Management recommends that the subcommittee recommend to the Board of Directors that the following resolution be approved:

WHEREAS, the Papio-Missouri River Natural Resources District ("NRD") endured a natural disaster in March 2019 in the form of flooding of the Missouri, Elkhorn and Platte Rivers and their surrounding areas;

WHEREAS, NRD Policy 15.4 allows for an Emergency Declaration which grants certain purchasing authority to NRD Management without having to follow certain purchasing NRD policies because of the emergency caused by the natural disaster;

WHEREAS, pursuant to NRD Policy 15.4, NRD Management obtained concurrence of seven (7) non-signing Directors and sent a written declaration to the Chairperson to declare an emergency within the NRD as a result of the March 2019 flooding of the Missouri, Elkhorn and Platte Rivers;

WHEREAS, Chairperson Jim Thompson executed the Emergency Declaration for the NRD on March 21, 2019;

WHEREAS, on April 11, 2019, the NRD Board of Directors declared the March 2019 flooding event a natural disaster of emergency nature, approved the Emergency Declaration signed March 21, 2019 and granted NRD Management the purchasing authority set forth in NRD Policy 15.4; and

WHEREAS, the emergency nature of the March 2019 flooding of the Missouri, Elkhorn and Platte Rivers and their surrounding areas has ended.

BE IT RESOLVED, that the Board of Directors determines that the Emergency Declaration is no longer necessary and is, therefore, revoked along with the purchasing authority granted to NRD Management under the Emergency Declaration and NRD Policy 15.4.

Report on Flood Emergency Purchases

Through May 2019

| Date | Project Name | ltem / Task | Company | Cost |
|----------------|--|--|-------------------------|--|
| March 21, 2019 | Union Dike emergency repairs | Cooperation agreement for initial repairs | US Corps of Engineers | \$1,200,000 |
| March 21, 2019 | Union Dike emergency repairs | 47B sand and gravel (cost to be applied to NRD share of Corps agreement) | Western Sand and Gravel | \$375,000 (quoted) \$315,900 (actual) |
| March 29, 2019 | R-613 levee breach repairs | Change order to existing contract | Graham Construction | \$408,862 |
| March 29, 2019 | Flood recovery project partnership - private homeowner well water testing | Immediate payment of NRD share (400 samples at \$17.50 each) | Midwest Laboratories | \$7,000 |
| | | | | |
| April 12, 2019 | R-613 levee breach repairs | Immediate payment on contract listed above | Graham Construction | \$367,975.80 |
| May 10, 2019 | Flood recovery project partnership - private homeowner well water testing | Immediate payment of NRD share (364 samples at \$17.50 each) | Midwest Laboratories | \$6,370 |
| | | | | |



Papio NRD 2019 Flood Timeline

The following is an outline of flooding events that occurred from March 7 - April 19.

March 7 - March 9

• Heavy snow and some rainfall in Loup and Elkhorn Basins.

Friday, March 8

• Papio NRD places Dykon Explosive Demolition Corp. on standby.

Tuesday, March 12

- According to the National Weather Service, heavy rains, frozen ground and snowmelt will lead to rapidly rising rivers and streams tonight and tomorrow.
- More than two inches of rainfall overnight in Loup, Elkhorn, and Lower Platte Basins creates high stages in all rivers.
- The Papio NRD issues Dykon notice to mobilize.

Wednesday, March 13

- At 9:00 am, Dykon representative arrives in Omaha.
- At 3:40 pm, a Platte River ice jam forms (2 miles long) at the confluence of Platte and Elkhorn Rivers as a result of Elkhorn ice flushing (2:00 – 3:00 pm) from Highway 36 to mouth of the Elkhorn, colliding into Platte River intact ice.
- Minor overtopping of Western Sarpy Levee occurs.
- Dykon and Hexagon Helicopter, Inc. conduct a dry run on ice jam explosives drop. The dry run consists of flying over the ice jam on the Platte River and dropping small sand bags to determine accuracy of location and methodology of a potential explosives drop.
- Staging area at John Schramm shed. Set-up scheduled for Thursday at 8:00 am initiation of Platte River ice jam break-up with explosives.
- Papillion Creeks experience high stages, reaching near bank full in places.
- No flooding along Papillion Creeks in Omaha metro area.
- Some minor flooding is reported along the Big Papillion Creek in Washington County near Kennard.

Thursday, March 14

- At 9:00 am, Marlin Petermann of the Papio NRD, flies the Platte River ice jam area with Hexagon Helicopter, Inc.
- High Platte River stages and ice flow moves the ice jam out early that morning.
- Platte River levels very high as flood waters and ice move downstream to Missouri River.
- Dykon explosive services no longer needed. Ice jam event is over.
- Significant flood water and ice overtop the Western Sarpy Levee along the Platte River.
- Papio NRD meets with the City of Omaha at Papillion Creek. Wastewater Treatment Plant to evaluate high water along R613 Levee – less than 2 feet of freeboard left.

- Papio NRD makes plans to place sand bags at the low spot (200 feet) at the Wastewater Treatment Plant in the morning.
- The City of Omaha places sand bags overnight on the R613 Levee (50 feet).
- At 11:30 pm, Papio NRD observes Platte River overtopping Union Dike near Fremont.

Friday, March 15

- Missouri and Platte River stages rise rapidly overnight.
- R613 Levee System (protects area south of the Papillion Creek) is overtopped by Platte/Missouri flood water.
- R613 portion of the R616/R613 Levee System (R616 protects area north of the Papillion Creek) is overtopped by Platte/Missouri River flood water.
- Papillion Wastewater Treatment Plant abandoned due to levee overtopping.
- Flood waters flow over land toward Offutt Air Force Base and Bellevue.
- Union Dike breaches (300 feet wide) early this morning just north of the Dodge/Douglas county line on Western Sand and Gravel property.
- Flood waters flow downstream along the Union Pacific Railroad toward Valley.
- Western Sarpy County Levee experiences severe overtopping, but there are no breaches.
- Papio NRD crews begin placing super sand bags in R616 Levee closure structure over the Burlington Northern Santa Fe Railroad (BNSF) at Highway 370 in Bellevue.
- R616 Levee experiences very minor overtopping in a few low spots for a short period of time.

Saturday, March 16

- According to the National Weather Service, the Elkhorn River at the Waterloo gauge represents the following flood categories:
 - <u>Major Flood Stage</u> 21 feet
 - Moderate Flood Stage 18 feet

- <u>Flood Stage</u> 14 feet
- Action Stage 12 feet
- Around noon, the Elkhorn River at Waterloo peaks at 24.63 feet
- A Record Flood Stage of 19.12 feet occurred on 3/29/1962.
- Elkhorn Crossing Recreation Area begins to flood at 12.5 feet, ending up with 12 feet of flood water at peak stage.
- Papio NRD crews complete sand bag closure over BNSF at R616 Levee at Highway 370 in Bellevue.
- Offutt Air Force Base reports flood water entering buildings.
- Bellevue reports flood water reaching low-lying residential areas.
- Papio NRD's General Manager John Winkler and Marlin Petermann fly with Hexagon Helicopter, Inc. over Union Dike, Western Sarpy Levee, and R616/R613 Levee Systems.
- Small breach (100 feet) of R613 Levee System, south of the Papillion Creek, occurs at La Platte Road overcrossing.

Sunday, March 17

- Two breaches occur at Clear Creek Levee along the Platte River in Saunders County:
 - National Guard Camp Ashland
 - Big Sandy area upstream of County Rd F
- Two large breaches of L611 Levee in Iowa occur along the Missouri River at the Platte River confluence.

Thursday, March 21

- As rivers receded, the Papio NRD considers breaching the R613 Levees to release flood waters trapped behind the levees at Offutt Air Force Base and Bellevue.
- Papio NRD staff recommends to John Winkler that R613 Levee System not be breached to drain flood water from the ponded area behind the levees. The risk is too great in the event of further high water.

March 22 – March 29

- Union Dike breach repairs start and are completed by U.S. Army Corp of Engineers.
- Papio NRD maintenance crews begin cleanup of the levee systems.

April 1 - April 5

• R613 La Platte Road breach repairs start and are completed by Papio NRD contractor Graham Construction.

Monday, April 15

• Papio NRD maintenance crews begin cleanup of Elkhorn and Platte River access sites (Elkhorn Crossing, West Maple Road, and Graske Crossing).

Friday, April 19

 Papio NRD staff meets to discuss rehabilitation efforts necessary for Elkhorn and Platte River access sites. Staff determines access sites will be closed indefinitely.