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APPENDIX A

VISION STATEMENT

Powder Basin Watershed Councils
Watershed Health Concerns

and

Issues from the Council's Basinwide List

Vision Statement

Vision: We recognize that our local prosperity is dependent upon the current and future availability and quality of our waters. We are committed to ensure that we retain, restore and enhance the health of our watersheds.

Powder Basin Watershed Council's Watershed Health Concerns

Category A: Legally Mandated and Straight Forward Issues

- Oregon Department of Environmental Quality (ODEQ) 303 (d) List of Water Quality Impaired Streams

  --- assessment of listed stream segments
  --- consideration of related politics
  --- address the issue of ODEQ temperature standards as well as other questionable standards
  --- loss of riparian ecosystems
  --- stream channel stability

- Fish Screens

- Noxious Weed Invasions

- Bull Trout Recovery

Category B: Legally Mandated and Controversial

- Baker City Watershed

  --- maintenance of water quality to avoid filtration requirements

- Over-Appropriation of Water

  --- i.e. water diversions (compliance with the limitation of water rights---delivery system that efficiently delivers the needed water with minimal waste or "Measured Deliveries")

- Improper Water Use (Illegal water use)

Category C: Other Concerns Not Legally Mandated

- Lack of Basin Assessment (to include the lack of water quality monitoring)

The Council wants to ensure that (1) the community is educated, supportive, enrolled and enthusiastic about results accomplished and (2) wants the public perception to be that the community has benefited from having healthy watersheds.

Issues from the Council's Basinwide List

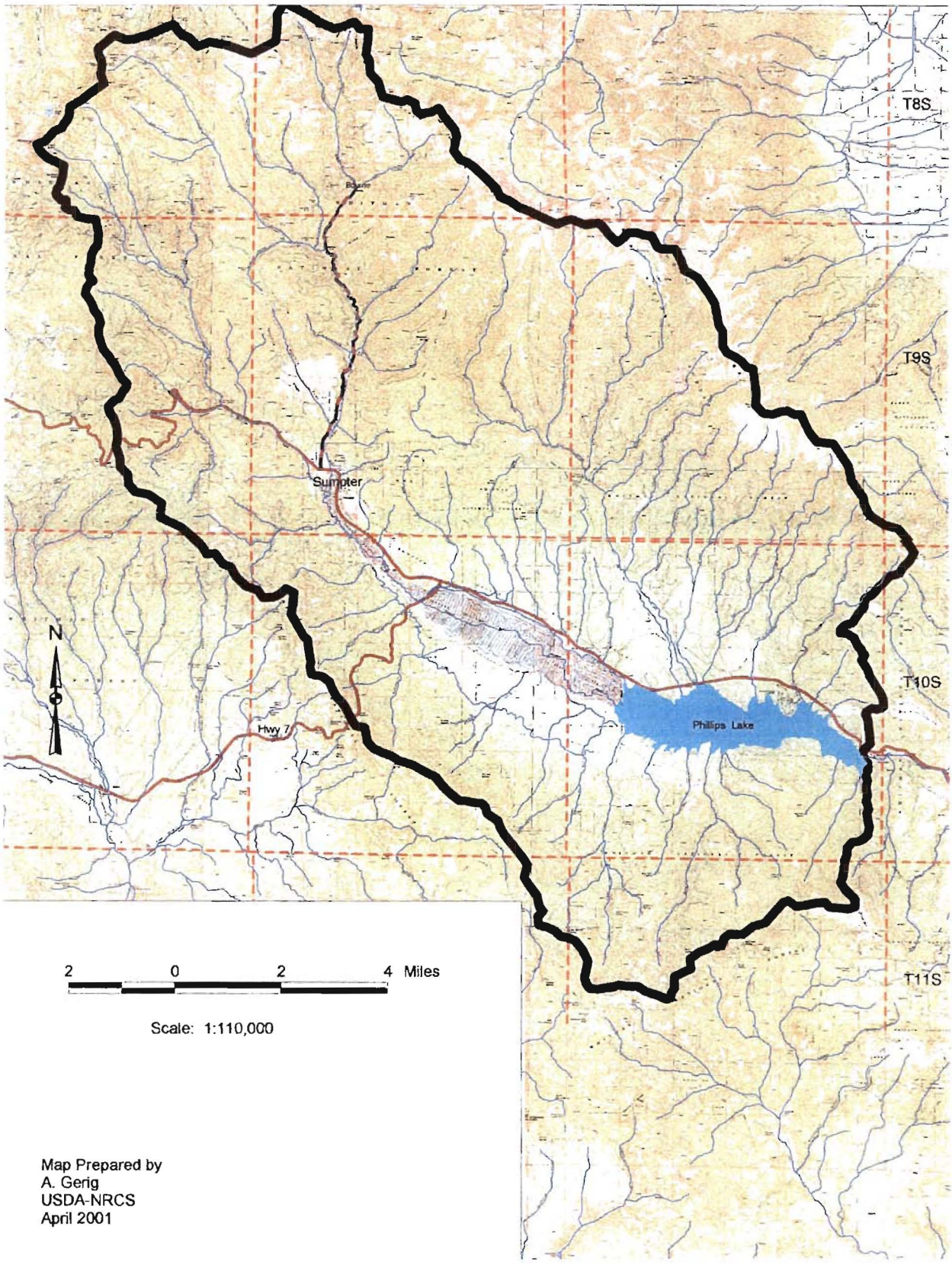
- **Water Quality Impaired Streams on 303(d) List:** Source: Oregon Department of Environmental Quality (ODEQ).
  - Validation of streams/parameters on ODEQ 303(d) list
  - Total Maximum Daily Loads (TMDL) for temperature, and Water Quality Management Plan scheduled for year 2005
  - Assessment of watershed condition and water quality for listed stream segments, including consideration of related politics
  - Loss of riparian ecosystems and stream channel stability
  - Water quality impacts to aquatic resources
- **Bull Trout:** Source: U.S. Fish and Wildlife Service (USFWS)
  - Listed under Federal Endangered Species Act (ESA) in 1998
  - Activities on Federal lands controlled under ESA Section 7
  - Activities on non-Federal lands controlled under ESA Section 10
  - Status of population — moderate risk of extinction
- **Fish Screens:** Source: Oregon Department of Fish and Wildlife (ODFW)
  - Fish mortality due to unscreened irrigation diversions
  - Fish screen requirements:
    (a) for stream diversions under 30 cubic feet per second (cfs), fish screens are encouraged
    (b) for stream diversions of 30 cfs or more, fish screens can be required under State law
- **Noxious Weed Invasions:** Source: Tri-County Weed Manager
  - Ecological and economic impacts from weeds are expected to worsen over the long term, even with increased public awareness and weed control.
  - Some weeds are difficult to control; most will be impossible to eradicate.
  - Weed infestations could decrease economic value of land.
  - Weeds compete with native forage species used by livestock and wildlife.
- **Over-Appropriation of Water from Streams:** Source: ODFW, Oregon Water Resources Department (OWRD), and Wallowa-Whitman National Forest (WWNF)
  - Advocates of consumptive water use and instream water use define over-appropriation differently.
  - Water is unavailable to all junior water right holders (e.g., irrigation) as streamflow declines, not just out of stream consumptive users.
  - Streamflow does not fully support desired aquatic resources during some time periods in some stream reaches where exercise of surface water rights (April - October) and storage of water in reservoirs (October - April) greatly reduces streamflow.
  - ODFW instream water right applications are still pending due to questions about the appropriation process for instream flows.
- **Unauthorized Water Use:** Source: OWRD
  - Potential exceedence of rate and duty limitations due to lack of regulated water measurement devices on irrigation diversions.
  - Potential reactivation of surface water rights that have been forfeited due to five or more years of nonuse but have not been canceled.

APPENDIX B

- MAPS -

Watershed and Subwatersheds

UPPER POWDER RIVER WATERSHED



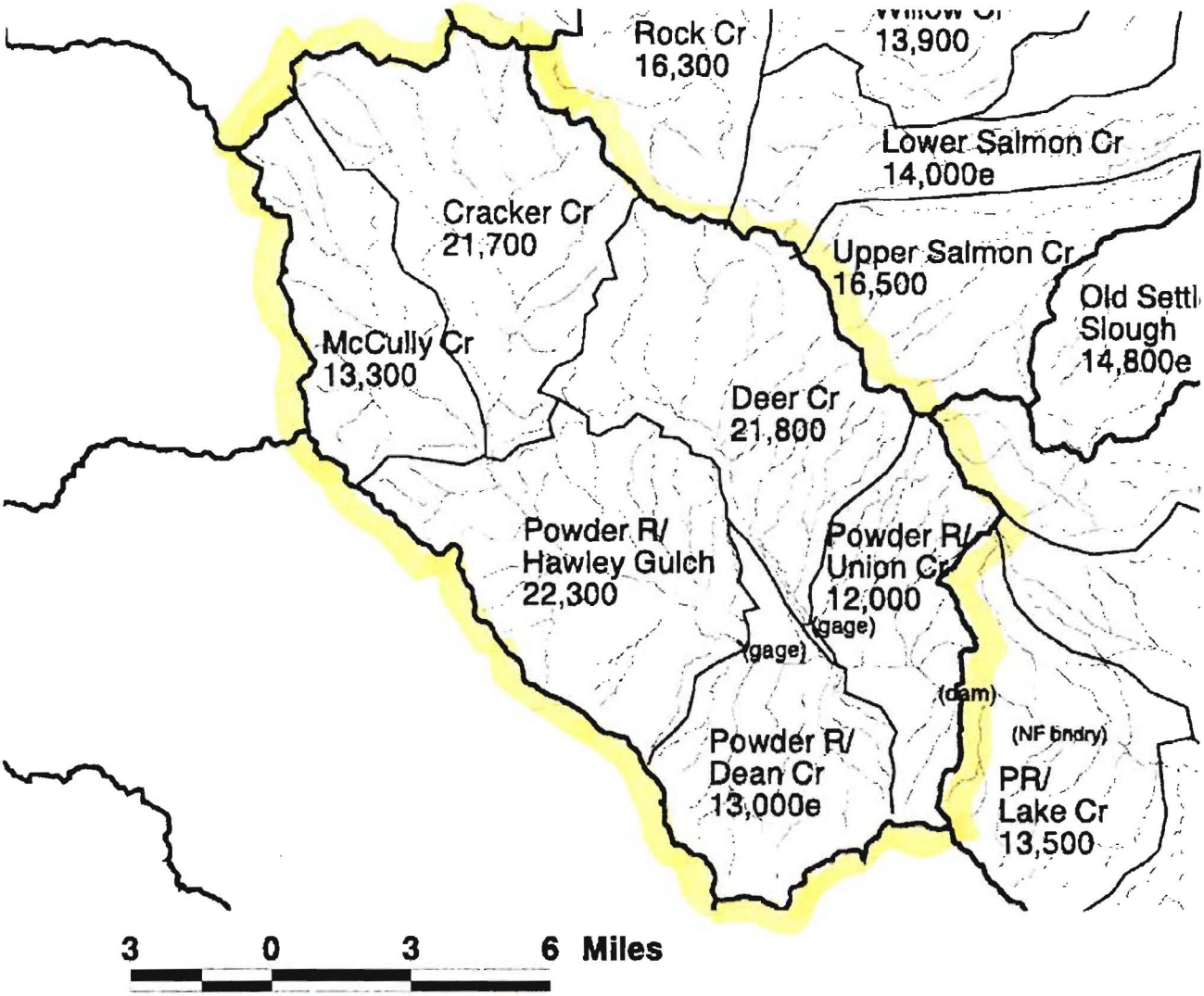
Map Prepared by
A. Gerig
USDA-NRCS
April 2001

Upper Powder River Subwatersheds

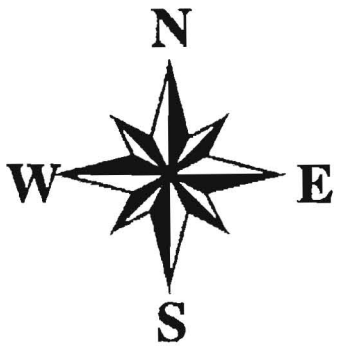
New Subwatersheds	*Old Subwatersheds*	*Comments*
Cracker Creek	Upper Cracker Creek – 20I Silver Creek – 20H Lower Cracker Creek – 20G	Combines 20G, 20H & 20I; About 21,700 acres.
McCully Creek	Upper McCully Creek – 20K Lower McCully Creek – 20J	Combines 20J & 20K; About 13,300 acres.
Powder River/Hawley Gulch	North Sumpter Valley – 20F South Sumpter Valley – 20L Clear Cr & misc tribs – 20M	Combines all of 20F & 20L, and part of 20M above Hawley Ditch confluence with Powder River; About 22,300 acres.
Deer Creek	Upper Deer Creek – 20E Middle Deer Creek – 20D Lower Deer Creek – 20C	Combines all of 20E, 20D, and most of 20C; mapped to legacy pour point with Powder River; legacy channel of Smith Creek was found to be tributary to Powder River and not to Deer Creek; About 21,800 acres.
Powder River/Dean Creek	Lower Deer Creek – 20C Phillips Lake – 20A Clear Cr & misc tribs – 20M Dean Cr & misc tribs – 20N	Combines parts of 20C, 20A and 20N above legacy Deer Creek confluence with Powder River and part of 20M below Hawley Ditch confluence with Powder River; About 13,000+ acres.
Powder River/Union Creek	Lower Deer Creek – 20C Union Cr & misc tribs – 20B Phillips Lake – 20A Dean Cr & misc tribs – 20N	Combines all of 20B with parts of 20C, 20A and 20N below legacy Deer Cr confluence; About 12,000+ acres.

UPPER POWDER RIVER WATERSHED 1705020301

**Map of new subwatersheds (HUC6s)
developed by interagency work group
in Portland, Oregon
during week of June 4, 2001.**



Huc5
Powder 6th.shp
Powder Streams



Status of Lands Managed by the Wallowa-Whitman National Forest in the Upper Powder River Watershed

National Forest Lands were set aside from the public domain under the following proclamations:

- Baker City Forest Reserve (February 5, 1904) (NE part of watershed).
- Blue Mountain Forest Reserve (March 15, 1906) (NW part of watershed).
- Whitman National Forest 5th Proclamation (September 11, 1926) (21 small tracts south and east of Baker City and Blue Mountain reserves).
- Whitman National Forest 7th Proclamation (April 26, 1939) (1 small tract on Black Mountain).

Private lands in the Phillips Lake Management Area purchased by the USDI Bureau of Reclamation were transferred to the Forest on November 18, 1966.

Private lands acquired by the Forest mostly from the 1920's to 1940's were give exchange reserved status. Some private lands acquired in the 1990's have purchased status.

APPENDIX C

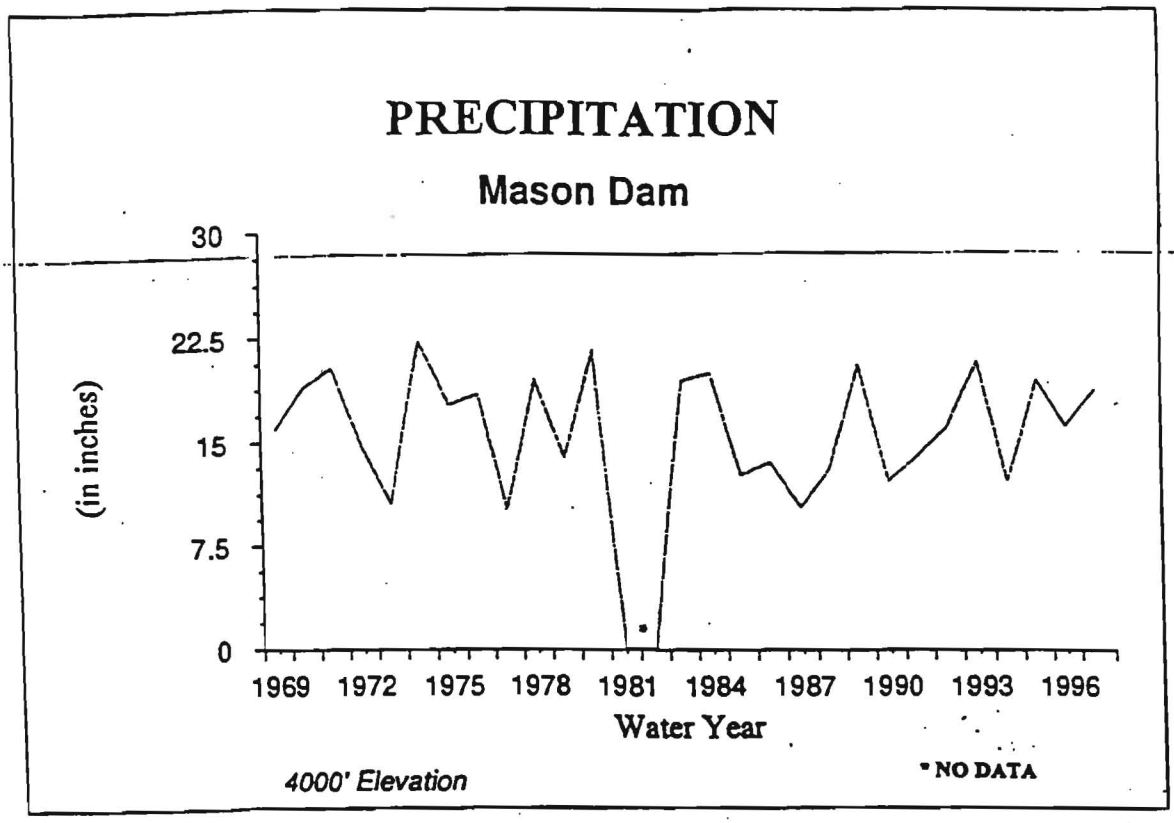
Water Availability
&
Consumptive Use

Water Availability, Consumption, and Budget:

Water Availability Tables and Consumptive Use calculations for those subwatersheds having measuring gauges are from OWRD's electronic files.

Deer Creek
Clear Creek
McCully Creek
Cracker Creek

Figure 4



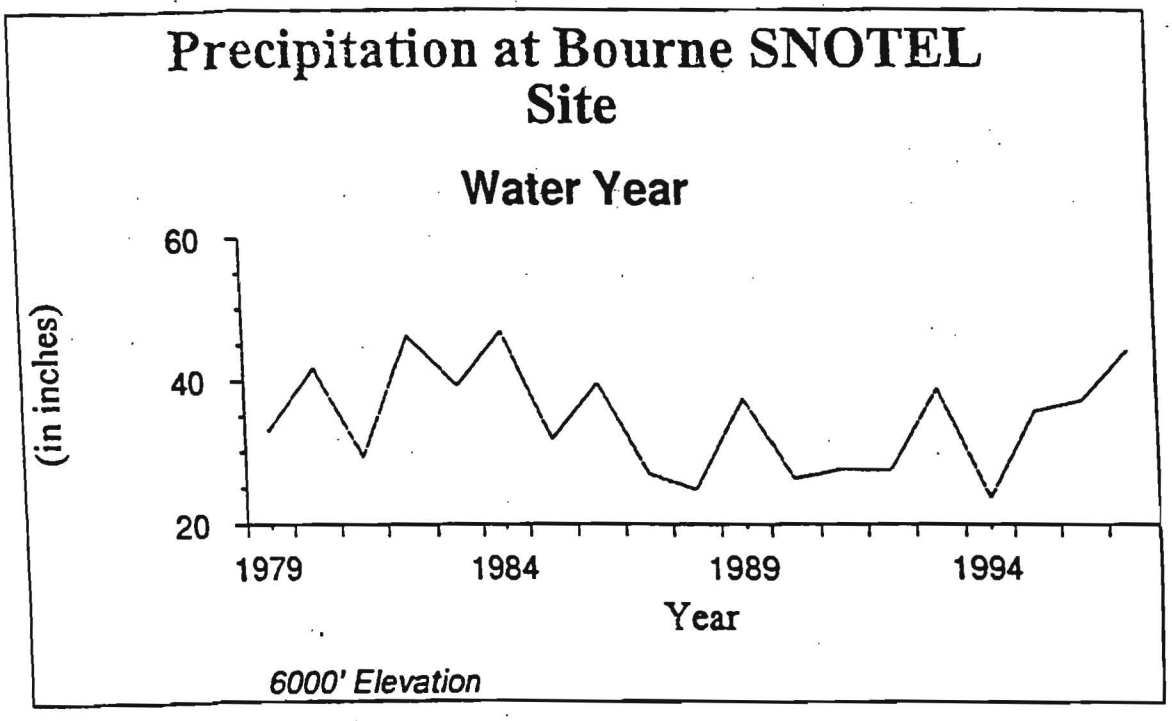


Figure 5

Figure 6

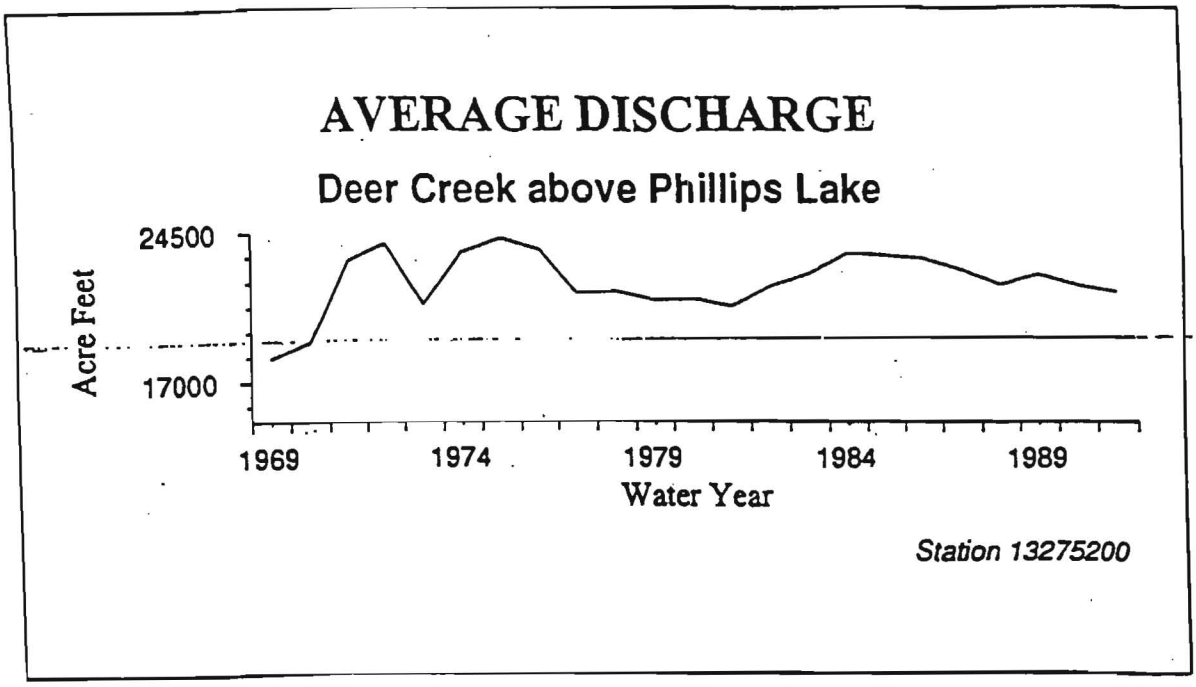
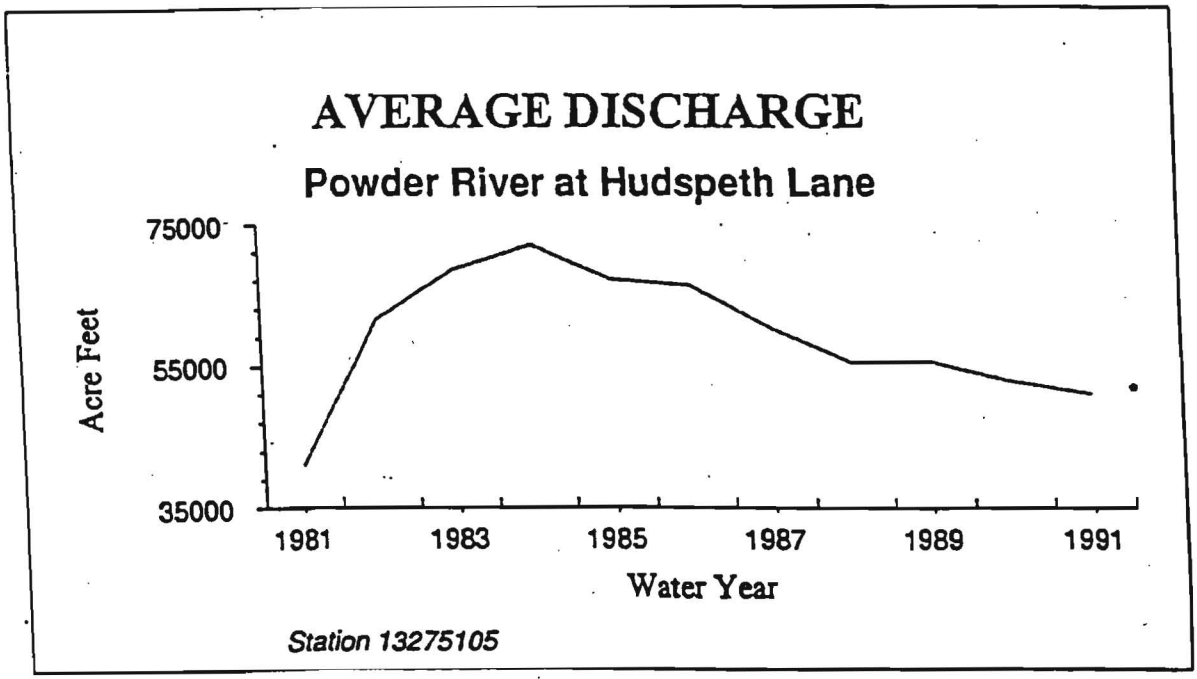


Figure 7



ONSET OF DROUGHT

OWRD Water Availability Studies

Water Availability Analyses (WAAs) have been completed by OWRD for 5 Water Availability Basins (WABs) in the Upper Powder Watershed. These analyses were done to estimate water availability for new applications, including consumptive surface water and storage, instream water rights, and reservations for future economic development. The stream name, WAB number, and analysis point are listed below:

Stream	Old WABNO	New WSID	Analysis Point
Deer Creek	010569674	72174	at mouth, Phillips Res.
Powder River	010569675	72190	above Clear Creek
Cracker Creek	0105696751	72172	at mouth w/ Powder R.
McCully Fork	0105696752	72183	at mouth w/ Powder R.
Powder River	01056967	243	above Beaver Creek, above & below dam

(streams or analysis points outside of study area but used in water availability analysis)

Powder River	01	30920301	Powder R. > Snake R. at mouth
Powder River	0105	72193	Powder R. > Snake R. at Eagle Cr.
Powder River	01056	72192	Powder R. > Snake R. above Goose Cr.
Powder River	010569	72191	Powder R.above Unnamed Streams
Powder River	0105696	30920327	Powder R. > Snake R. above Rock Cr.

Fifty (50) Percent Exceedence

This is an estimate of the flow of water available 50 percent of the time on a monthly basis. Appendix C contains the OWRD 50 percent exceedence flow tables for the streams listed above. OWRD uses 50 percent exceedence flows to determine water availability for new water right applications for storage and instream water rights (Appendix D). The tables in this appendix (C) show storage opportunities exist in all WABs, but only during the winter/spring period.

Eighty (80) Percent Exceedence

This is the flow of water available 80 percent of the time on a monthly basis. Appendix C contains the OWRD 80 percent exceedence flow tables for the 7 streams listed above. OWRD uses 80 percent exceedence flows to determine water availability for new water right applications for new surface water and groundwater connected to surface water (both out-of-stream and instream uses). The tables in appendix C show opportunities to obtain surface water rights exist in all WABs, but only during the winter/spring period.

Storage

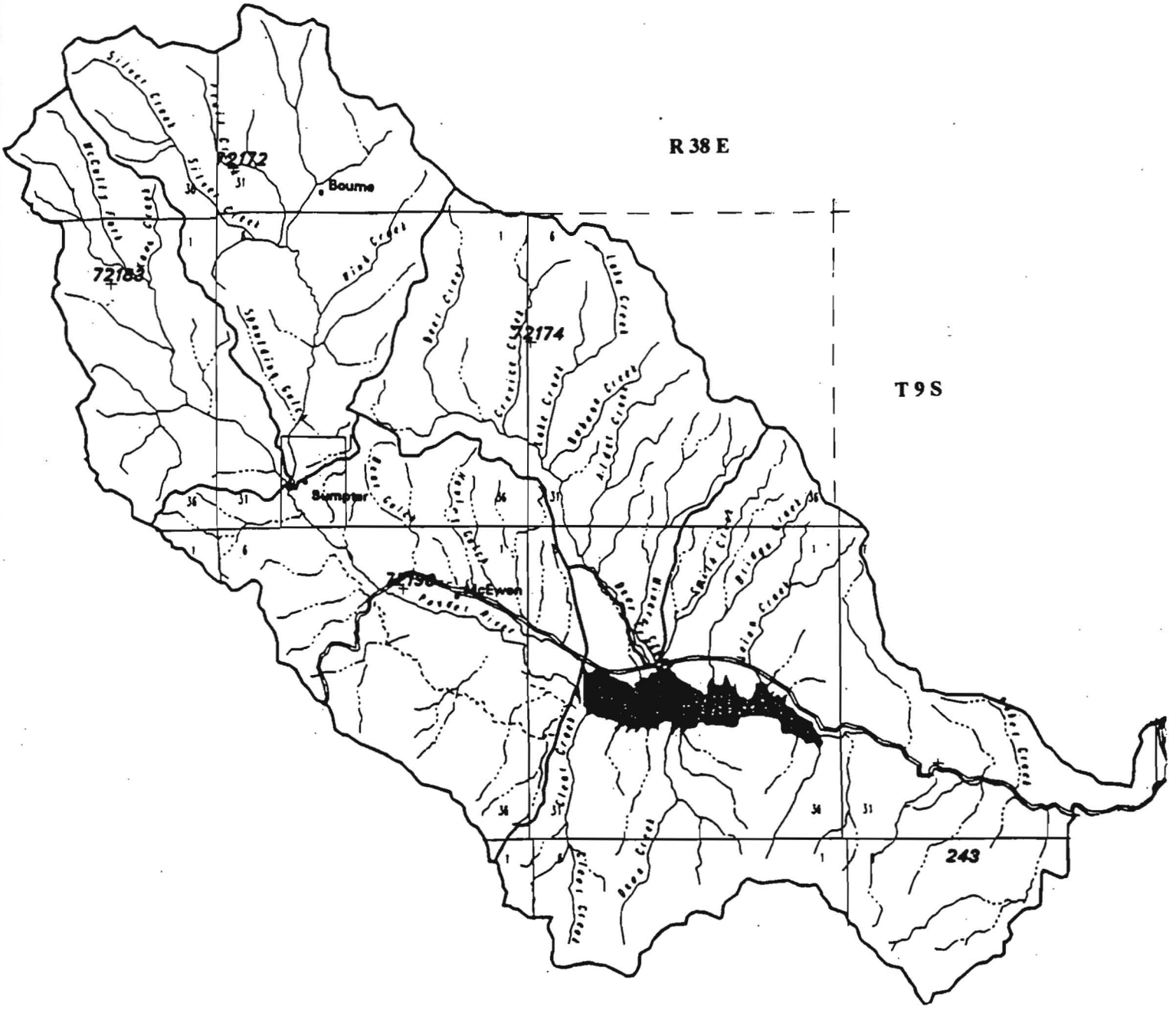
The table in Appendix C shows storage opportunities in the UPR subwatersheds. The numbers are not additive. The table shows only the annual storage opportunities. Monthly storage opportunities require additional analysis. Feasibility of storage opportunities depends on several factors including cost of planning for storage facilities, construction costs, and environmental issues such as bull trout recovery and water quality limited streams.

Interpretation of OWRD Exceedence Tables

Evaluation of the UPR requires analysis of information for the water availability subbasins, including those downstream of the study area. The Water Availability Table identifies the subbasins as Item Numbers 1, 2, 3, . . . and so forth. Reading to the right, this table indicates the months that water is unavailable for new water rights by the work ***NO.*** Note that there are more months with ***NO*** as one goes from Items 1 to 4. The lowest analysis point on a stream is always Item 1 and the highest analysis point along a stream is always the last Item.

The locations of the subbasins are briefly described in the *Stream Names* table. The first line in the *Water Availability* table corresponds to the first line in the *Stream Names* table. *The Limiting Water Availability Subbasins* table shows which of the subbasins is most limiting for each month and for storage. Note that there is negative water available for July through November. This is due to an accounting procedure indicating the stream is over-appropriated with respect to 50 percent exceedence. *It does not mean the stream is dry in those months*. The ***NO***s in this table are for the same subbasins and months shown in the *Water Availability* table.

The *Detailed Report on ISWRs* is a summary of instream water rights or applications for the WAB analysis point. This data also appears in the *Detailed Report of Water Availability* under the column entitled Instream Water Rights. Looking at the numbers to the left and right of the Instream Water Rights column, note when they are subtracted from the column to the left, negative numbers appear for two months to the right. These same months are shown as *NO*s in the *Water Availability* table. To summarize, the *Water Availability* table shows an estimate of natural streamflow, from which estimated consumptive use for water rights (not diversion rights for water rights), storage rights, and instream water rights are subtracted to show how much water is available for new appropriations. The most limiting Net Available Water figure for any month from among the *Water Availability* tables appears in the *Limiting Water Availability Subbasin* table.



OWRD Water Availability Basins (WABs)

Upper Powder River Watershed

13275300 POWDER RIVER NEAR SUMPTER, OR

LOCATION. Lat 44°40'20", Long 117°59'40', in NE¼NE¼ Section 25, T 10 S R 38 E, Baker County, Hydrologic Unit 17050203, Wallowa Whitman National Forest, on left bank 1,200 ft downstream from Mason Dam, 1.4 mi upstream from California Gulch, 11.4 mi southeast of Sumpter, and at mile 123.2.

DRAINAGE AREA. 168 mi^2, approximately. Prior to Oct. 1, 1970, 170 mi^2 at cableway, 0.5 mi downstream.

PERIOD OF RECORD. April 1965 to 1987

GAGE. Water-stage recorder. Datum of gage is 3898.47 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark). Prior to July 29, 1967, nonrecording gage at datum 1.03 ft higher.

REMARKS. Flow completely regulated since Oct. 31, 1967, by Phillips Lake, active capacity, 90,540 acre ft. Many small diversions for irrigation upstream from station.

AVERAGE DISCHARGE. 22 years, 115 ft^3/s, 83,320 acre-ft/yr, not adjusted for storage in Phillips Lake.

EXTREMES FOR PERIOD OF RECORD. Maximum discharge observed, 971 ft^3/s

EXTREMES OUTSIDE PERIOD OF RECORD. Maximum discharge, 1,600 ft^3/s, approximately, Mar. 20, 1910, based on comparison with records for station downstream, near Baker.

STATISTICAL SUMMARIES FOR THE PERIOD 1968 – 1987

[n = number of values used to compute statistics, months are abbreviated; Ann = annual]

Monthly and annual statistics based on mean daily discharge, in cubic feet per second								
Month	n	Minimum	(year)	Maximum	(year)	Mean	Standard Deviation	Percent of Annual Runoff
Oct	20	2.6	1974	19	1981	11	4.7	0.8
Nov	20	0.5	1968	16	1985	9.0	4.3	0.6
Dec	20	0.5	1968	14	1984	8.2	3.9	0.6
Jan	20	0.4	1968	105	1984	15	26	1.1
Feb	20	0.8	1968	67	1984	18	19	1.2
Mar	20	1.1	1968	317	1982	64	91	4.6
Apr	20	11	1978	355	1984	147	117	10.1
May	20	157	1978	519	1975	324	101	23.1
Jun	20	135	1987	546	1983	308	137	21.3
Jul	20	85	1968	411	1984	214	69	15.3
Aug	20	56	1976	301	1974	216	63	15.4
Sep	20	21	1984	171	1974	86	37	6.0
Ann		60	1968	186	1984	119	39	100.0

13275300 POWDER RIVER NEAR SUMPTER, OR

Flow duration statistics based on mean daily discharge																
Discharge, in cubic feet per second, which was equaled or exceeded for indicated percent of time																
Month	95%	90%	85%	80%	75%	70%	60%	50%	40%	30%	25%	20%	15%	10%	5%	n
Oct	3.8	5.2	5.2	7.2	7.9	8.5	9.1	10	12	14	15	16	17	19	21	20
Nov	1.2	2.6	3.1	4.9	6.2	7.0	8.2	8.8	9.6	11	12	13	15	16	17	20
Dec	0.7	2.7	3.1	3.1	4.6	5.3	8.1	9.1	9.7	11	12	12	13	134	15	20
Jan	0.3	1.5	2.9	2.9	4.8	5.3	7.2	7.7	9.2	11	12	12	13	15	96	20
Feb	1.2	1.4	3.	74.5	5.6	6.2	8.0	8.6	10	11	12	14	16	41	103	20
Mar	1.5	2.2	5.5	6.4	7.7	8.3	11	13	14	50	85	118	164	210	345	20
Apr	6.4	9.4	12	13	14	16	56	94	154	204	238	291	343	398	463	20
May	122	156	181	207	227	245	283	317	360	401	429	457	478	500	536	20
Jun	102	127	147	167	186	202	234	275	329	427	452	475	498	528	563	20
Jul	89	115	128	141	150	160	183	206	226	248	259	270	285	309	396	20
Aug	55	98	130	148	165	179	201	221	242	268	278	289	299	321	349	20
Sep	6.5	9.3	15	18	23	31	54	79	102	124	136	149	164	178	199	20
Ann	3.0	5.2	6.9	8.1	9.2	10	13	23	117	181	213	247	290	343	447	

Historically there has been a range of 2100 to 2900 acres of pasture and/or hay crops under irrigation (*Powder Drainage Basin*, USDA, 1966). The calculation was performed with the higher number to error on the conservative side. The Assessment Committee recommends this data could be used to develop a water conservation strategy for the Action Plan. Perhaps the landowners could use this information as rationale for expansion of irrigated acreage under conserved water use statutes (ORS 537.455-.500) and rules (OAR 690-18), and so forth.

ESTIMATED AVERAGE MONTHLY CONSUMPTIVE USE

MONTH	cfs	ACRE-FEET
January	.32	19.7
February	.32	17.8
March	.32	19.7
April	3.99	237.4
May	23.39	1438.2
June	27.92	1661.4
July	12.87	791.4
August	3.98	244.7
September	2.26	134.5
October	.32	19.7
November	.32	19.0
December	.32	19.7
Subtotal		**4623.2**
Storage		**4687.0**
Total		**9310.2**

Figures are from OWRD Water Availibilty Tables in Appendix C.

Amounts from tables for Deer Creek (72174) and Powder River (72190) were combined to indicate volumes available above the dam site but as discussed in the text, not all stream flows contributing to the total real volumes are accounted. As explained in the text, the dam collects a significant amount of unmeasured flows. The stored volume and its controlled release is a better indication of available water.

Water Available for Storage by Water Availability Subbasin

Stream	Water Availability Subbasin Name	Watershed ID Number	Potential Storage (acre-feet)	Analysis Point
Powder R.	POWDER	72190	7,420	above Clear Cr. McEwen
Deer Cr.		72174	5,840	at mouth
McCully Cr.		72183	3,570	at mouth
Cracker Cr.		72172	19,000	at mouth

figures from *Limiting Watersheds* (OWRD) tables in Appendix C

Consumptive Water Rights or Out-of-Stream Uses

The primary consumptive use of water in the watershed is for irrigation. Other uses include domestic, livestock, mining, and other uses related to road, forestland, and rangeland management. There are decreed water rights in Sumpter Valley as early as 1870.

There are numerous water developments in the watershed. Some developments are recorded as water rights, some are registered as exempt uses, and some qualify as exempt uses that do not require registration at this time. A summary of all of these developments was beyond the scope of this assessment. The numerous water rights are not yet filed electronically on the Watermaster's database and therefore not easily accessible for display.

The best data available on consumptive water use was developed by OWRD, and was presented in Appendix C, (50 Percent Exceedence tables). The table includes estimates of consumptive use in cfs by month, plus storage. This data has been converted to acre-feet, as shown in the following table, using the formula below.

$$\frac{(x \text{ cubic feet/second})(86{,}400 \text{ seconds/day})(y \text{ days in month})}{(43{,}560 \text{ cubic feet/acre-foot})}$$

Using the data from the table, one can estimate average consumptive use as follows:

$$\frac{9310.2 \text{ acre-feet consumptive use}}{2900 \text{ acres of irrigation}} = 3.2 \text{ acre-feet/acre/year}$$

Nonconsumptive Water Rights or Instream Uses

In 1990 and 1992, ODFW applied for instream water rights for streams in the watershed (Appendix D). None of the applications were protested. All applications have certificates. Instream flows became more of an issue when several streams were listed as water quality limited for temperature in the summer (for bull trout) on the 1994/1996 303(d) list and when bull trout were listed as a threatened species in 1998.

Instream water rights are junior to all but a few water rights, so the deficiencies shown in the water availability tables will occur in normal to dry years. Water to meet instream flow needs can come from senior surface water and storage rights through OWRD programs that allow lease, purchase or transfer of senior water rights to instream uses. Watershed health enhancements can also assist in meeting instream flow needs, as well as delivery and application system improvements, and/or better conservation of the resource.

Senior water rights are not legally affected by new applications. OWRD Division 33 rules affect new applications filed after July 17, 1992, that restrict direct (live) flow withdrawal from April 15 to September 30. New diversions or live flow water rights will be permitted during this period, if they qualify as an exception or meet other conditions described in the rules. Some allowed uses include domestic, off channel livestock watering, emergency use, multi-purpose storage, or other projects with significant public benefits.

The Baker Valley Irrigation District has an agreement with the OWRD where they guarantee a minimum flow of ten cfs in the Powder River. This guaranteed flow is not subtracted from total found in the Water Availability tables.

The following data is from Oregon Water Resources Department Water (WRD) Water Rights Information System (WRIS) 1995 printouts. (See C-5 Data B)

POWDER BASIN WATER RIGHTS SUMMARY

PINE CREEK SUB-BASIN	CFS	ACRE FEET	POWDER RIVER SUB-BASIN	CFS	ACRE FEET	BURNT RIVER SUB-BASIN	CFS	ACRE FEET
Groundwater	7.93	0	Groundwater	117.30	0	Groundwater	3.80	0
Surface water	150.65	240.50	Surface water	3,703.93	69,577.57	Surface water	1,019.84	699.28
Reservoir	15.48	1,772.57	Reservoir	38.62	159,822.51	Reservoir	3.73	29,216.15

IRRIGATION WATER RIGHTS SUMMARY

~~1995~~ PRIMARY WATER RIGHTS - IRRIGATED ACRES SUMMARY

BURNT RIVER SUB-BASIN	Primary Irrigated Acres Summary	POWDER RIVER SUB-BASIN	Primary Irrigated Acres Summary	PINE RIVER SUB-BASIN	Primary Irrigated Acres Summary
Groundwater	93.77	Groundwater	6,397.49	Groundwater	154.25
Surface water	32,975.89	Surface water	141,261.59	Surface water	16,450.06
Stored	2,741.45	Stored	12,292.65	Stored	1,619.80
TOTAL ACRES	35,811.11	TOTAL ACRES	159,951.73	TOTAL ACRES	18,224.11

IRRIGATION WATER RIGHTS

ACRES IRRIGATED BY SURFACE AND GROUNDWATER

SUB-BASIN	1966 ACRES	1995 ACRES**
POWDER RIVER	155,078	159,952
PINE CREEK	20,688	18,224
BURNT RIVER	28,053	35,811
TOTAL	203,819	213,987

*1967 Powder River Basin Report
**1995 Water Resources Department

Deer Creek

(Appendix C)

LIMITING WATERSHEDS

Stream: DEER CR > POWDER R - AT MOUTH
Watershed ID Number: 72174
Basin: POWDER — Exceedance Level: 50
Time: 15:27 — Date: 02/26/2001

Mnth	Limiting Watershed	Stream Name	Water Avail?	Net Water Available
1	243	POWDER R > SNAKE R - AB BEAVER CR	NO	-19.0
2	243	POWDER R > SNAKE R - AB BEAVER CR	NO	-20.3
3	243	POWDER R > SNAKE R - AB BEAVER CR	NO	-44.4
4	72174	DEER CR > POWDER R - AT MOUTH	YES	40.4
5	30920327	POWDER R > SNAKE R - AB ROCK CR	YES	55.9
6	30920327	POWDER R > SNAKE R - AB ROCK CR	NO	-183.0
7	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-301.0
8	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-225.0
9	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-190.0
10	30920327	POWDER R > SNAKE R - AB ROCK CR	NO	-54.8
11	30920327	POWDER R > SNAKE R - AB ROCK CR	NO	-25.4
12	72192	POWDER R > SNAKE R - AB GOOSE CR	NO	-34.8
Stor	72174	DEER CR > POWDER R - AT MOUTH	YES	5840.0

WATER AVAILABILITY TABLE

Stream: DEER CR > POWDER R - AT MOUTH
Basin: POWDER — Exceedance Level: 50
Watershed ID Number: 72174 (and Nested Subbasins)
Time: 15:22 — Date: 02/26/2001

Item #	Watershed ID #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
1	30920301	YES	YES	YES	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES
2	72193	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
3	72192	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
4	72191	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
5	30920327	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
6	243	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
7	72174	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES

WATER AVAILABILITY TABLE

Stream: DEER CR > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72174 (and Nested Subbasins)
Time: 11:47

Exceedance Level: 80
Date: 02/16/2001

Item #	Watershed ID #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
1	30920301	YES	YES	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES	YES
2	72193	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
3	72192	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
4	72191	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
5	30920327	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
6	243	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
7	72174	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION

Stream: DEER CR > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72174
Time: 15:15

Exceedance Level: 80
Date: 02/26/2001

Month	Natural Stream Flow	CU + Stor Prior to 1/1/93	CU + Stor After 1/1/93	Expected Stream Flow	Reserved Stream Flow	Instream Water Rights	Net Water Available
1	4.70	.06	.00	4.64	.00	6.00	-1.37
2	7.69	.06	.00	7.63	.00	10.00	-2.38
3	16.10	.06	.00	16.00	.00	15.00	1.03
4	28.90	.83	.07	28.00	.00	15.00	13.00
5	45.60	4.89	.41	40.30	.00	15.00	25.30
6	17.20	5.82	.25	11.10	.00	15.00	-3.88
7	3.30	2.67	.00	.63	.00	5.00	-4.36
8	1.29	.81	.00	.48	.00	1.80	-1.32
9	1.23	.45	.00	.78	.00	1.70	-.92
10	1.48	.06	.00	1.42	.00	2.40	-.99
11	2.84	.06	.00	2.77	.00	4.80	-2.03
12	3.94	.06	.00	3.88	.00	6.00	-2.13
Stor	15600	961	45	14600	0	5880	8860

DETAILED REPORT OF ISWRS

Stream: DEER CR > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72174
Time: 15:16

Date: 02/26/2001

	ISWRS							
APP #	72174A	0	0	0	0	0	0	MAXIMUM
Status	Cert.							
1	6.00	.00	.00	.00	.00	.00	.00	6.00
2	10.00	.00	.00	.00	.00	.00	.00	10.00
3	15.00	.00	.00	.00	.00	.00	.00	15.00
4	15.00	.00	.00	.00	.00	.00	.00	15.00
5	15.00	.00	.00	.00	.00	.00	.00	15.00
6	15.00	.00	.00	.00	.00	.00	.00	15.00
7	5.00	.00	.00	.00	.00	.00	.00	5.00
8	1.80	.00	.00	.00	.00	.00	.00	1.80
9	1.70	.00	.00	.00	.00	.00	.00	1.70
10	2.40	.00	.00	.00	.00	.00	.00	2.40
11	4.80	.00	.00	.00	.00	.00	.00	4.80
12	6.00	.00	.00	.00	.00	.00	.00	6.00

Details of the Water Availability Calculations

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION

Stream: DEER CR > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72174
Time: 15:23

Exceedance Level: 50
Date: 02/26/2001

Month	Natural Stream Flow	CU + Stor Prior to 1/1/93	CU + Stor After 1/1/93	Expected Stream Flow	Reserved Stream Flow	Instream Water Rights	Net Water Available
1	8.32	.06	.00	8.26	.00	6.00	2.26
2	13.50	.06	.00	13.40	.00	10.00	3.44
3	27.70	.06	.00	27.60	.00	15.00	12.60
4	56.30	.83	.07	55.40	.00	15.00	40.40
5	86.30	4.89	.41	81.00	.00	15.00	66.00
6	41.80	5.82	.25	35.70	.00	15.00	20.70
7	5.53	2.67	.00	2.87	.00	5.00	-2.13
8	2.18	.81	.00	1.37	.00	1.80	-.43
9	1.91	.45	.00	1.46	.00	1.70	-.24
10	2.54	.06	.00	2.48	.00	2.40	.08
11	4.64	.06	.00	4.58	.00	4.80	-.22
12	6.89	.06	.00	6.83	.00	6.00	.82
Stor	15600	961	45	14600	0	5880	8860

DETAILED REPORT OF ISWRs

Stream: DEER CR > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72174
Time: 15:25

Date: 02/26/2001

	ISWRs						
APP #	72174A	0	0	0	0	0	0	MAXIMUM
Status	Cert.							
1	6.00	.00	.00	.00	.00	.00	.00	6.00
2	10.00	.00	.00	.00	.00	.00	.00	10.00
3	15.00	.00	.00	.00	.00	.00	.00	15.00
4	15.00	.00	.00	.00	.00	.00	.00	15.00
5	15.00	.00	.00	.00	.00	.00	.00	15.00
6	15.00	.00	.00	.00	.00	.00	.00	15.00
7	5.00	.00	.00	.00	.00	.00	.00	5.00
8	1.80	.00	.00	.00	.00	.00	.00	1.80
9	1.70	.00	.00	.00	.00	.00	.00	1.70
10	2.40	.00	.00	.00	.00	.00	.00	2.40
11	4.80	.00	.00	.00	.00	.00	.00	4.80
12	6.00	.00	.00	.00	.00	.00	.00	6.00

[above] Clear Creek

(Appendix C)

LIMITING WATERSHEDS

Stream: POWDER R > SNAKE R - AB CLEAR CR
Watershed ID Number: 72190
Basin: POWDER
Time: 18:06

Exceedance Level: 80
Date: 02/09/2001

Mnth	Limiting Watershed	Stream Name	Water Avail?	Net Water Available
1	72192	POWDER R > SNAKE R - AB GOOSE CR	NO	-69.9
2	72192	POWDER R > SNAKE R - AB GOOSE CR	NO	-49.0
3	243	POWDER R > SNAKE R - AB BEAVER CR	NO	-98.9
4	243	POWDER R > SNAKE R - AB BEAVER CR	NO	-62.1
5	72192	POWDER R > SNAKE R - AB GOOSE CR	NO	-258.0
6	72192	POWDER R > SNAKE R - AB GOOSE CR	NO	-478.0
7	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-376.0
8	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-258.0
9	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-210.0
10	30920327	POWDER R > SNAKE R - AB ROCK CR	NO	-63.6
11	30920327	POWDER R > SNAKE R - AB ROCK CR	NO	-39.1
12	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-76.4
Stor	72190	POWDER R > SNAKE R - AB CLEAR CR	YES	7420.0

WATER AVAILABILITY TABLE

Stream: POWDER R > SNAKE R - AB CLEAR CR
Basin: POWDER
Watershed ID Number: 72190 (and Nested Subbasins)
Time: 17:54

Exceedance Level: 80
Date: 02/09/2001

Item #	Watershed ID #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
1	30920301	YES	YES	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES	YES
2	72193	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
3	72192	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
4	72191	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
5	30920327	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
6	243	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
7	72190	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION

Stream: POWDER R > SNAKE R - AB CLEAR CR
Basin: POWDER
Watershed ID Number: 72190
Time: 18:09

Exceedance Level: 80
Date: 02/09/2001

Month	Natural Stream Flow	CU + Stor Prior to 1/1/93	CU + Stor After 1/1/93	Expected Stream Flow	Reserved Stream Flow	Instream Water Rights	Net Water Available
1	11.30	.26	.00	11.00	.00	23.60	-12.60
2	13.30	.26	.00	13.00	.00	25.20	-12.20
3	33.10	.26	.00	32.80	.00	40.00	-7.16
4	76.60	3.16	.19	73.20	.00	40.00	33.20
5	166.00	18.50	.00	147.00	.00	40.00	107.00
6	78.30	22.10	.00	56.20	.00	40.00	16.20
7	13.70	10.20	.00	3.51	.00	25.00	-21.50
8	3.88	3.17	.00	.71	.00	17.10	-16.40
9	2.27	1.81	.00	.46	.00	7.30	-6.84
10	2.98	.26	.00	2.72	.00	5.60	-2.88
11	5.76	.26	.00	5.50	.00	7.60	-2.10
12	7.76	.26	.00	7.50	.00	14.80	-7.30
Stor	44000	3670	11	40300	0	17300	25000

WATER AVAILABILITY TABLE

Stream: POWDER R > SNAKE R - AB CLEAR CR
Basin: POWDER
Watershed ID Number: 72190 (and Nested Subbasins)
Time: 18:30
Exceedance Level: 50
Date: 02/09/2001

Item #	Watershed ID #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
1	30920301	YES	YES	YES	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES
2	72193	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
3	72192	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
4	72191	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
5	30920327	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
6	243	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
7	72190	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES

STREAM NAMES

Basin: POWDER
Watershed ID Number: 72190 (and Nested Subbasins)
Time: 18:31
Date: 02/09/2001

Item	Watershed ID	Stream Name
1	30920301	POWDER R > SNAKE R - AT MOUTH
2	72193	POWDER R > SNAKE R - AB EAGLE CR
3	72192	POWDER R > SNAKE R - AB GOOSE CR
4	72191	POWDER R > SNAKE R - AB UNN STR
5	30920327	POWDER R > SNAKE R - AB ROCK CR
6	243	POWDER R > SNAKE R - AB BEAVER CR
7	72190	POWDER R > SNAKE R - AB CLEAR CR

LIMITING WATERSHEDS

Stream: POWDER R > SNAKE R - AB CLEAR CR
Watershed ID Number: 72190
Basin: POWDER
Time: 18:31
Exceedance Level: 50
Date: 02/09/2001

Mnth	Limiting Watershed	Stream Name	Water Avail?	Net Water Available
1	243	POWDER R > SNAKE R - AB BEAVER CR	NO	-19.0
2	243	POWDER R > SNAKE R - AB BEAVER CR	NO	-20.3
3	243	POWDER R > SNAKE R - AB BEAVER CR	NO	-44.4
4	243	POWDER R > SNAKE R - AB BEAVER CR	YES	66.9
5	30920327	POWDER R > SNAKE R - AB ROCK CR	YES	55.9
6	30920327	POWDER R > SNAKE R - AB ROCK CR	NO	-183.0
7	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-301.0
8	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-225.0
9	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-190.0
10	30920327	POWDER R > SNAKE R - AB ROCK CR	NO	-54.8
11	30920327	POWDER R > SNAKE R - AB ROCK CR	NO	-25.4
12	72192	POWDER R > SNAKE R - AB GOOSE CR	NO	-34.8
Stor	72190	POWDER R > SNAKE R - AB CLEAR CR	YES	7420.0

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION

Stream: POWDER R > SNAKE R - AB CLEAR CR
Basin: POWDER
Exceedance Level: 50
Watershed ID Number: 72190
Time: 18:31
Date: 02/09/2001

Month	Natural Stream Flow	CU + Stor Prior to 1/1/93	CU + Stor After 1/1/93	Expected Stream Flow	Reserved Stream Flow	Instream Water Rights	Net Water Available
1	19.30	.26	.00	19.00	.00	23.60	-4.56
2	26.10	.26	.00	25.80	.00	25.20	.64
3	54.20	.26	.00	53.90	.00	40.00	13.90
4	138.00	3.16	.19	135.00	.00	40.00	94.60
5	241.00	18.50	.00	222.00	.00	40.00	182.00
6	180.00	22.10	.00	158.00	.00	40.00	118.00
7	25.40	10.20	.00	15.20	.00	25.00	-9.79
8	7.36	3.17	.00	4.19	.00	17.10	-12.90
9	4.95	1.81	.00	3.14	.00	7.30	-4.16
10	5.79	.26	.00	5.53	.00	5.60	-.07
11	10.90	.26	.00	10.60	.00	7.60	3.04
12	15.40	.26	.00	15.10	.00	14.80	.34
Stor	44000	3670	11	40300	0	17300	25000

DETAILED REPORT OF CONSUMPTIVE USES AND STORAGES

Stream: POWDER R > SNAKE R - AB CLEAR CR
Basin: POWDER
Watershed ID Number: 72190
Time: 18:31
Date: 02/09/2001

Mo	Storage	Irrig	Munic	Ind/Man	Commer	Domest	Agricul	Other	Total
1	.00	.00	.10	.00	.00	.11	.05	.00	.26
2	.00	.00	.10	.00	.00	.11	.05	.00	.26
3	.00	.00	.10	.00	.00	.11	.05	.00	.26
4	.00	3.09	.10	.00	.00	.11	.05	.00	3.35
5	.00	18.26	.10	.00	.00	.11	.05	.00	18.50
6	.00	21.77	.20	.00	.00	.11	.05	.00	22.10
7	.00	9.83	.20	.00	.00	.11	.05	.00	10.20
8	.00	2.81	.20	.00	.00	.11	.05	.00	3.17
9	.00	1.45	.20	.00	.00	.11	.05	.00	1.81
10	.00	.00	.10	.00	.00	.11	.05	.00	.26
11	.00	.00	.10	.00	.00	.11	.05	.00	.26
12	.00	.00	.10	.00	.00	.11	.05	.00	.26

DETAILED REPORT OF RESERVATIONS FOR CU

Stream: POWDER R > SNAKE R - AB CLEAR CR
Basin: POWDER
Watershed ID Number: 72190
Time: 18:31 Date: 02/09/2001

	Reservations							
APP #	0	0	0	0	0	0	0	TOTAL
Status Use								
1	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00

DETAILED REPORT OF ISWRs

Stream: POWDER R > SNAKE R - AB CLEAR CR
Basin: POWDER
Watershed ID Number: 72190
Time: 18:31 Date: 02/09/2001

	ISWRs							
APP #	72190A	0	0	0	0	0	0	MAXIMUM
Status	Cert.							
1	23.60	.00	.00	.00	.00	.00	.00	23.60
2	25.20	.00	.00	.00	.00	.00	.00	25.20
3	40.00	.00	.00	.00	.00	.00	.00	40.00
4	40.00	.00	.00	.00	.00	.00	.00	40.00
5	40.00	.00	.00	.00	.00	.00	.00	40.00
6	40.00	.00	.00	.00	.00	.00	.00	40.00
7	25.00	.00	.00	.00	.00	.00	.00	25.00
8	17.10	.00	.00	.00	.00	.00	.00	17.10
9	7.30	.00	.00	.00	.00	.00	.00	7.30
10	5.60	.00	.00	.00	.00	.00	.00	5.60
11	7.60	.00	.00	.00	.00	.00	.00	7.60
12	14.80	.00	.00	.00	.00	.00	.00	14.80

McCully Creek

(Appendix C)

LIMITING WATERSHEDS

Stream: MCCULLY FK > POWDER R - AT MOUTH
Watershed ID Number: 72183
Basin: POWDER — Exceedance Level: 80
Time: 13:18 — Date: 02/16/2001

Mnth	Limiting Watershed	Stream Name	Water Avail?	Net Water Available
1	72192	POWDER R > SNAKE R - AB GOOSE CR	NO	-69.9
2	72192	POWDER R > SNAKE R - AB GOOSE CR	NO	-49.0
3	243	POWDER R > SNAKE R - AB BEAVER CR	NO	-98.9
4	243	POWDER R > SNAKE R - AB BEAVER CR	NO	-62.1
5	72192	POWDER R > SNAKE R - AB GOOSE CR	NO	-258.0
6	72192	POWDER R > SNAKE R - AB GOOSE CR	NO	-478.0
7	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-376.0
8	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-258.0
9	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-210.0
10	30920327	POWDER R > SNAKE R - AB ROCK CR	NO	-63.6
11	30920327	POWDER R > SNAKE R - AB ROCK CR	NO	-39.1
12	72193	POWDER R > SNAKE R - AB EAGLE CR	NO	-76.4
Stor	72183	MCCULLY FK > POWDER R - AT MOUTH	YES	3570.0

WATER AVAILABILITY TABLE

Stream: MCCULLY FK > POWDER R - AT MOUTH
Basin: POWDER — Exceedance Level: 80
Watershed ID Number: 72183 (and Nested Subbasins)
Time: 13:16 — Date: 02/16/2001

Item #	Watershed ID #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Stc
1	30920301	YES	YES	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES	YES
2	72193	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
3	72192	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
4	72191	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
5	30920327	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
6	243	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
7	72190	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
8	72183	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES

STREAM NAMES

Basin: POWDER
Watershed ID Number: 72183 (and Nested Subbasins)
Time: 13:18 — Date: 02/16/2001

Item	Watershed ID	Stream Name
1	30920301	POWDER R > SNAKE R - AT MOUTH
2	72193	POWDER R > SNAKE R - AB EAGLE CR
3	72192	POWDER R > SNAKE R - AB GOOSE CR
4	72191	POWDER R > SNAKE R - AB UNN STR
5	30920327	POWDER R > SNAKE R - AB ROCK CR
6	243	POWDER R > SNAKE R - AB BEAVER CR
7	72190	POWDER R > SNAKE R - AB CLEAR CR
8	72183	MCCULLY FK > POWDER R - AT MOUTH

WATER AVAILABILITY TABLE

Stream: MCCULLY FK > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72183 (and Nested Subbasins)
Time: 10:25

Exceedance Level: 80
Date: 02/16/2001

Item #	Watershed ID #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
1	30920301	YES	YES	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES	YES
2	72193	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
3	72192	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
4	72191	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
5	30920327	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
6	243	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
7	72190	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
8	72183	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES

Water Availability Tables

WATER AVAILABILITY TABLE

Stream: MCCULLY FK > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72183 (and Nested Subbasins)
Time: 13:06

Exceedance Level: 50
Date: 02/20/2001

Item #	Watershed ID #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
1	30920301	YES	YES	YES	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES
2	72193	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
3	72192	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
4	72191	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
5	30920327	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
6	243	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
7	72190	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
8	72183	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION

Stream: MCCULLY FK > POWDER R - AT MOUTH
Basin: POWDER Watershed ID Number: 72183
Time: 14:50

Exceedance Level: 50
Date: 02/26/2001

Month	Natural Stream Flow	CU + Stor Prior to 1/1/93	CU + Stor After 1/1/93	Expected Stream Flow	Reserved Stream Flow	Instream Water Rights	Net Water Available
1	4.63	.00	.00	4.63	.00	5.00	-.37
2	5.84	.00	.00	5.84	.00	5.92	-.08
3	11.40	.00	.00	11.40	.00	12.20	-.80
4	30.60	.00	.00	30.60	.00	15.00	15.60
5	57.90	.00	.00	57.90	.00	15.00	42.90
6	45.20	.00	.00	45.20	.00	15.00	30.20
7	6.70	.00	.00	6.70	.00	6.00	.70
8	1.83	.00	.00	1.83	.00	4.02	-2.19
9	1.18	.00	.00	1.18	.00	1.72	-.54
10	1.39	.00	.00	1.39	.00	1.32	.07
11	2.65	.00	.00	2.65	.00	1.79	.86
12	3.55	.00	.00	3.55	.00	3.48	.07
Stor	10400	0	0	10400	0	5220	5470

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION

Stream: MCCULLY FK > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72183
Time: 13:18

Exceedance Level: 80
Date: 02/16/2001

Month	Natural Stream Flow	CU + Stor Prior to 1/1/93	CU + Stor After 1/1/93	Expected Stream Flow	Reserved Stream Flow	Instream Water Rights	Net Water Available
1	2.73	.00	.00	2.73	.00	5.00	-2.27
2	3.11	.00	.00	3.11	.00	5.92	-2.81
3	7.16	.00	.00	7.16	.00	12.20	-5.04
4	17.30	.00	.00	17.30	.00	15.00	2.30
5	40.00	.00	.00	40.00	.00	15.00	25.00
6	19.70	.00	.00	19.70	.00	15.00	4.70
7	3.44	.00	.00	3.44	.00	6.00	-2.56
8	.92	.00	.00	.92	.00	4.02	-3.10
9	.50	.00	.00	.50	.00	1.72	-1.22
10	.64	.00	.00	.64	.00	1.32	-.68
11	1.40	.00	.00	1.40	.00	1.79	-.39
12	1.98	.00	.00	1.98	.00	3.48	-1.50
Stor	10400	0	0	10400	0	5220	5470

DETAILED REPORT OF ISWRs

Stream: MCCULLY FK > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72183
Time: 13:18

Date: 02/16/2001

	ISWRs						
APP #	72183A	0	0	0	0	0	MAXIMUM
Status	Cert.						
1	5.00	.00	.00	.00	.00	.00	5.00
2	5.92	.00	.00	.00	.00	.00	5.92
3	12.20	.00	.00	.00	.00	.00	12.20
4	15.00	.00	.00	.00	.00	.00	15.00
5	15.00	.00	.00	.00	.00	.00	15.00
6	15.00	.00	.00	.00	.00	.00	15.00
7	6.00	.00	.00	.00	.00	.00	6.00
8	4.02	.00	.00	.00	.00	.00	4.02
9	1.72	.00	.00	.00	.00	.00	1.72
10	1.32	.00	.00	.00	.00	.00	1.32
11	1.79	.00	.00	.00	.00	.00	1.79
12	3.48	.00	.00	.00	.00	.00	3.48

Cracker Creek

(Appendix C)

WATER AVAILABILITY TABLE

Stream: CRACKER CR > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72172 (and Nested Subbasins)
Time: 11:36

Exceedance Level: 80
Date: 02/16/2001

Item #	Watershed ID #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
1	30920301	YES	YES	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES	YES
2	72193	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
3	72192	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
4	72191	NO	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES
5	30920327	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
6	243	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
7	72190	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
8	72172	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES

WATER AVAILABILITY TABLE

Stream: CRACKER CR > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72172 (and Nested Subbasins)
Time: 11:40

Exceedance Level: 50
Date: 02/16/2001

Item #	Watershed ID #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
1	30920301	YES	YES	YES	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES
2	72193	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
3	72192	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
4	72191	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
5	30920327	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
6	243	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
7	72190	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
8	72172	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION

Stream: CRACKER CR > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72172
Time: 15:08

Exceedance Level: 80
Date: 02/26/2001

Month	Natural Stream Flow	CU + Stor Prior to 1/1/93	CU + Stor After 1/1/93	Expected Stream Flow	Reserved Stream Flow	Instream Water Rights	Net Water Available
1	6.86	.47	.00	6.40	.00	9.00	-2.61
2	7.96	.47	.00	7.50	.00	11.00	-3.51
3	17.10	.47	.00	16.60	.00	20.00	-3.36
4	41.30	.47	.19	40.60	.00	20.00	20.60
5	111.00	.47	.00	111.00	.00	20.00	90.50
6	54.50	.47	.00	54.00	.00	20.00	34.00
7	9.38	.47	.00	8.92	.00	12.00	-3.09
8	2.74	.47	.00	2.28	.00	7.45	-5.17
9	1.61	.47	.00	1.15	.00	3.18	-2.04
10	2.14	.47	.00	1.68	.00	2.44	-.76
11	3.86	.47	.00	3.40	.00	3.31	.09
12	4.91	.47	.00	4.44	.00	6.44	-2.00
Stor	27300	337	11	27000	0	8140	19000

Water Availability Tables

WATER AVAILABILITY TABLE

Stream: CRACKER CR > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72172 (and Nested Subbasins)
Time: 11:40

Exceedance Level: 50
Date: 02/16/2001

Item #	Watershed ID #	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
1	30920301	YES	YES	YES	YES	YES	YES	YES	NO	NO	YES	YES	YES	YES
2	72193	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
3	72192	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
4	72191	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	NO	YES
5	30920327	NO	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
6	243	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
7	72190	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES
8	72172	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION
Stream: CRACKER CR > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72172
Time: 15:02

Exceedance Level: 50
Date: 02/26/2001

Month	Natural Stream Flow	CU + Stor Prior to 1/1/93	CU + Stor After 1/1/93	Expected Stream Flow	Reserved Stream Flow	Instream Water Rights	Net Water Available
1	11.50	.47	.00	11.00	.00	9.00	2.03
2	13.70	.47	.00	13.20	.00	11.00	2.23
3	24.60	.47	.00	24.10	.00	20.00	4.14
4	69.70	.47	.19	69.00	.00	20.00	49.00
5	160.00	.47	.00	160.00	.00	20.00	140.00
6	126.00	.47	.00	126.00	.00	20.00	106.00
7	17.30	.47	.00	16.80	.00	12.00	4.83
8	5.04	.47	.00	4.58	.00	7.45	-2.88
9	3.38	.47	.00	2.92	.00	3.18	-.26
10	3.86	.47	.00	3.40	.00	2.44	.95
11	7.20	.47	.00	6.74	.00	3.31	3.42
12	9.79	.47	.00	9.33	.00	6.44	2.89
Stor	27300	337	11	27000	0	8140	19000

DETAILED REPORT OF ISWRs
Stream: CRACKER CR > POWDER R - AT MOUTH
Basin: POWDER
Watershed ID Number: 72172
Time: 15:05

Date: 02/26/2001

	ISWRs							
APP #	72172A	0	0	0	0	0	0	MAXIMUM
Status	Cert.							
1	9.00	.00	.00	.00	.00	.00	.00	9.00
2	11.00	.00	.00	.00	.00	.00	.00	11.00
3	20.00	.00	.00	.00	.00	.00	.00	20.00
4	20.00	.00	.00	.00	.00	.00	.00	20.00
5	20.00	.00	.00	.00	.00	.00	.00	20.00
6	20.00	.00	.00	.00	.00	.00	.00	20.00
7	12.00	.00	.00	.00	.00	.00	.00	12.00
8	7.45	.00	.00	.00	.00	.00	.00	7.45
9	3.18	.00	.00	.00	.00	.00	.00	3.18
10	2.44	.00	.00	.00	.00	.00	.00	2.44
11	3.31	.00	.00	.00	.00	.00	.00	3.31
12	6.44	.00	.00	.00	.00	.00	.00	6.44