



Red River and Devils Lake Basin – 2017 Spring Flood Outlook

Discussion Points 3/8/2017

prepared by

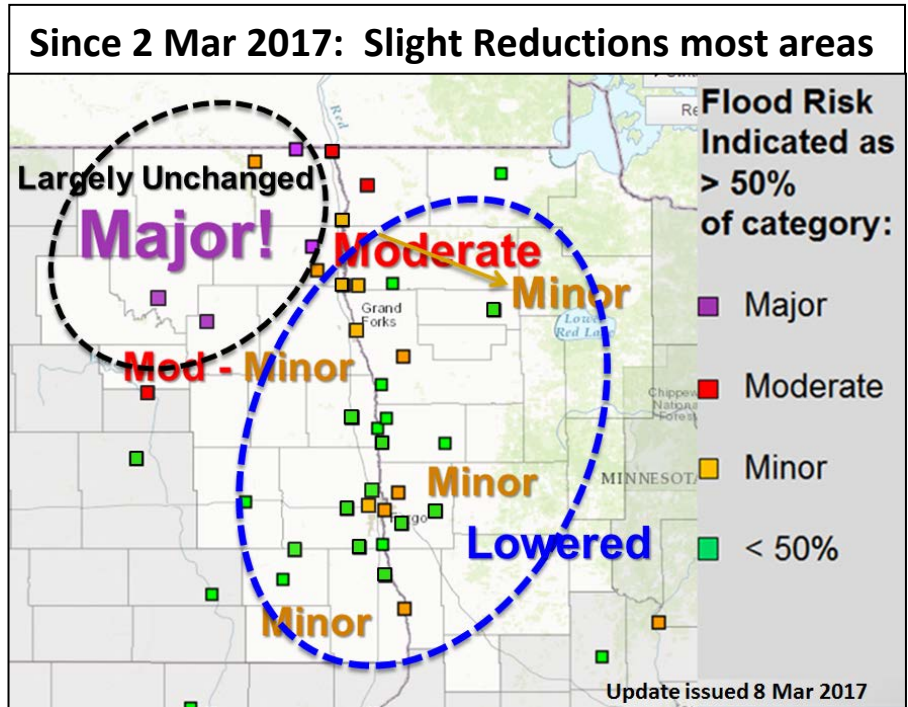


NWS - Weather Forecast Office, Grand Forks ND
 NWS - North Central River Forecast Center, Chanhassen MN

This outlook is for the U.S. portion of the basin based on conditions as of Wednesday, 3/8/17. All graphics and related discussion will be posted to weather.gov/fgf. The next update, if needed, is due on or around 3/24/17.

Bottom Line up Top!

- Additional thaw conditions removed most runoff from southern Valley.
- Planned releases from Red Lakes have been reduced, less flow on Red Lake River.
- The threat for significant, impactful snowmelt flooding remains very high for the Devils Lake Basin, where near record runoff is projected.
- The threat remains moderate to high, above the historical risk for most river points across northeast ND into far northwest MN, especially along the Park and Pembina Rivers.



- Most areas still subject to early spring snow and rain. South and central basin locations are near long term normal flood risk... those areas are still prone to minor or low-end moderate spring flooding.

What's Changed?

Southern and Central Valley, Grand Forks and points south. [Overall Risk Reduced] Most runoff has now moved into the mainstem Red and some is beginning to push across the border at Pembina. Red Lake River flows have been markedly reduced based on updates to the Red Lake management plan.

Northern Valley, north of Grand Forks ND. [Mixed Adjustments] Reduced flows in northwest MN tribs and along the mainstem Red should reduce overall flows along the Red from Oslo into Pembina. A high runoff potential still exists along the Park and Pembina Rivers, with no significant changes made to their overall flow.

[No update to Devils Lake outlook, check next page for updates to Red River and tributary points]

DEVILS AND STUMP LAKES LONG-RANGE PROBABILISTIC OUTLOOK

VALID FEBRUARY 26, 2017 - SEPTEMBER 30, 2017 [no update since 3/2/17]

LOCATION	95%	90%	75%	50%	25%	10%	05%
CREEL BAY	1452.8	1452.8	1453.2	1453.6	1454.0	1454.6	1455.2
EAST STUMP LAKE	1452.8	1452.8	1453.2	1453.6	1454.0	1454.6	1455.2

THE CURRENT HEIGHT OF DEVILS LAKE AT CREEL BAY IS NEAR 1450.3 FEET
 THE CURRENT HEIGHT OF STUMP LAKE NEAR LAKOTA IS NEAR 1450.0 FEET

Color code: Below Minor Moderate Major Flood of Record

CHANCE OF EXCEEDING STAGES AT MAINSTEM RED RIVER LOCATIONS [Updated]

VALID 3/05/2017 - 6/03/2017

LOCATION	95%	90%	75%	50%	25%	10%	05%
WAHPETON	7.3	7.7	9.4	11.3	12.7	14.2	14.6
HICKSON	13.7	14.2	19.1	22.2	27.1	31.2	32.9
FARGO	16.2	16.3	18.5	21.3	26.1	31.3	33.0
HALSTAD	11.4	11.7	15.2	19.7	26.1	30.5	35.3
GRAND FORKS	20.4	21.2	23.9	30.6	38.0	42.9	45.2
OSLO	19.1	19.6	23.2	29.2	34.3	35.8	36.8
DRAYTON	27.9	28.9	31.3	37.1	40.1	40.9	42.5
PEMBINA	41.7	43.4	45.4	47.4	49.9	51.1	52.9

Minnesota Tributaries:

South Fork Buffalo River.....							
SABIN	7.9	8.6	10.7	12.8	13.9	14.8	15.3
Buffalo River.....							
HAWLEY	4.8	4.8	5.4	6.2	7.5	8.7	9.5
DILWORTH	7.4	7.4	10.9	13.9	18.2	19.7	21.2
Wild Rice River.....							
TWIN VALLEY	3.9	4.0	5.1	6.3	8.4	10.1	10.8
HENDRUM	9.5	9.8	14.2	18.6	24.9	28.2	29.9
Marsh River.....							
SHELLY	4.9	5.0	6.1	8.9	11.8	15.0	17.9
Sand Hill River.....							
CLIMAX	6.8	7.0	7.8	9.6	13.9	19.9	23.2
Red Lake River.....							
HIGH LANDING	6.5	6.8	7.5	8.7	9.9	11.1	12.5
CROOKSTON	12.6	13.2	14.2	17.2	20.1	22.7	24.3
Snake River.....							
ABOVE WARREN	63.6	63.8	64.2	64.8	65.9	67.4	69.1
ALVARADO	103.5	103.8	104.5	106.0	107.7	109.5	110.0
Two Rivers River.....							
HALLOCK	807.2	807.7	808.1	809.1	810.0	810.7	811.4
Roseau River.....							
ROSEAU	12.2	12.5	13.1	14.4	15.9	16.9	17.2

North Dakota Tributaries:

Wild Rice River.....							
ABERCROMBIE	2.0	2.2	4.2	7.9	13.9	16.9	17.7
Sheneye River.....							
VALLEY CITY	10.6	11.3	11.7	12.6	16.9	19.9	21.7
LISBON	10.2	10.9	11.4	12.4	16.5	19.9	21.9
KINDRED	12.4	13.0	14.2	15.8	20.2	21.1	21.1
WEST FARGO DVRSN	16.0	16.2	16.5	18.3	22.5	23.1	23.1
HARWOOD	876.4	876.9	878.2	880.3	885.4	890.8	891.2
Maple River.....							
ENDERLIN	2.9	3.6	5.8	7.0	8.8	10.2	12.5
MAPLETON	896.4	896.4	898.9	902.5	906.5	907.8	908.8
Goose River.....							
HILLSBORO	2.4	2.4	3.0	4.2	5.8	8.6	11.8
Forest River.....							
MINTO	5.7	5.8	6.2	6.7	7.1	7.8	8.3
Park River.....							
GRAFTON	14.3	14.6	16.2	17.1	18.1	19.2	19.7
Pembina River.....							
WALHALLA	12.4	12.7	13.7	14.3	15.0	16.0	16.5
NECHE	21.1	21.2	21.4	21.4	21.5	21.6	21.6