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Flood Potential Outlook
National Weather Service, ABRFC, Tulsa, Oklahoma
1100 AM CDT, Wednesday, March 13, 2024

COLORADO
-- ARKANSAS RIVER BASIN--

The Rocky Mountains

The potential for flood conditions is NEAR normal this spring across the Arkansas River Basin in Colorado. Flooding at most forecast points in the Colorado Rocky Mountains is driven by rapid snowpack runoff or isolated, high-intensity rainfall.

As measured at high altitude SNOTEL monitoring stations, the mountains of the Arkansas River basin have received approximately 92 percent-of-median precipitation and have accumulated 88 percent-of-median snowpack this water year. A more detailed table is included below. At the end of February, mountain reservoirs in the Arkansas River Basin (Turquoise, Twin Lakes, Pueblo) were at 65 percent of capacity, 112 percent of median storage, and 118 percent of last year's storage.

S N O W - P R E C I P I T A T I O N U P D A T E

Based on Mountain Data from NRCS SNOTEL Sites
As of Wednesday: March 13, 2024

BASIN Data Site Name	ELEV. (Ft)	SNOW WATER EQUIVALENT Current	Median	% Median	TOTAL PRECIPITATION Current	Median	% Median
ARKANSAS RIVER BASIN							
APISHAPA	10000	4.9	5.6	88	7.4	10.3	72
BRUMLEY	10600	10.0	8.8	114	12.0	11.2	107
FREMONT PASS	11300	13.4	13.6	99	14.6	13.4	109
GLEN COVE	11400	5.2	3.4	153	9.6	8.2	117
MEDANO PASS	9700	2.8	6.0	47	8.3	8.8	94
NORTH COSTILLA	10600	4.2	6.1	69	8.5	10.4	82
PORPHYRY CREEK	10800	15.7	13.4	117	17.5	12.2	143
SOUTH COLONY	10900	12.0	15.3	78	15.3	18.1	85
WHISKEY CK	10300	6.8	9.8	69	9.1	12.8	71
Basin wide percent-of-median				88			92

Units = inches for the Current and Average Snow Water Equivalent and Total Precipitation values

The latest Climate Prediction Center (CPC) outlook for spring (MAR-APR-MAY) indicates an increased chance for equal chances of above, near, or below normal temperatures across a majority of Colorado. The precipitation outlook for the same period indicates equal chances of above, near, or below normal precipitation in the Arkansas River Basin of Colorado.

Current soil moisture estimates from the CPC are near normal (30-70th percentile) in the Upper Arkansas River valley.

The U.S. Drought Monitor of March 7, 2024 indicates that there are Abnormally Dry (D0) conditions in parts of the mountain headwaters of the Upper Arkansas River.

The Ensemble Streamflow Prediction (ESP) model does not indicate a greater than 50 percent chance of flooding at any forecast point on the headwaters of the Arkansas River above Pueblo. The table below contains a summary of some potential maximum stages from the model output.

Colorado Ensemble Streamflow Prediction
As of Tuesday: March 12, 2023
Mar 12 - Jul 10 50% Exceedence
Weekly

Station	Flood Stage(ft)	50% exceedence Maximum Stage (ft)	50% exceedence Maximum Stage (ft)
Leadville	9.0	7.3	6.8
Salida	8.0	4.0	4.0
Wellsville	9.0	5.5	5.4
Parkdale	9.0	4.5	4.4
Canon City	10.0	7.6	7.5
Portland	9.0	4.5	4.4
Pueblo	8.0	6.9	5.5

The Southeastern Plains

The potential for flood conditions is NEAR normal this spring. Normal conditions for southeastern Colorado reflect a low probability of flooding.

Current Climate Prediction Center (CPC) soil moisture estimates for the area indicate near normal soil conditions (30-70th percentile) in the plains of southeastern Colorado.

The U.S. Drought Monitor of March 7, 2024 indicates that there are Moderate Drought (D1) and Abnormally Dry (D0) conditions along the Sangre de Cristo Mountains in southern Colorado.

The Arkansas River is currently flowing at near normal levels downstream from Pueblo Reservoir. Fountain Creek is flowing at near normal levels. The Purgatoire River is flowing at below normal levels.

Reservoir storage below Pueblo (Meredith, Trinidad, and John Martin) at the end of February was at 14 percent of capacity, 91 percent of median storage, and 166 percent of last year's storage.

The table below presents some southeastern Colorado forecast points where the ESP model indicated a greater than 10% chance of minor flooding over the next 90 days.

Colorado Ensemble Streamflow Prediction
As of Tuesday: March 12, 2024

Fcst Point Station ID	% Probability Minor Flooding	% Probability Moderate Flooding	% Probability Major Flooding
ADLC2	65	14	7
LXHC2	79	28	7
LAPC2	36	16	3
NPTC2	30	17	12
SCVC2	24	9	7

This, and additional Water Supply Information, can be found on our Web Page at:

www.weather.gov/abrfc/water_supply

SOUTHERN KANSAS

The potential for flood conditions in southern Kansas is NEAR normal this spring. Most flooding in this area is directly related to specific precipitation events.

Precipitation during the last 90 days has been normal to above normal across southern Kansas. However, this is the driest time of the year, and the anomaly is not large.

Current Climate Prediction Center (CPC) soil moisture estimates indicate above normal soil moisture in parts of southwestern Kansas near Dodge City and the Oklahoma border. Estimates are above the 90th percentile in this area.

Streamflows are near to below normal on the Arkansas River. Flows are near to above normal in southeastern Kansas, including the Neosho River.

Reservoir storage in southern Kansas is near normal. U.S. Corps of Engineers data indicate that Corps reservoirs in southern Kansas currently have near 100 percent of their flood-control storage available.

The Climate Prediction Center (CPC) outlook for spring (MAR-APR-MAY) indicates equal chances for above, near, or below normal temperatures

across Kansas. The CPC outlook also indicates increased chances of above normal precipitation across eastern Kansas during the same period.

The U.S. Drought Monitor of March 7, 2024 indicates Severe Drought (D2), Moderate Drought (D1), and Abnormally Dry (D0) conditions across parts of southern Kansas from long-term drought conditions. The worst drought areas are near Hutchinson and in Chautauqua County in southeastern Kansas.

The table below presents some southern Kansas forecast points where the ESP model indicated a greater than 10% chance of minor flooding over the next 90 days.

Select Points in Southern Kansas
Ensemble Streamflow Prediction
As of Tuesday, February 27, 2024

Fcst. Point Station ID	% Probability Minor Flooding	% Probability Moderate Flooding	% Probability Major Flooding
AGAK1	24	Not Expected	Not Expected
AGSK1	23	16	9
ALBK1	20	18	17
ALMK1	32	26	10
ARCK1	57	15	7
ARKK1	19	Not Expected	Not Expected
ATOK1	42	10	Not Expected
BETK1	14	9	4
BLPK1	16	11	7
CBNK1	64	Not Expected	Not Expected
CFVK1	28	12	Not Expected
CNUK1	71	35	9
COWK1	34	Not Expected	Not Expected
CTWK1	50	30	Not Expected
DRBK1	25	8	7
EDWK1	27	23	18
ENWK1	24	18	6
EREK1	71	51	26
FLRK1	37	9	Not Expected
FRNK1	44	18	1
HAVK1	22	16	9
HTCK1	30	24	Not Expected
HTDK1	24	8	Not Expected
HTCK1	40	29	Not Expected
IDPK1	51	Not Expected	Not Expected
IOLK1	62	Not Expected	Not Expected
KIOK1	15	11	9
LYNK1	16	Not Expected	Not Expected
MDKK1	27	10	Not Expected
MULK1	26	18	7
OSWK1	76	62	15
OXFK1	39	19	Not Expected
PECK1	17	6	Not Expected
PLYK1	50	15	Not Expected

PPFK1	78	68	Not Expected
PTTK1	11	Not Expected	Not Expected
RCNK1	28	18	8
SEDK1	20	14	9
TOWK1	34	23	12
WELK1	66	50	20
WFDK1	47	25	18
ZENK1	15	12	4
AMCK1	24	19	Not Expected
BRLK1	16	Not Expected	Not Expected
EMPK1	62	44	Not Expected
EPRK1	40	38	Not Expected
LRYK1	42	42	Not Expected
NEOK1	68	62	Not Expected

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* can be found on our Web Page at: *
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SOUTHWEST MISSOURI

The potential for flood conditions in southwestern Missouri is NEAR normal this spring. Most flooding in this area is related to specific heavy rainfall events.

Precipitation for the last 90 days across southwestern Missouri has been near normal. Soil moisture is below normal (20-30th percentile). Streamflow is normal to below normal.

The Climate Prediction Center (CPC) outlook for spring (MAR-APR-MAY) indicates equal chances of above, below, or near normal temperatures across southwestern Missouri. There are increased chances of above normal precipitation over the same period.

The U.S. Drought Monitor of March 7, 2024 indicates Abnormally Dry (D0) conditions across most of southwestern Missouri.

The table below presents some southwestern Missouri forecast points where the ESP model indicated a greater than 10 percent chance of minor flooding over the next 90 days.

Select Points in Southwest Missouri
Ensemble Streamflow Prediction
As of Tuesday: March 12, 2024

Fcst. Point ID	% Probability Minor Flooding	% Probability Moderate Flooding	% Probability Major Flooding
Station			

CHTM7	29	8	Not Expected
JOPM7	14	4	Not Expected
TIFM7	10	5	4
WCOM7	38	Not Expected	Not Expected
BXTK1	43	8	Not Expected

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Thanks to the USGS for streamflow condition data, the U.S. Army Corps of Engineers for reservoir condition data, the Natural Resource Conservation Service for SNOTEL data, and the Climate Prediction Center for the precipitation and temperature outlooks, the soil moisture deficits, and the Drought Outlook.

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