



United States Department of the Interior



BUREAU OF RECLAMATION
Columbia-Cascades Area Office
1917 Marsh Road
Yakima, WA 98901-2058

IN REPLY REFER TO:

CCA-1000
2.2.4.23

VIA ELECTRONIC, FEDEX AND/OR U.S. MAIL

To: Prineville Reservoir Storage Contractors

Subject: Updated Final Storage Allocations for 2022, Prineville Reservoir, Crooked River Federal Reclamation Project, Oregon

Dear Ladies and Gentlemen:

Due to unexpected wetter and cooler conditions during late May and early June, Prineville Reservoir was able to store additional water since the calculation of storage allocations on May 19, 2022. Therefore, our recent declaration of the day of allocation for that date was incorrect. We have recalculated the final day of allocation for Prineville Reservoir as June 18, 2022.

This letter is being sent to inform Crooked River Project contractors of their updated Final 2022 Prineville Reservoir Storage Allocations—i.e., the amount of storage water available for use. Your updated final 2022 storage allocation can be found in the blue-highlighted Column K on Attachment 1.

Important Reminder: As indicated in our earlier correspondence, project contractors are required to follow the procedure to request delivery of your storage during this irrigation season. This procedure for requesting and delivering storage from Prineville Reservoir during the 2022 season along with weekly storage delivery reports showing your remaining storage allocation balance can be found on Reclamation's website:

<https://www.usbr.gov/pn/cca/projects/PrinevilleResStorage/PrinevilleResStorage.html>

If you have any questions, please contact Mr. Gregg Garnett, Bend Field Office Manager, at (541) 389-6541, ext 226.

Sincerely,

TALMADGE OXFORD
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TALMADGE OXFORD
Date: 2022.06.29
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Columbia Cascades Area Manager

Enclosure

INTERIOR REGION 9 • COLUMBIA-PACIFIC NORTHWEST

IDAHO, MONTANA*, OREGON*, WASHINGTON

* PARTIAL

cc: Kyle Gorman, OWRD
231 SW Scalehouse Loop, Ste. 103
Bend, Oregon 97702

Bill Nashem, Crooked River Watermaster
231 SW Scalehouse Loop, Ste. 103
Bend, Oregon 97702

Attachment 1A: Final Storage Allocation Table Descriptions

June 18, 2022

Column	Column Title	Column Description
A	Contractor	The name of each contractor
B	Contract Amount (acre-feet)	The amount of the storage contract space for each contractor
C	% of Contracted	The % of the total contracted space for each contractor
D	October 1, 2021 Carryover Storage (acre-feet)	Carryover storage into the 2022 season consists of the physical reservoir contents at the end of the day September 30, 2021 (30,090 acre-feet). McKay Creek Land OID (2,740 acre-feet), City of Prineville (5,100 acre-feet), and Uncontracted Storage (6,361 acre-feet) carried over 100% of their allocation into the 2022 season (totalling 14,201 acre-feet). NUID Temp Contract, no carryover entitlement. The remaining 15,889 acre-feet of carryover storage was distributed proportionally based on Contract Amount to the remaining contractors.
E	Carryover Storage Use prior to the Day of Allocation (acre-feet)	Carryover Storage use prior to the day of allocation totalled 18,413 acre-feet for winter flows 10/1/2021 through 4/10/2022: => 5,100 acre-feet of City of Prineville => 6,361 acre-feet of uncontracted storage => 2,740 acre-feet of McKay Creek Land (OID) storage and 4,212 acre-feet of Ochoco Irrigation District storage. OID storage use is adjusted for natural flow releases for diversions downstream of the dam that occurred starting 2/23 per the watermaster.
F	New Fill (acre-feet)	New fill during the winter and spring of 2022 totalled 38,035 acre-feet. The new fill was distributed proportionally based on Contract Amount to all contracted accounts.
G	Reserved for Projected 10 cfs Releases from Storage 9/1-10/26 (acre-feet)	992 acre-feet of New Fill has been reserved proportionally to provide 10 cfs of releases from Prineville Dam after an assumed date when irrigation deliveries cease (assumed to be 9/1 due to uncertainty) through the estimated date when natural flow into the reservoir becomes greater than 10 cfs (10/26) or releases past the dam of more than 10 cfs are being made for other purposes (including the Deschutes Basin Habitat Conservation Plan). Inflow projections are based on minimum flow data from 1993-2021 period for the Prineville River above Reservoir near Post gauge (CRPO); the volume has been calculated as that amount necessary to supplement the reservoir inflow.
H	WY2022 Allocation Before Loss (acre-feet)	WY2022 Allocation Before Loss for each account is calculated as Carryover Storage (Column D) - Storage Use Prior to Day of Allocation (Column E) + New Fill (Column F) - 10 cfs Reservation (Column G).
I	Estimated Reservoir Losses (acre-feet)	Storage allocations have been adjusted proportionally based on Allocation before Loss to account for estimated reservoir losses (e.g. evaporation, seepage, etc.). The amount of 2,815 acre-feet was determined based on a historical analysis of subtracting June 18 through September 30 computed unregulated flow (change in storage + discharge) volume at Prineville Reservoir from the June 18 through September 30 flow volume at the Crooked River above Prineville Reservoir near Post. Historical years with > +/- 1 Standard Deviation were excluded as outliers, and the average for the non-excluded 1994-2021 period was used.
J	Estimated Sedimentation Loss (acre-feet)	Storage allocations have been adjusted proportionally based on Contract Amount to account for approximately 1,517 acre-feet of sedimentation that is estimated to have occurred in the contracted space below the 2022 day of allocation reservoir elevation since the time of the 1998 Prineville Reservoir Sedimentation Survey: (https://www.usbr.gov/tsc/techreferences/reservoir/Prineville%20Reservoir%201998%20Sedimentation%20Survey.pdf). The estimate is based on guidance provided in the study that used a theoretical distribution of future sediment in the reservoir computed using the Empirical Area Reduction Method.
K	WY2022 Storage Allocation After Loss (acre-feet)	WY2022 Storage Allocation After Loss for each account is calculated as WY2022 Allocation Before Loss (Column H) - Estimated Reservoir Losses (Column I) - Estimated Sedimentation Loss (Column J). This column represents the amount of storage water each contractor has available for the 2022 Season. NOTE: The 2022 Storage Allocations shown in Column K are not reduced for 2022 storage allocation that has already been released for the contractor this season. See the latest weekly storage report for current remaining storage allocation balance.
L	WY2022 Storage Allocation After Loss (% of Contract)	WY2022 Storage Allocation After Loss (% of Contract) is calculated as WY2022 Storage Allocation After Loss (Column K) ÷ Contract Amount (Column B).

Attachment 1: Final Storage Allocation Table

June 18, 2022

Prineville Reservoir Storage Contracts			Final Water Year 2022 Storage Allocations								
A	B	C	D	E	F	G	H	I	J	K	L
Contractor	Contract Amount (acre-feet)	% of Contracted	October 1, 2021 Carryover Storage (acre-feet)	Carryover Storage Use prior to the Day of Allocation (acre-feet)	New Fill (acre-feet)	Reserved for Projected 10 cfs Releases from Storage 9/1-10/26 (acre-feet)	WY2022 Allocation Before Loss (acre-feet)	Estimated Reservoir Losses (acre-feet)	Estimated Sedimentation Loss (acre-feet)	WY2022 Storage Allocation After Loss (acre-feet)	WY2022 Storage Allocation After Loss (% of Contract)
Ochoco Irrigation District	57,899	67.24%	13,475	4,212	25,573	667	34,169	1,974	1,020	31,174	54%
Peoples Irrigation Co.	3,497	4.06%	814	0	1,545	40	2,318	134	62	2,123	61%
Ulupalakua Ranch, Inc.	2,176	2.53%	506	0	961	25	1,442	83	38	1,321	61%
Quail Valley Ranch, LLC	1,243	1.44%	289	0	549	14	824	48	22	754	61%
Quail Valley Ranch II, LLC	1,205	1.40%	280	0	532	14	799	46	21	731	61%
City of Prineville	724	0.84%	168	0	320	8	480	28	13	439	61%
William Sigman	350	0.41%	81	0	155	4	232	13	6	212	61%
Low Line Ditch Company	330	0.38%	77	0	146	4	219	13	6	200	61%
Jack & Kathryn Riley	286	0.33%	67	0	126	3	190	11	5	174	61%
Larry & Barbara Goss	135	0.16%	31	0	60	2	89	5	2	82	61%
Butler Ranch, Inc.	104	0.12%	24	0	46	1	69	4	2	63	61%
Billie Estridge	97	0.11%	23	0	43	1	64	4	2	59	61%
South Valley Bank & Trust	84	0.10%	20	0	37	1	56	3	1	51	61%
Clara Varcoe	50	0.06%	12	0	22	1	33	2	1	30	61%
Crooked River Water LLC	39	0.05%	9	0	17	0	26	1	1	24	61%
Crooked River Water LLC	19	0.02%	4	0	8	0	13	1	0	12	61%
Nick & Mary Maithonis	19	0.02%	4	0	8	0	13	1	0	12	61%
Robert Dellenback	16	0.02%	4	0	7	0	11	1	0	10	61%
McKay Creek Land (OID)	2,740	3.18%	2,740	2,740	1,210	32	1,179	68	48	1,062	39%
NUID Temp Contract	10,000	11.61%	0	0	4,417	115	4,302	249	176	3,877	39%
City of Prineville 5100	5,100	5.92%	5,100	5,100	2,253	59	2,194	127	90	1,977	39%
Contracted Storage Totals	86,113	100%	23,729	12,052	38,035	992	48,720	2,815	1,517	44,388	52%
Uncontracted Storage	62,520		6,361	6,361	0	0	0	0	0	0	0%
Total Active Capacity	148,633		30,090	18,413	38,035	992	48,720	2,815	1,517	44,388	30%

2022 Final Day of Allocation was June 18, 2022

See Attachment 1A for Storage Allocation Table Descriptions

Note: The 2022 Storage Allocations shown in Column K are not reduced for 2022 storage allocation that has already been released for the contractor this season. See the latest weekly storage report for current remaining storage allocation balance.