEPARATELY PAGINATED SECTIONS AND APPENDICES.

**U.S. Bureau of Reclamation, Upper Colorado Region; AND U.S. National Park Service, Intermountain Region**

- 2015 18.2136 *Glen Canyon Dam Long-Term Experimental and Management Plan, Environmental Impact Statement : Public Draft.* [No place]: U.S. Bureau of Reclamation, Upper Colorado Region, and U.S. National Park Service, Intermountain Region. *Executive Summary*, viii, 60 pp.; *Volume 1—Chapters 1-8*, SEPARATELY PAGINATED SECTIONS [1,014 pp. total]; *Volume 2—Appendices A-N*, SEPARATELY PAGINATED SECTIONS [966 pp. total].

PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

- 2016 18.2137 *Glen Canyon Dam Long-Term Experimental and Management Plan, Environmental Impact Statement : final*. [No place]: U.S. Bureau of Reclamation, Upper Colorado Region, and U.S. National Park Service, Intermountain Region. *Executive Summary*, viii, 68 pp.; *Volume 1—Chapters 1-8*, SEPARATELY PAGINATED SECTIONS [1,022 pp. total]; *Volume 2—Appendices A-N*, SEPARATELY PAGINATED SECTIONS [966 pp. total]; *Volume 3—Appendices O-Q*, SEPARATELY PAGINATED SECTIONS [412 pp. total] + “LTEMP FEIS Errata List”, 9 pp., accessible online [http://ltempeis.anl.gov/documents/final-eis/FEIS\\_Errata\\_List.pdf](http://ltempeis.anl.gov/documents/final-eis/FEIS_Errata_List.pdf) [2409 pp. grand total].
- 2016 18.2138 *U.S. Department of the Interior : Record of Decision for the Glen Canyon Dam Long-Term Experimental and Management Plan Environmental Impact Statement : December 2016*. Salt Lake City: U.S. Bureau of Reclamation, Upper Colorado Region, and Lakewood, Colorado: U.S. National Park Service, Intermountain Region, 22, 4, 34, 13 pp.

**U.S. Bureau of Reclamation, Upper Colorado Regional Office**

- 2012 18.2139 *Finding of No Significant Impact for the Environmental Assessment for development and implementation of a protocol for high-flow experimental releases from Glen Canyon Dam, Arizona through 2020*. Salt Lake City: U.S. Bureau of Reclamation, Upper Colorado Regional Office, 22 pp. + attachments [43 pp. total]. [Cover sheet title. Title on signature page: *Finding of No Significant Impact : Environmental Assessment for development and implementation of a protocol for high-flow experimental releases from Glen Canyon Dam, Arizona 2011 through 2020 : Colorado River Storage Project, Coconino County, Arizona.*]

**U.S. Bureau of Reclamation; AND U.S. Fish and Wildlife Service**

- 1988 18.711 *Glen Canyon Environmental Studies final report*. [No imprint], 343 pp.  
≡ CROSS-LISTINGS [CITED» GCNHA Monograph 8: page 4-28]

**U.S. Bureau of Reclamation; AND U.S. Geological Survey**

- 1963 18.2014 *Quality of water : Upper Colorado River basin : progress report [no. 1] : January 1963*. [No place]: U.S. Geological Survey, and U.S. Bureau of Reclamation, 42, 66 pp. [Includes Lees Ferry.]
- 1965 18.2015 *Quality of water : Colorado River basin : progress report [no. 2] : January 1965*. [No place]: U.S. Geological Survey, and U.S. Bureau of Reclamation, 50 pp. + tables, illustrations [108 pp. total]. [NOTE: For subsequent reports see under U.S. Department of the Interior.]

**U.S. Council on Environmental Quality**

see U.S. Executive Office of the President of the United States, Council on Environmental Quality

**U.S. Department of Agriculture, Natural Resources Conservation Service**

- 2006 18.2168 Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific basin. *U.S. Department of Agriculture, Handbook 296*, 669

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pp., maps. [See "Western Range and Irrigated Region", pp. 61-62; "35—Colorado Plateau", pp. 96-99.] [Also later updates as the same Handbook number.]

- 2010 18.2046 *Soil survey of Glen Canyon National Recreation Area, Arizona and Utah.* [No place]: U.S. Department of Agriculture, Natural Resources Conservation Service, in cooperation with U.S. National Park Service, and Utah Agricultural Experiment Station, 463 pp.
- 2018 18.2167 *Arizona basin outlook report, March 1, 2018.* Phoenix: U.S. Department of Agriculture, Natural Resources Conservation Service, [20] pp. [including wraps]. (Basin Outlook Reports and Federal-State-Private Cooperative Snow Surveys.)

**U.S. Department of Agriculture, Natural Resources Conservation Service; AND University of Arizona, Water Resources Research Center**

- 2010 18.1423 *Havasu Canyon watershed : Rapid Watershed Assessment Report June, 2010.* [No place]: U.S. Department of Agriculture, Natural Resources Conservation Service; and University of Arizona, Water Resources Research Center, SEPARATELY PAGINATED SECTIONS [67 pp. total]. [Principal Investigators: Dino DeSimone, Keith Larson, Kristine Uhlman, Terry Sprouse, Phil Guertin. Prepared in cooperation with Coconino Natural Resource Conservation District, Arizona Department of Agriculture, Arizona Department of Environmental Quality, Arizona Department of Water Resources, Arizona Game and Fish Department, Arizona State Land Department, U.S. Forest Service, and U.S. Bureau of Land Management.]

**U.S. Department of Agriculture, Soil Conservation Service**

- 1980 18.1803 *Soil survey of Virgin River area, Nevada-Arizona : parts of Clark and Lincoln Counties, Nevada, and part of Mohave County, Arizona.* [No place]: U.S. Department of Agriculture, Soil Conservation Service, 147 pp., 2 plates, and 31 plates loose. (In cooperation with U.S. Bureau of Land Management, University of Nevada Agricultural Experiment Station, and University of Arizona Agricultural Experiment Station.)

**U.S. Department of Agriculture, Weather Bureau**

- 1904 18.1797 *Climatic charts of the United States.* Washington, D.C.: U.S. Weather Bureau, 36 sheets. ("Prepared under the direction of Willis L. Moore.") (Weather Bureau No. 301.)

**U.S. Department of Commerce**

- \_\_\_\_\_ 18.716 [Precipitation record at the North Rim climatic station.] *In: Climatological data.* [Various dates. Issued monthly.]  
 ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 4-28|

**U.S. Department of Energy; AND U.S. Department of the Interior, Bureau of Land Management**

- 2007 18.1336 (WITH U.S. Department of Agriculture, Forest Service; U.S. Department of Defense; and U.S. Department of the Interior, Fish and Wildlife Service) *Programmatic Environmental Impact Statement, designation of energy corridors on Federal land in*

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*the 11 western states (DOE/EIS-0386). Draft.* U.S. Department of Agriculture, and U.S. Department of the Interior, 3 volumes.

**U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy**

- 2018 18.2195 *Renewing our national parks : a partnership of the Federal Energy Management Program and the National Park Service.* [No place]: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, [18] pp. [including wraps]. [Regarding photovoltaic systems. See "Grand Canyon National Park", p. [10]; "Lake Mead National Recreation Area", p. [12].]

**U.S. Department of Health, Education and Welfare, Public Health Service, Bureau of State Services, Division of Sanitary Engineering Services, Robert A. Taft Sanitary Engineering Center**

- 1958 18.1767 *Air pollution measurements of the National Air Sampling Network : analysis of suspended particulate samples collected 1953-1957.* Cincinnati, Ohio: U.S. Department of Health, Education and Welfare, Public Health Service, Bureau of State Services, Division of Sanitary Engineering Services, Robert A. Taft Sanitary Engineering Center, 259 pp. [Cover title: *Air pollution measurements of the National Air Sampling Network : analyses of suspended particulates, 1953-1957.*]

**U.S. Department of the Interior**

- 1967 18.2016 *Quality of water : Colorado River basin : progress report no. 3 : January 1967.* [No place]: U.S. Department of the Interior. [NOTE: For earlier reports see under "U.S. Geological Survey, AND U.S. Bureau of Reclamation".]
- 1969 18.2017 *Quality of water : Colorado River basin : progress report no. 4 : January 1969.* [No place]: U.S. Department of the Interior, 50 pp. + tables, illustrations [108 pp. total].
- 1971 18.2018 *Quality of water : Colorado River basin : progress report no. 5 : January 1971.* [No place]: U.S. Department of the Interior, 156 pp.
- 1973 18.2019 *Quality of water : Colorado River basin : progress report no. 6 : January 1973.* [No place]: U.S. Department of the Interior, 151 pp.
- 1975 18.2020 *Quality of water : Colorado River basin : progress report no. 7 : January 1975.* [No place]: U.S. Department of the Interior, 195 pp.
- 1977 18.2021 *Quality of water : Colorado River basin : progress report no. 8 : January 1977.* [No place]: U.S. Department of the Interior, 195 pp.
- 1979 18.2022 *Quality of water : Colorado River basin : progress report no. 9 : January 1979.* [No place]: U.S. Department of the Interior, 206 pp.
- 1981 18.2012 *Quality of water : Colorado River basin : progress report no. 10 : January 1981.* [No place]: U.S. Department of the Interior, 190 pp.  
     ≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 3-13|
- 1983 18.2023 *Quality of water : Colorado River basin : progress report no. 11 : January 1983.* [No place]: U.S. Department of the Interior, 149 pp.

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- 1985 18.2024 *Quality of water : Colorado River basin : progress report no. 12 : January 1985.* [No place]: U.S. Department of the Interior, 220 pp.
- 1987 18.2027 *Quality of water : Colorado River basin : progress report no. 13 : January 1987.* [No place]: U.S. Department of the Interior, SEPARATELY PAGINATED SECTIONS.
- 1989 18.2028 *Quality of water : Colorado River basin : progress report no. 14 : January 1989.* [No place]: U.S. Department of the Interior.
- 1991 18.2029 *Quality of water : Colorado River basin : progress report no. 15 : January 1991.* [No place]: U.S. Department of the Interior.
- 1993 18.2030 *Quality of water : Colorado River basin : progress report no. 16 : January 1993.* [No place]: U.S. Department of the Interior.
- 1995 18.724 *Quality of water : Colorado River basin : progress report no. 17.* [No place]: U.S. Department of the Interior, 96, 103 pp.
- 1997 18.2013 *Quality of water : Colorado River basin : progress report no. 18. January 1997.* [No place]: U.S. Department of the Interior, pp. 1-99, A1-A103.
- 1999 18.2031 *Quality of water : Colorado River basin : progress report no. 19 : January 1999.* [No place]: U.S. Department of the Interior.
- 2001 18.2032 *Quality of water : Colorado River basin : progress report no. 20 : January 2001.* [No place]: U.S. Department of the Interior.
- 2003 18.2025 *Quality of water : Colorado River basin : progress report no. 21 : January 2003.* [No place]: U.S. Department of the Interior, 89 pp. [NOTE: For later reports see U.S. Bureau of Reclamation, Upper Colorado Region.]

**U.S. Department of the Interior, Office of Inspector General**

- 2016 18.2141 Scientific integrity incident at USGS Energy Geochemistry laboratory. *U.S. Department of the Interior, Office of Inspector General, Report 2016-EAU-010*, 15 pp. [Regarding a scientific integrity incident at the U.S. Geological Survey Geochemistry Laboratory, Lakewood, Colorado. Among products affected is noted, *in passing* (p. 5) “assessment of uranium in the environment in and around Grand Canyon National Park in Arizona for possible groundwater restoration”.] [See also Allison and Spencer (2016, [ITEM NO. 18.2140](#)).]

**U.S. Environmental Protection Agency**

- 1972 18.1762 *Seventh session of the Conference in the Matter of Pollution of Interstate Waters of the Colorado River and its Tributaries—Colorado, New Mexico, Arizona, California, Nevada, Wyoming and Utah : held at Las Vegas, Nevada, February 15-17, 1972 : transcript of proceedings.* [No place]: U.S. Environmental Protection Agency, 2 volumes, pp. 1-708 [719 pp. total], pp. 708A-1142+ [638 pp. total]. [Cover title: *Proceedings : Seventh session, February 15-17, 1972, Las Vegas, Nevada, Volume 1* [or *Volume 2*] : *Conference in the Matter of Pollution of Interstate Waters of the Colorado River and its Tributaries—Colorado, New Mexico, Arizona, California, Nevada, Wyoming, Utah.*]

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- 1972 18.2219 *Reconvened seventh session of the Conference in the Matter of Pollution of Interstate Waters of the Colorado River and its Tributaries in the States of California, Colorado, Utah, Arizona, Nevada, New Mexico, and Wyoming : held in Denver, Colorado, April 26-27, 1972 : transcript of proceedings.* [No place]: U.S. Environmental Protection Agency, 178 pp. [Cover title: *Proceedings : Seventh Session reconvened April 26-27, 1972, Denver, Colorado : conference : In the Matter of Pollution of Interstate Waters of the Colorado River and its Tributaries—Colorado, New Mexico, Arizona, California, Nevada, Wyoming, Utah.*]
- 1991 18.952 *Securing our legacy : an EPA progress report 1989-1991.* [No place]: U.S. Environmental Protection Agency.
- 2016 18.2226 *What climate change means for Arizona.* [No place]: U.S. Environmental Protection Agency, 2 pp. (EPA 430-F-16-005.) [Fact sheet.]

**[U.S. Environmental Protection Agency]**

- 2013 18.2291 *Approval of air quality implementation plans: Navajo Nation; regional haze requirements for Navajo Generating Station : technical support document for Proposed rule : docket Number: EPA-R09-OAR-2013-0009, 129 [142] pp.*

**U.S. Environmental Protection Agency, Air Quality Modelling Group; U.S. National Park Service, Air Resources Division; U.S. Forest Service, Air Program; AND U.S. Fish and Wildlife Service, Air Quality Branch**

- 1998 18.2382 *Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 2 summary report and recommendations for modeling long-range transport impacts.* Research Triangle Park, North Carolina: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, 119 pp. + appendices [160 pp. total]. [See section 4.6.4, "1992 Project MOHAVE Tracer Study", pp. 73-76.] [Measurement Of Haze And Visual Effects.]

**U.S. Environmental Protection Agency, Chemical, Biological, Radiological and Nuclear Consequence Management Advisory Team**

- 2013 18.1598 ASPECT investigates possible uranium mine drainage in Grand Canyon. [AND] Xavier University student assists ASPECT with Grand Canyon survey. *In: CBRN Consequence Management Advisory Team, 2013 FY Annual Report*, p. 11. [Airborne Spectral Photometric Environmental Collection Technology.] ["A survey is being conducted per a request from the National Park Service (NPS) to investigate possible uranium mine drainage into the Grand Canyon. NPS is interested in addressing any potential impacts to the public and environment from these potential discharges. The project will use a subset of ASPECT equipment that will be installed and flown on an NPS helicopter." (ENTIRE ITEM) "A volunteer from Xavier University worked with the ASPECT program during the summer to receive research credit in pursuit of a bachelor's degree. The student characterized a new configuration of the radiation detectors used on the ASPECT aircraft to support a future survey in the Grand Canyon." (ENTIRE ITEM)]

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**U.S. Environmental Protection Agency, Emissions Monitoring and Analysis Division, Monitoring and Quality Assurance Group**

1999 18.1187 *Visibility monitoring guidance.* Research Triangle Park, North Carolina: Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, SEPARATELY PAGINATED SECTIONS. (EPA-454/R-99-003.)

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**U.S. Environmental Protection Agency, Environmental Monitoring and Assessment Program**

1992 18.1731 *Colorado Plateau pilot study : arid ecosystems.* [Las Vegas?]: U.S. Environmental Protection Agency, Environmental Monitoring and Assessment Program, [2] pp. [Fact sheet.]

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**U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards**

1991 18.1761 *Project MOHAVE : Measurement of Haze and Visual Effects : study plan.* Research Triangle Park, North Carolina: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, SEPARATELY PAGINATED SECTIONS [181 pp. total].

1993 18.1766 *Effects of the 1990 Clean Air Act amendments on visibility in Class I areas: An EPA report to Congress.* Research Triangle Park, North Carolina: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, 92 pp. (EPA-452/R-93/014.)

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**U.S. Environmental Protection Agency, Office of Policy**

1998 18.1771 *Climate change and Arizona.* [Washington, D.C.]: U.S. Environmental Protection Agency, Office of Policy, 4 pp. (EPA 236-F-98-007c.) [Fact sheet.]

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**U.S. Environmental Protection Agency, Office of Policy, Economics and Innovation**

2006 18.2222 *Western Regional Air Partnership.* [Washington, D.C.]: U.S. Environmental Protection Agency, Office of Policy, Economics and Innovation, 2 pp. (EPA-231-F-06-007.) [Fact sheet.]

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**U.S. Environmental Protection Agency, Office of Radiation and Indoor Air; AND U.S. Geological Survey**

1993 18.2225 *EPA's map of radon zones : Arizona.* [No place]: U.S. Environmental Protection Agency, Office of Radiation and Indoor Air, Radon Division, SEPARATELY PAGINATED SECTIONS [86 pp. total]. (402-R-93-023.)

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**U.S. Environmental Protection Agency, Office of Radiation and Indoor Air, Radiation Protection Division**

2008 18.2147 *Technical report on technologically enhanced naturally occurring radioactive materials from uranium mining. Volume 1: Mining and reclamation background.* Washington, D.C.: U.S. Environmental Protection Agency, Office of Radiation and Indoor Air, Radiation Protection Division, SEPARATELY PAGINATED SECTIONS [225 pp. total]. ("Previously published on-line and printed as Vol. 1 of EPA 402-R-05-007, January 2006; Updated June 2007 and printed april 2008 as EPA 402-R-08-005".) [Orphan



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Mine, Grand Canyon, see in Section 3 (“Volume and Characteristics of Uranium Mine Wastes”, subsection “Potential for Water Contamination), p. 3-15, and in Appendix III (“Overview of Uranium Mines and *In Situ* Leach Operations Case Studies”), pp. AIII-1 to AIII-2.]

**U.S. Environmental Protection Agency, Office of Research and Development, National Center for Environmental Assessment**

2007 18.1765 *Pilot survey of levels of polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans, polychlorinated biphenyls, and mercury in rural soils of the United States.* Washington, D.C.: U.S. Environmental Protection Agency, SEPARATELY PAGINATED SECTIONS [310 pp. total]. (EPA/600/R-05/048F.) [National Dioxin Air Management Network monitoring stations include Grand Canyon, Arizona.]

**U.S. Environmental Protection Agency, Office of Research and Development, Office of Health and Environmental Assessment, Environmental Criteria and Assessment Office**

1993 18.1678 *Air quality criteria for oxides of nitrogen. Volume II of III.* Research Triangle Park, North Carolina: U.S. Environmental Protection Agency, Office of Research and Development, Office of Health and Environmental Assessment, Environmental Criteria and Assessment Office, SEPARATELY PAGINATED SECTIONS. [Grand Canyon, see pp. 11-26, 11-51.]

**U.S. Environmental Protection Agency; Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Air Quality Trends Analysis Group**

2003 18.1188 *Guidance for estimating natural visibility conditions under the regional haze program.* Research Triangle Park, North Carolina: Emissions, Monitoring and Analysis Division; Office of Air Quality Planning and Standards; U.S. Environmental Protection Agency, SEPARATELY PAGINATED SECTIONS [66 pages total]. (EPA-454/B-03-005.)

**U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response**

1992 18.1758 *Successful practices in Title III implementation : chemical emergency preparedness and prevention technical assistance bulletin. Natrona County, Colorado : Erie County, New York : State of Arizona : Mohave County, Arizona : subject index.* [Washington, D.C.]: U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, 26 pp. (OSWER-92-006.1. Series 6, No. 9.) [See “State of Arizona”, pp. 9-14; “Mohave County, Arizona”, pp. 15-17.]

1999 18.1438 *Guide for industrial waste management.* U.S. Environmental Protection Agency, solid Waste and Emergency Response, SEPARATELY PAGINATED SECTIONS. (EPA530-R-99-001.) [See section 5, Protecting Air Quality; specifically, p. 5-2, illustrations of emission-related loss of visibility at Grand Canyon. No text discussion.]

**U.S. Environmental Protection Agency, Regions VIII and IX**

1971 18.1772 *The mineral quality problem in the Colorado River basin : summary report.* [No place]: U.S. Environmental Protection Agency, Regions VIII and IX, 65 pp. [Regarding salinity.]

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**U.S. Environmental Protection Agency; AND Arizona Department of Environmental Quality**

- 2011 18.1755 *The Arizona Route 66 partnership : westward expansion from Holbrook to Kingman : with updated resource list!! New!* [No place]: U.S. Environmental Protection Agency, Region 9; and Arizona Department of Environmental Quality, 13 pp.

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**U.S. Executive Office of the President of the United States, Council on Environmental Quality**

- 1979 18.2365 *Environmental quality : the ninth annual report of the Council on Environmental Quality. December 1978.* Washington, D.C.: U.S. Government Printing Office, 599 pp. [See pp. 77, 78.]
- 1996 18.2366 *Environmental quality : the 1996 report of the Council on Environmental Quality : along the American river.* Washington, D.C.: Council on Environmental Quality, 394 pp. [See "Colorado River", pp. 93-95; regarding high-flow experiments below Glen Canyon Dam.]

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**U.S. Federal Aviation Administration**

- 2006 18.1871 Noise levels for aircraft used for commercial operations in Grand Canyon National Park Special Flight Rules Area. *U.S. Federal Aviation Administration, Advisory Circular AC-93-2*, 10, 9 pp. [Includes measurements and statistics of aircraft noise.]

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**U.S. Federal Interagency Stream Restoration Working Group**

- 2000 18.1493 *Stream corridor restoration : principles, processes, and practices.* [No place]: U.S. Federal Interagency Stream Restoration Working Group, revised ed., SEPARATELY PAGINATED SECTIONS [605 pp. total]. (U.S. Department of Agriculture, Natural Resources Conservation Service, National Engineering Handbook, Part 653.) [See "Case Study. The Glen Canyon Dam Spike Flow Experiment", page 3-9.]

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**U.S. Federal Security Agency, Public Health Service, Division of Water Pollution Control, Western Gulf and Colorado Drainage Basins Office**

- 1951 18.2518 *Colorado River drainage basin : summary report on water pollution.* [No place]: U.S. Federal Security Agency, Public Health Service, 46 pp. [Cover title: *Colorado River drainage basin : cooperative state-federal report on water pollution.* (Pollution Series, No. 9.)] [In cooperation with Arizona State Department of Health, California State Department of Public Health, Colorado State Department of Public Health, Nevada State Department of Health, New Mexico Department of Public Health, Utah State Department of Health, Wyoming State Department of Public Health.]

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- 1986 18.1350 *Record of Decision : USDA Forest Service, Kaibab National Forest : Canyon mine proposal, Final Environmental Impact Statement, Coconino County, Arizona.* U.S. Forest Service, Kaibab National Forest, 13 pp.

**U.S. Forest Service, Southwestern Region**

- NO DATE 18.1384 *Landscape character types of the national forests in Arizona and New Mexico : the Visual Management System.* [No place]: U.S. Forest Service, Southwestern Region, 66 pp. [1989.]

**U.S. General Accounting Office**

- 1996 18.2369 *Report to Congressional committees : Bureau of Reclamation : an assessment of the Environmental Impact Statement on the operations of the Glen Canyon Dam.* Washington, D.C.: U.S. General Accounting Office, 213 pp. (GAO/RCED-97-12.) [Major contributors to this report (p. 213): Jonathan Bachman, Steve Brown, Jay R. Cherlow, Timothy J. Guinane, Barry T. Hill, Edward A. Niemi, Jim Yeager, Sandra P. Davis, W. Stephen Lowrey, Craig D. Richards, William J. Temmler, Frank B. Waterous, Alan J. Wernz, Martin J. Fitzgerald, Alan R. Kasdan.]

**U.S. Geological Survey**

- 2003 18.1073 Water quality studies continue; Lake Powell and the Colorado River. *The Waiting List* (Grand Canyon Private Boaters Association Quarterly), 6(3) (Fall): 41. [Attribution given as "US Geological Service".]
- 2009 18.1255 Grand Canyon Monitoring and Research Center. *U.S. Geological Survey, General Information Product 85*, brochure.

**U.S. Geological Survey, AND U.S. National Aeronautics and Space Administration**

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**U.S. Geological Survey, Denver Field Station**

- 1999 18.1017 *Scientific review of the Glen Canyon Dam Modifications to Control Downstream Temperatures Plan and Draft Environmental Assessment, January 1999, and supporting documentation.* [U.S. Geological Survey, Denver Field Office], 58 pp.

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- 1997 18.2052 *The Grand Canyon Monitoring and Research Center long-term monitoring and research strategic plan : final.* [Flagstaff, Arizona]: [Grand Canyon Monitoring and Research Center], SEPARATELY PAGINATED SECTIONS [184 pp. total].

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- 2001 18.2047 *Grand Canyon Monitoring and Research Center science advisors river trip briefing book, Sept. 29-Oct. 8, 2001.* [Flagstaff, Arizona]: U.S. Geological Survey, Grand Canyon Monitoring and Research Center, [309] pp. [GCMRC library copy annotated on cover: "River trip was originally scheduled for Sept/Oct 2001. Postponed due to 9/11/01 event. This trip actually took place April 6-13, 2002 (same briefing book used.)"]
- 2001 18.961 *Colorado River Ecosystem Science Symposium 2001 : Little America Hotel, Flagstaff, Arizona, April 26 and 27, 2001 : organized by the Grand Canyon Monitoring and Research Center, U.S. Geological Survey. Program and abstracts.* [Flagstaff, Arizona: Grand Canyon Monitoring and Research Center], 54, 17 pp. (Glen Canyon Dam Adaptive Management Program.)
- 2014 18.1741 *Grand Canyon Monitoring and Research Center : Fiscal Year 2014 Annual Project Report for the Glen Canyon Dam Adaptive Management Program.* [Flagstaff, Arizona]: Grand Canyon Monitoring and Research Center, 128 pp.

**U.S. Geological Survey, Grand Canyon Monitoring and Research Center, Glen Canyon Dam Adaptive Management Program**

- 2005 18.1126 *Colorado River Ecosystem Science Symposium 2005. Abstracts. October 25-27, 2005, Fiesta Inn Resort, 2100 South Priest Drive, Tempe, AZ.* [No imprint], 100 pp. ("Presented by the Glen Canyon Dam Adaptive Management Program and organized by the Grand Canyon Monitoring and Research Center, U.S. Geological Survey, U.S. Department of the Interior, Flagstaff, AZ, Theodore S. Melis, Acting Chief".) [Cover: *The Glen Canyon Dam Adaptive Management Program Presents: Colorado River Ecosystem Science Symposium 2005. October 25-27, Fiesta Inn Resort, Tempe, AZ. Abstracts. Organized by: U.S. Geological Survey, Southwest Biological Science Center, Grand Canyon Monitoring and Research Center.*]

**U.S. Geological Survey, Southwest Biological Science Center**

- NO DATE 18.1089 *Southwest Biological Science Center.* Flagstaff, Arizona: [U.S. Geological Survey], Southwest Biological Science Center, 2 pp.

**U.S. House of Representatives, Committee on Interior and Insular Affairs, Subcommittee on Parks and Recreation**

- 1986 18.2099 *Impacts of air pollution on national park units : Hearings before the Subcommittee on National Parks and Recreation of the Committee on Interior and Insular Affairs, House of Representatives, Ninety-ninth Congress, First Session; on impacts of air pollution on national park units : hearings held in Washington, DC, May 20 and 21, 1985 : Serial No. 99-10.* Washington, D.C.: U.S. Government Printing Office, 586 pp.

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**U.S. National Climatic Center; U.S. Bureau of Land Management; AND DeWall, Alfred A.**

- 2004 18.1536 Climate. *In*: DeWall, Alfred A., *Soil survey of Shivwits area, Arizona, part of Mohave County*. [No place]: U.S. Department of Agriculture, Resources Conservation Service; and U.S. Bureau of Land Management, pp. 12-14.

**U.S. National Committee for the International Hydrological Decade**

- 1972 18.1329 *Catalog of International Hydrological Decade stations and networks in the United States*. Washington, D.C.: U.S. National Academy of Sciences, National Research Council, 66 pp. [Includes Colorado River stations in Grand Canyon and along lower Colorado River.] [IHD, 1965-1974.]

**U.S. National Cooperative Soil Survey; Canada, National Soil Survey Committee; AND United Nations Food and Agriculture Organization**

- 1975 18.2071 *FAO-Unesco : soil map of the world : 1:5 000 000 : Volume II : North America*. Paris: United Nations Educational, Scientific and Cultural Organization, 210 pp.

**U.S. National Oceanic and Atmospheric Administration, National Environmental Satellite, Data and Information Service, National Climatic Data Center**

- 2012 18.1604 Storm data and unusual weather phenomena. *Storm Data*, 54(8) (August):. [For reports from Grand Canyon region, see pp. 12, 15.]
- 2013 18.1603 Storm data and unusual weather phenomena. *Storm Data*, 55(7) (July):. [For reports from Grand Canyon region, see pp. 21-23.]
- 2013 18.1604 Storm data and unusual weather phenomena. *Storm Data*, 55(8) (August):. [For reports from Grand Canyon region, see p. 11.]
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**U.S. National Park Service**

- NO DATE 18.734 *Air quality*. U.S. National Park Service, folded brochure. [1992.]
- 1977 18.739 *Grand Canyon climates*. Folded pamphlet, mimeographed. [Temperature and precipitation information.]  
     ≡ CROSS-LISTINGS [CITED» GCNHA Monograph 8: page 12-10]
- 1992 18.752 *Fire on the rim*. U.S. National Park Service, folded brochure.

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- 1994 18.753 *Grand Canyon National Park : 1992 gaseous pollutant and meteorological monitoring : annual data summary.* Denver: U.S. National Park Service, Technical Report NPS/NRAQD/NRTR-94/135, unpaginated.

**U.S. National Park Service; U.S. Bureau of Land Management; AND U.S. Forest Service**

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- 1978 18.816 *Adjacent lands study, Grand Canyon National Park, Arizona.* Washington, D.C.: U.S. Government Printing Office, 30 pp.  
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- 1981 13.5258 *Final adjacent lands study : Grand Canyon National Park, Arizona.* San Francisco: U.S. National Park Service, U.S. Bureau of Land Management, and U.S. Forest Service, i, 51, [15] pp. [NOTE: There also was a later distribution, not dated, 7 leaves, with emended information on the adjacent lands study; with modified pagination: "The pages stapled to this note contain the pages with different information on the Final Adjacent Lands Study, which is dated November 1981"; "page 1 (Final) corresponds to page i (Public Review Draft); Pages 5, 6, & 7 (Final) correspond to pages 4 & 5 (Draft); Pages 45-48 (Final) correspond to pages 43-46 (Draft)"; "Some differences are rewritten material, others are new material."]

**U.S. National Park Service, Air Quality Division**

- 1990 18.2100 *Visibility and air quality measurement methods used by the National Park Service.* [No place]: U.S. National Park Service, Air Quality Division, 6 pp.

**U.S. National Park Service, Air Resources Division**

- 2002 18.1199 *Air quality in the national parks.* Lakewood, Colorado: Air Resources Division, U.S. National Park Service, 2nd ed., 59 pp.

**U.S. National Park Service, Air Resources Division, Night Sky Program**

- NO DATE 18.2300 *Stargazing in national parks.* [No place]: U.S. National Park Service, Air Resources Division, Night Sky Program, [4] pp. [2010.] [See p. [2], "10 Quick Facts", which includes: "4. Stargazing Festivals: In several parks, informal 'star parties' have grown into Stargazing Festivals. Bryce Canyon National Park's Astronomy Festival attracts over 6000 visitors. Grand Canyon's is even larger. Acadia, Great Basin, and Olympic national parks have followed in their footsteps." (ENTIRE NOTE)]

PART 18. PHYSICAL ENVIRONMENT OF THE GRAND CANYON AND THE SOUTHWEST REGION

**U.S. National Park Service, Bryce Canyon National Park, NPS Night Sky Team**

NO DATE 18.1147 *Experiencing dark night skies.* U.S. National Park Service, Night Sky Program, informational rack card. [Distributed at Grand Canyon National Park, 2007.]

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**U.S. National Park Service, Dark Sky Cooperative**

NO DATE 18.1653 *Get to know your night sky.* [No place]: U.S. National Park Service, Dark Sky Cooperative, folded brochure. [Features Colorado Plateau.]

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**U.S. National Park Service, Grand Canyon National Park**

NO DATE 18.774 *Contract no. 1443CS821093011 : Remove, transport and dispose of hazardous waste : Grand Canyon National Park.* Phoenix: Industrial Compliance, and Grand Canyon, Arizona: National Park Service, Grand Canyon National Park, SEPARATELY PAGINATED SECTIONS.

NO DATE 18.1045 *Outboard motors and air quality on the Colorado River.* U.S. National Park Service, Grand Canyon National Park, folded pamphlet.

NO DATE 18.773 *Information for running the Colorado through the Grand Canyon : or How to have a minimum impact on yourself and the resource.* Grand Canyon, Arizona: U.S. National Park Service, and Grand Canyon Natural History Association, 22 pp. [After 1974.]  
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2017 18.2228 *Grand Canyon 2016-2017 IDA report.* U.S. National Park Service, Grand Canyon National Park, [3] pp. [Report as a provisional International Dark-Sky Park.] [International Dark-Sky Association.]

2018 18.2304 *Grand Canyon 2018 IDA report.* U.S. National Park Service, Grand Canyon National Park, 3 pp. [Report as a provisional International Dark-Sky Park.] [International Dark-Sky Association.]

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**U.S. National Park Service, Water Resources Division**

1996 18.2216 *Baseline water quality data inventory and analysis : Grand Canyon National Park.* Fort Collins, Colorado: U.S. National Park Service, Water Resources Division, for U.S. National Park Service, Washington, D.C., SEPARATELY PAGINATED SECTIONS [827 pp. total]. (Water Resources Division and Servicewide Inventory and Monitoring Program.) (U.S. National Park Service, Water Resources Division, Technical Report NPS/NRWRD/NRTR-96/84.)

1999 18.2217 *Baseline water quality data inventory and analysis : Pipe Spring National Monument.* Fort Collins, Colorado: U.S. National Park Service, Water Resources Division, for U.S. National Park Service, Washington, D.C., SEPARATELY PAGINATED SECTIONS [240 pp. total]. (Water Resources Division and Servicewide Inventory and Monitoring Program.) (U.S. National Park Service, Water Resources Division, Technical Report NPS/NRWRD/NRTR-99/220.)

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**U.S. National Research Council, Assembly of Life Sciences, Board on Toxicology and Environmental Health Hazards, Committee on Alkyl Benzene Derivatives**

- 1981 18.1303 *The alkyl benzenes.* Washington, D. C.: U.S. National Academy Press, 384 pp. [Grand Canyon, see pp. 158, 160.]
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**U.S. National Research Council, Commission on Geosciences, Environment and Resources, Board on Environmental Studies and Toxicology, Committee on Improving the Science and Technology Programs of the National Park Service**

- 1992 18.499 *Science and the national parks.* Washington, D.C.: National Academy Press, 122 pp.
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**U.S. National Research Council, Commission on Geosciences, Environment and Resources, Board on Environmental Studies and Toxicology, Committee on Haze in National Parks and Wilderness Areas**

- 1993 18.500 *Protecting visibility in national parks and wilderness areas.* Washington, D.C.: National Academy Press, 446 pp.
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**U.S. National Research Council, Commission on Geosciences, Environment and Resources, Board on Environmental Studies and Toxicology, Board on Atmospheric Science and Climate, Committee on Haze in National Parks and Wilderness Areas**

- 1990 18.501 *Haze in the Grand Canyon : an evaluation of the Winter Haze Intensive Tracer Experiment.* Washington, D.C.: National Academy Press, 97 pp.  
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**U.S. National Research Council, Commission on Geosciences, Environment, and Resources, Committee on Grand Canyon Monitoring and Research, Water Science and Technology Board**

- 1999 18.934 *Downstream : adaptive management of Glen Canyon Dam and the Colorado River ecosystem.* Washington, D.C.: National Academy Press, 230 pp.
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**U.S. National Research Council, Commission on Geosciences, Environment and Resources, Water Science and Technology Board, Committee to Review the Glen Canyon Environmental Studies**

- 1991 18.502 *Colorado River ecology and dam management : proceedings of a symposium, May 24-25, 1990, Santa Fe, New Mexico.* Washington, D.C.: National Academy Press, 276 pp.



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- 1991 18.503 I synopsis/findings and recommendations. *In: Colorado River ecology and dam management : proceedings of a symposium, May 24-25, 1990, Santa Fe, New Mexico.* Washington, D.C.: National Academy Press, pp. 1-9.
- 1994 18.504 *Review of the Draft Federal long-term monitoring plan for the Colorado River below Glen Canyon Dam.* Washington, D.C.: U.S. National Research Council, 30 pp.; followed by Appendix B, by Duncan T. Patten, "Long-Term Monitoring in Glen and Grand Canyon: Response to Operations of Glen Canyon Dam", dated May 1993, paginated [cover sheet], I, ii, A-1 to A-25. [Cover title: *The Glen Canyon Environmental Studies : Review of the Draft Federal long-term monitoring plan for the Colorado River below Glen Canyon Dam.*]  
 ≡ CROSS-LISTINGS FQ23:432
- 1996 18.505 *River resource management in the Grand Canyon.* Washington, D.C.: National Academy Press, 226 pp.  
 ≡ CROSS-LISTINGS FQ19:440

**U.S. National Research Council, Commission on Physical Sciences, Mathematics, and Resources, Water Science and Technology Board, Committee to Review the Glen Canyon Environmental Studies**

- 1987 18.818 *River and dam management. A review of the Bureau of Reclamation's Glen Canyon Environmental Studies.* Washington, D.C.: National Academy Press, 203 pp. [*NOTE:* This book also includes a list of documents reviewed by the committee (Appendix A, pp. 127-140) which includes some miscellaneous reports of the Glen Canyon Environmental Studies program.]  
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**U.S. National Tribal Environmental Council**

- 1995 18.1169 *Briefing book for workshop on tribal issues associated with the Grand Canyon Visibility Transport Commission : March 29-31, 1965, Albuquerque, New Mexico.* Albuquerque: National Tribal Environmental Council, SEPARATELY PAGINATED SECTIONS.

**U.S. Soil Conservation Service**

- 1973 18.2289 *Cocopai Resource Conservation and Development Project.* [No place]: U.S. Soil Conservation Service, [114] pp.

**U.S. Soil Conservation Service, U.S. Economic Research Service; AND U.S. Forest Service**

- 1981 18.819 *Little Colorado River Plateau Resource Conservation and Development Area, Arizona-New Mexico : Appendix I, Description of basin* (in cooperation with the states of Arizona and New Mexico). U.S. Department of Agriculture, 60, 82 pp.
- 1981 18.820 *Little Colorado River Plateau Resource Conservation and Development Area, Arizona-New Mexico : Appendix II, Water resources* (in cooperation with the states of Arizona and New Mexico). U.S. Department of Agriculture, 59, 32, 25, 62, 50 pp.

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- 1981 18.821 *Little Colorado River Plateau Resource Conservation and Development Area, Arizona-New Mexico : Appendix III, Erosion and sediment and flooding* (in cooperation with the states of Arizona and New Mexico). U.S. Department of Agriculture, 77, 12 pp.
- 1981 18.822 *Little Colorado River Plateau Resource Conservation and Development Area, Arizona-New Mexico : Appendix IV, Recreation, fish and wildlife, and timber* (in cooperation with the states of Arizona and New Mexico). U.S. Department of Agriculture, 30, 43, 51 pp.
- 1981 18.823 *Little Colorado River Plateau Resource Conservation and Development Area, Arizona-New Mexico : summary report* (in cooperation with the states of Arizona and New Mexico). U.S. Department of Agriculture, 41 pp.

**U.S. Weather Bureau**

- 1958 18.1266 Storm data and unusual weather phenomena. *Climatological Data, National Summary*, 9(7) (July). [See p. 308, listing for South Rim of Grand Canyon, "Tornado (suspected). Merchantable timber blown down. Tornado moved northward." (July 24, afternoon, path half-mile long and 200 yards wide). (No further information.)]

**U.S. Weather Bureau, Climatological Division**

- 1912 18.1441 Summary of the climatological data for the United States, by sections. Section 4.—Northern Arizona. *In*: U.S. Weather Bureau, Climatological Division, Summaries of climatological data by sections. Volume I. Sections 1 to 57, inclusive, embracing the sections West of the Mississippi River. *U.S. Weather Bureau, Bulletin W*, separately paginated section, 10 pp.

**U.S. Weather Bureau, Division of Climatological and Hydrologic Services, Cooperative Studies Section**

- 1949 18.824 Maximum possible flood-producing meteorological conditions. 1. Colorado River basin above Glen Canyon dam site; 2. Colorado River basin above Bridge Canyon dam site; 3. San Juan River basin above Bluff dam site; 4. Little Colorado River basin above Coconino dam site. *U.S. Department of Commerce, Weather Bureau, U.S. Department of the Interior, Bureau of Reclamation, Cooperative Studies Report 9*, 24 pp. + 103 figures.

**University of Arizona, School of Renewable Natural Resources, College of Agriculture**

- NO DATE 18.825 *Water quality monitoring in the Colorado River corridor, Lees Ferry to Diamond Creek, 1981*. University of Arizona, School of Renewable Natural Resources, College of Agriculture, 78 pp.

**URS Company/Las Vegas**

- 1977 18.1449 *Clark County 208 water quality management plan, Clark County, Nevada : summary for draft report : water quality policies for Clark County and the Colorado River basin*. [Las Vegas]: Clark County Sanitation Board, 5 pp. [Clean Water Act, Section 208.]

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**Utah Board of Water Resources**

- 1993 18.1513 *State water plan : Kanab Creek/Virgin River basin.* Salt Lake City: Utah Board of Water Resources, SEPARATELY PAGINATED SECTIONS [246 pp. total]. [Includes notes on adjacent Arizona lands, and is significant as for data pertaining to contributing factors in drainage basins in Arizona and Nevada.]
- 2008 18.1499 *Lake Powell hydroelectric system. Volume I. Public information : notice of intent to file an application for original license, pre-application document. Project No. 12966-\_\_\_ [sic],* SEPARATELY PAGINATED SECTIONS [264 pp. total]. [Lake Powell Pipeline, Lake Powell to St. George, Utah. Cited here because of its potential impacts in traversing a portion of the Arizona Strip.]
- 2008 18.1500 *Lake Powell hydroelectric system. Volume II. Publication information : appendices. Project No. 12966-\_\_\_ [sic].* [Volume comprises numerous reports compiled from other sources.] [Lake Powell Pipeline, Lake Powell to St. George, Utah. Cited here because of its potential impacts in traversing a portion of the Arizona Strip.]

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- 1997 18.1928 Moderated panel on the success/failure of the controlled Grand Canyon flood. *American Fisheries Society, 127th Annual Meeting, "Fisheries at Interfaces: Habitats, Disciplines, Cultures", 24-28 August 1997, Monterey, California, Abstracts: L-Z, p. 95.*

**Valdez, Richard A., Robinson; Christopher T.; AND Melis, Theodore S.**

- 2011 18.1344 The Swiss experience with high-flow experiments—Implications for the management of Glen Canyon Dam? *From:* Kennedy, Theodore A., and Ralston, Barbara E., Biological responses to high-flow experiments at Glen Canyon Dam. *In:* Melis, Theodore S. (ed.), Effects of three high-flow experiments on the Colorado River ecosystem downstream from Glen Canyon Dam, Arizona. *U.S. Geological Survey, Circular 1366*, pp. 114-116.

**Valentine, Susan, AND Dolan, Robert**

- 1979 18.826 Footstep-induced sediment displacement in the Grand Canyon. *Environmental Management*, 3(6) (November): 531-533.

**Van Otten, George A.**

- 1981 18.827 (SENIOR ED.) *Resource atlas of Coconino County, Arizona.* (Leonard H. Alger, S. Harry Tsutsui, and Stanley W. Swarts, eds.) Flagstaff, Arizona: Northern Arizona University, Department of Geography, 59 pp.  
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**van Riper, Charles, III** see **Riper, Charles van, III**

**VanderKooi, Scott P.**

- 2015 18.1811 The Glen Canyon Dam Adaptive Management Program 20 years after the 1<sup>st</sup> EIS on GCD operations: an overview [ABSTRACT]. *In: 13th Biennial Conference of Science and Management on the Colorado Plateau and Southwest Region, October 5-8, 2015, Northern Arizona University, High Country Conference Center : oral and poster abstracts*, p. 86. [Environmental Impact Statement.]

**VanderKooi, Scott P.; Kennedy, Theodore A.; Topping, David J.; Grams, Paul E.; Ward, David L.; Fairley, Helen C.; Bair, Lucas S.; Sankey, Joel B.; Yackulic, Charles B.; AND Schmidt, John C.**

- 2017 18.1926 Scientific monitoring plan in support of the selected alternative of the Glen Canyon Dam Long-Term Experimental and Management Plan. *U.S. Geological Survey, Open-File Report 2017-1006*, 18 pp. ["The purpose of this document is to describe a strategy by which monitoring and research data in the natural and social sciences will be collected, analyzed, and provided to the U.S. Department of the Interior (DOI), its bureaus, and to the Glen Canyon Dam Adaptive Management Program (GCDAMP) in support of implementation of the Glen Canyon Dam Long-Term Experimental and Management Plan (LTEMP)."]

**Vano, Julie A.; Das, Tapash; AND Lattenmaier, Dennis P.**

- 2012 18.1547 Hydrologic sensitivities of Colorado River runoff to changes in precipitation and temperature. *Journal of Hydrometeorology*, 13(3) (June): 932-949.

**Vasconcelos, Luis Alfredo de Paula**

- 1995 18.828 *Aerosol and transport climatology at the Grand Canyon*. Doctoral dissertation, Washington University, 108 pp.
- 1997 18.2069 Seasonal transport of fine particles to the Grand Canyon. *In: Visual Air Quality, Aerosols, and Global Radiation Balance : proceedings of a specialty conference sponsored by the Air and Waste management Association and the American Geophysical Union, Septemer 9-12, 1997, Barlett, NH. Volume I*. Pittsburgh, Pennsylvania: Air and Waste Management Association, pp. 140-155.
- 1999 18.919 Seasonal transport of fine particles to the Grand Canyon. *Air and Waste Management Association, Journal*, 49(3): 268-278.

**Vasconcelos, Luis A. de P.; Kahl, Jonathan D. W.; Liu, Desong; Macias, Edward S.; AND White, Warren H.**

- 1996 18.2381 Spatial resolution of a transport inversion technique. *Journal of Geophysical Research*, 101(D14) (August 27): 19,337-19,342. [Data for trajectories arriving at Hopi Point, Grand Canyon.]
- 1996 18.1152 A tracer calibration of back trajectory analysis at the Grand Canyon. *Journal of Geophysical Research*, 101(D14) (August 27): 19,329-19,335.

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1994 18.831 Haze and aerosol transport climatology at the Grand Canyon. *In: Flagan, R. C. (ed.), International Aerosol Conference, 1994. Volume 1.* American Association for Aerosol Research, p. 188. [4th International Aerosol Conference.]

1994 18.2068 Aerosol composition as a function of haze and humidity levels in the southwestern U.S. *Atmospheric Environment*, 28(22) (December): 3679-3691. [Grand Canyon region.]

**Vaselaar, R. T.**

1997 18.832 Opening the flood gates: the 1996 Glen Canyon Dam experiment. *Restoration and Management Notes*, 15(2): 119-125.

**Vaughn, Kelly**

2025 18.2641 Red sky at night, photographer's delight. On May 7, 2024, NASA detected signs of a solar superstorm in the Northern Hemisphere. Three days later, the skies lit up over Arizona, giving photographers what they thought might be a once-in-a-lifetime opportunity. But there would be another. On October 10, the northern lights returned, and what an encore it was. An essay by Kelly Vaughn. *Arizona Highways*, 101(1) (January): 40-45. [Illustrated with three photographs, by Rich Rudow, Adam Schallau, and Jonathan Buford.] [Aurora Borealis.] [NOTE: The NASA "detection" is misworded; the occurrence at that time was an eruption on the sun, particles from which reached the earth three days later.]

**Venkatram, Akula; Karamchandani, Prakash; Pai, Prasad; Sloane, Christine; Saxena, Pradeep; AND Goldstein, Robert**

1997 18.1862 The development of a model to examine source-receptor relationships for visibility on the Colorado Plateau. *Air and Waste Management Association, Journal*, 47 (March): 286-301.

**Vernieu, William S. [Vernieu, Bill]**

1995 18.833 *Bureau of Reclamation Lake Powell water quality monitoring program : draft.* Glen Canyon Environmental Studies, 47 pp. [Includes sampling directly downstream from Glen Canyon Dam.]

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