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| NWS Form E-5 (04-2006) (PRES. BY NWS Instruction 10-924) | U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE | HYDROLOGIC SERVICE AREA (HSA) |
| | | NORTHERN INDIANA (IWX) |
| MONTHLY REPORT OF HYDROLOGIC CONDITIONS | | REPORT FOR: MONTH YEAR |
| | | JANUARY 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | | SIGNATURE |
| | | Michael Rehbein, Service Hydrologist |
| | | DATE |
| | | February 11, 2008 |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Major to record flooding across the area...

January started out with heavy snows across southwestern Lower Michigan and northern Indiana. The New Year's holiday saw as much as 2 feet of snow fall adjacent to areas of Lake Michigan. The following week, record high temperatures were recorded over the area and then showers and thunderstorms accompanied a cold front that moved across the HSA. All of these factors combined to create major to record flooding across the Northern Indiana HSA. The northwestern half of the HSA saw the highest river levels. Three river sites saw record high crests. The Tippecanoe River at Ora crested at 15.63 feet. The old record was 15.22 feet. Bean Creek near Powers observed a record crest of 18.87 feet, topping the record of 18.65 feet. The Pigeon River near Scott crested at 7.32 feet which was above the old record of 6.55 feet. By the end of the month, nearly all of the rivers had fallen below flood stage. The one exception was the Kankakee River near Davis. This river, which is typically slow to fall, remained above flood stage for the rest of the month.

The major river flow along the Tippecanoe River produced a record discharge at the Norway Dam. At its peak, the discharge through the dam was 25,087 CFS. This record high discharge resulted in flooding downstream in the town of Monticello. More than 300 homes were damaged by the flooding from the Tippecanoe River.

Despite all the snow, temperatures averaged above normal at Fort Wayne and South Bend. Fort Wayne averaged 34.5 degrees for a high temperature which was 3.5 degrees above the normal of 31.0 degrees. The average low temperature was 18.1 degrees. This was 2 degrees above the normal value of 16.1 degrees. For South Bend, the average high for the month was 32.8 degrees. This topped the normal value of 31 degrees by 1.8 degrees. The average low for the month was 16.6 degrees which was 0.9 degrees above normal.

The bulk of the precipitation for the month occurred across the western and central portions of the HSA. South Bend reported a record amount of rainfall for the month. They received 5.34 inches of liquid for the month. This value more than doubled the average amount of liquid of 2.27 inches. More than 2 feet of snow was recorded at South Bend for the month. The 25.3 inches of snow topped the normal amount for the month of 23.2 inches.

In Fort Wayne, precipitation was almost exactly “normal.” The airport reported 2.24 inches of liquid. The average total for the month is 2.05 inches. As far as snow is concerned, Ft. Wayne reported 7.2 inches for the month. This was 2.7 inches below the normal value of 9.9 inches.

...Flood Conditions...

As was mentioned above, there was significant flooding across the entire HSA. A few of the rivers were quick to fall, remaining above flood stage for a few days. However, the majority of the rivers exceeded flood stage for up to 2 weeks, and the Kankakee River at Davis remained above flood stage for more than 3 weeks. However, all rivers, with the exception of Davis, returned to their banks before the end of the month.

...Drought Conditions...

No drought conditions were observed this month.

FLOOD STAGE REPORT

REPORT FOR:
 MONTH YEAR
 JANUARY 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|--------------------------------------|-----------------------|------------------------------|-----------|-----------------|---------|
| | | FROM | TO | STAGE (Feet) | DATE |
| KANKAKEE RIVER @ DAVIS | 10.0 | 1/6/08 | CONTINUED | 13.61 | 1/8/08 |
| ST. JOSEPH (MI) RIVER @ THREE RIVERS | 7.0 | 1/8/08 | 1/20/08 | 9.44 | 1/12/08 |
| ST. JOSEPH (MI) RIVER @ MOTTVILLE | 8.0 | 1/10/08 | 1/16/08 | 8.59 | 1/12/08 |
| ST. JOSEPH (MI) RIVER @ NILES | 11.0 | 1/8/08 | 1/18/08 | 14.19 | 1/9/08 |
| ST. JOSEPH (MI) RIVER @ SOUTH BEND | 5.5 | 1/8/08 | 1/19/08 | 9.6 | 1/9/08 |
| ST. JOSEPH (MI) RIVER @ ELKHART | 24.0 | 1/8/08 | 1/17/08 | 25.77 | 1/10/08 |
| ELKHART RIVER @ GOSHEN | 7.0 | 1/8/08 | 1/12/08 | 10.07 | 1/9/08 |
| TIPPECANOE RIVER @ ORA | 12.0 | 1/8/08 | 1/20/08 | 15.63 | 1/10/08 |
| TIPPECANOE RIVER @ WINAMAC | 10.0 | 1/8/08 | 1/19/08 | 15.11 | 1/11/08 |
| TIPPECANOE RIVER @ OSWEGO | 7.5 | 1/8/08 | 1/29/08 | 8.51 | 1/13/08 |
| TIPPECANOE RIVER @ NORTH WEBSTER | 6.0 | 1/11/08 | 1/16/08 | 6.15 | 1/13/08 |
| EEL RIVER @ NORTH MANCHESTER | 9.0 | 1/8/08 | 1/12/08 | 13.88 | 1/8/08 |
| EEL RIVER @ ADAMSBORO | 9.0 | 1/8/08 | 1/11/08 | 11.26 | 1/10/08 |
| MAUMEE RIVER @ FORT WAYNE | 17.0 | 1/8/08 | 1/12/08 | 18.93 | 1/10/08 |
| MAUMEE RIVER @ DEFIANCE | 10.0 | 1/9/08 | 1/12/08 | 11.46 | 1/10/08 |
| ST. JOSEPH (OH) RIVER @ FORT WAYNE | 12.0 | 1/8/08 | 1/14/08 | 16.38 | 1/9/08 |
| ST. JOSEPH (OH) RIVER @ NEWVILLE | 12.0 | 1/8/08 | 1/16/08 | 15.67 | 1/11/08 |
| ST. JOSEPH (OH) RIVER @ MONTPELIER | 12.0 | 1/8/08 | 1/13/08 | 14.50 | 1/10/08 |
| TIFFIN RIVER @ STRYKER | 11.0 | 1/8/08 | 1/16/08 | 15.34 | 1/10/08 |
| YELLOW RIVER @ PLYMOUTH | 13.0 | 1/8/08 | 1/13/08 | 15.12 | 1/10/08 |
| YELLOW RIVER @ KNOX | 10.0 | 1/9/08 | 1/14/08 | 12.14 | 1/12/08 |
| BLANCHARD RIVER @ OTTAWA | 23.0 | 1/10/08 | 1/11/08 | 23.51 | 1/10/08 |
| AUGLAIZE RIVER @ FORT JENNINGS | 13.0 | 1/9/08 | 1/11/08 | 14.22 | 1/10/08 |
| WABASH RIVER @ LINN GROVE | 11.0 | 1/10/08 | 1/11/08 | 11.23 | 1/11/08 |
| WABASH RIVER @ BLUFFTON | 10.0 | 1/12/08 | 1/12/08 | 10.1 | 1/12/08 |
| SPY RUN CREEK @ FORT WAYNE | 11.0 | 1/8/08 | 1/8/08 | 11.54 | 1/8/08 |
| BEAN CREEK @ POWERS | 15.0 | 1/8/08 | 1/11/08 | 18.87 | 1/9/08 |
| CEDAR CREEK @ 18TH STREET IN AUBURN | 9.0 | 1/8/08 | 1/9/08 | 10.18 | 1/8/08 |
| DOWAGIAC RIVER @ SUMNERVILLE | 8.0 | 1/8/08 | 1/11/08 | 9.34 | 1/9/08 |
| FISH CREEK @ HAMILTON | 9.0 | 1/8/08 | 1/9/08 | 9.32 | 1/9/08 |
| PIGEON RIVER @ SCOTT | 6.0 | 1/8/08 | 1/20/08 | 7.32 | 1/10/08 |

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| NWS Form E-5 (04-2006) (PRES. BY NWS Instruction 10-924) | U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE | HYDROLOGIC SERVICE AREA (HSA) |
| | | NORTHERN INDIANA (IWX) |
| MONTHLY REPORT OF HYDROLOGIC CONDITIONS | | REPORT FOR: MONTH YEAR |
| | | FEBRUARY 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | | SIGNATURE |
| | | Michael Rehbein, Service Hydrologist |
| | | DATE |
| | | March 10, 2008 |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Very wet conditions continued across the IWX HSA during February...

The month of February was very similar to January in that the very moist weather pattern continued. The combination of heavy snows followed by warming temperatures followed by heavy rains once again led to major to record flooding. Bean Creek at Powers, OH broke the record for flooding that was established only a month earlier. Several other sites experienced near record flooding. Extremely high discharge rates were once again observed at Norway Dam as the Tippecanoe River basin once again experienced extremely high flow rates.

February was slightly cooler than normal at both Fort Wayne and South Bend. For the month, the average high temperature at South Bend was 31.0 degrees. This was 4.5 degrees below the normal value of 35.5 degrees. Meanwhile, the average low temperature readings were 16.8 degrees. This was 2.2 degrees below the normal values of 19.0 degrees. At Fort Wayne, the average high temperature was 32.3 degrees. This was 3.1 degrees below the normal of 35.4 degrees. The average low temperatures were 17.2 degrees which was 2.0 degrees cooler than the normal of 19.2 degrees.

Snowfall for the month of February totaled nearly a foot above normal. Fort Wayne observed a record total of 19 inches, which was 11.4 inches above normal. For the season, 37.6 inches of snow has been observed at Fort Wayne. The rainfall total at Fort Wayne for the month was 4.73 inches. This was 1.94 inches above the normal value of 2.79 inches of liquid.

At South Bend, 26.7 inches of snow was recorded. This was 11.2 inches above the normal value of 15.5 inches. Rainfall total at South Bend was 3.39 inches which was almost 2 inches above the normal value of 1.41 inches.

...Flood Conditions...

Once again, there were numerous rivers and streams that went into flood during the month. One river, the Kankakee River at Davis was above flood stage for the entire month. In fact, it has been above flood stage continuously since the 6th of January. A total of 37 sites reported flooding conditions through at least part of the month. Spy Run Creek at Fort Wayne Children's Zoo was above flood stage twice during the month. Most sites were above flood stage for a week or less, but several sites experienced

extended times above flood stage. The longest running site was the Kankakee River at Davis. The St. Joseph River at South Bend and Three Rivers were above flood stage for about two and a half weeks.

...Drought conditions...

Due to the excessive rainfall and snowfall, the entire HSA remains moist to very moist. Therefore, there are no areas experiencing drought conditions.

FLOOD STAGE REPORT

REPORT FOR:
 MONTH YEAR

FEBRUARY 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|---|-----------------------|------------------------------|-----------|-----------------|-----------|
| | | FROM | TO | STAGE (Feet) | DATE |
| KANKANEE RIVER @ DAVIS | 10.0 | 1/6/2008 | CONTINUED | 13.61 | 1/8/2008 |
| ST. JOSEPH (MI) RIVER @ NILES | 11.0 | 2/6/2008 | 2/11/2008 | 13.4 | 2/7/2008 |
| ST. JOSEPH (MI) RIVER @ SOUTH BEND | 5.5 | 2/6/2008 | 2/24/2008 | 8.9 | 2/7/2008 |
| ST. JOSEPH (MI) RIVER @ ELKHART | 24.0 | 2/6/2008 | 2/10/2008 | 25.33 | 2/6/2008 |
| ST. JOSEPH (MI) RIVER @ THREE RIVERS | 7.0 | 2/7/2008 | 2/24/2008 | 8.12 | 2/9/2008 |
| YELLOW RIVER @ PLYMOUTH | 13.0 | 2/6/2008 | 2/9/2008 | 14.96 | 2/7/2008 |
| YELLOW RIVER @ KNOX | 10.0 | 2/6/2008 | 2/11/2008 | 12.16 | 2/9/2008 |
| ELKHART RIVER @ GOSHEN | 7.0 | 2/5/2008 | 2/10/2008 | 10.4 | 2/6/2008 |
| TIPPECANOE RIVER @ WINAMAC | 10.0 | 2/6/2008 | 2/22/2008 | 15.03 | 2/9/2008 |
| TIPPECANOE RIVER @ ORA | 12.0 | 2/5/2008 | 2/22/2008 | 15.6 | 2/8/2008 |
| TIPPECANOE RIVER @ OSWEGO | 7.5 | 2/6/2008 | CONTINUED | 8.54 | 2/10/2008 |
| TIPPECANOE RIVER @ NORTH WEBSTER | 6.0 | 2/9/2008 | 2/14/2008 | 6.18 | 2/10/2008 |
| EEL RIVER @ NORTH MANCHESTER | 9.0 | 2/5/2008 | 2/7/2008 | 14.09 | 2/6/2008 |
| EEL RIVER @ ADAMSBORO | 9.0 | 2/5/2008 | 2/9/2008 | 11.31 | 2/7/2008 |
| WABASH RIVER @ WABASH | 14.0 | 2/6/2008 | 2/7/2008 | 16.3 | 2/6/2008 |
| WABASH RIVER @ BLUFFTON | 10.0 | 2/5/2008 | 2/11/2008 | 15.9 | 2/7/2008 |
| WABASH RIVER @ LINN GROVE | 11.0 | 2/6/2008 | 2/11/2008 | 13.54 | 2/7/2008 |
| MISSISSINEWA RIVER @ MARION | 12.0 | 2/6/2008 | 2/8/2008 | 13.78 | 2/7/2008 |
| SALAMONIE RIVER @ WARREN | 12.0 | 2/5/2008 | 2/9/2008 | 14.86 | 2/6/2008 |
| ST. MARY'S RIVER @ DECATUR | 17.0 | 2/5/2008 | 2/12/2008 | 23.62 | 2/8/2008 |
| ST. MARY'S RIVER @ MULDOON BRIDGE | 14.0 | 2/6/2008 | 2/11/2008 | 17.67 | 2/9/2008 |
| LITTLE RIVER @ HUNTINGTON | 15.0 | 2/5/2008 | 2/8/2008 | 18.91 | 2/7/2008 |
| MAUMEE RIVER @ FT. WAYNE | 17.0 | 2/5/2008 | 2/12/2008 | 22.93 | 2/8/2008 |
| MAUMEE RIVER @ DEFIANCE | 10.0 | 2/5/2008 | 2/11/2008 | 17.97 | 2/8/2008 |
| MAUMEE RIVER @ NAPOLEON | 12.0 | 2/6/2008 | 2/10/2008 | 17.29 | 2/8/2008 |
| MAUMEE RIVER @ COLISEUM BLVD FT. WAYNE | 17.0 | 2/5/2008 | 2/12/2008 | 23.21 | 2/8/2008 |
| MAUMEE RIVER @ NEW HAVEN | 17.0 | 2/5/2008 | 2/12/2008 | 23.2 | 2/8/2008 |
| ST. JOSEPH (OH) RIVER @ FT. WAYNE | 12.0 | 2/5/2008 | 2/11/2008 | 17.37 | 2/7/2008 |
| ST. JOSEPH (OH) RIVER @ NEWVILLE | 12.0 | 2/5/2008 | 2/15/2008 | 15.7 | 2/8/2008 |
| ST. JOSEPH (OH) RIVER @ MONTPELIER | 12.0 | 2/6/2008 | 2/10/2008 | 14.41 | 2/7/2008 |
| TIFFIN RIVER @ STRYKER | 11.0 | 2/5/2008 | 2/14/2008 | 16.05 | 2/8/2008 |
| BLANCHARD RIVER @ OTTAWA | 23.0 | 2/6/2008 | 2/9/2008 | 29.29 | 2/7/2008 |
| AUGLAIZE RIVER @ FT. JENNINGS | 13.0 | 2/6/2008 | 2/9/2008 | 19.44 | 2/7/2008 |
| BEAN CREEK @ POWERS | 15.0 | 2/5/2008 | 2/8/2008 | 18.98 | 2/6/2008 |
| CEDAR CREEK @ 18 TH STREET IN AUBURN | 9.0 | 2/5/2008 | 2/7/2008 | 11.29 | 2/6/2008 |
| FISH CREEK @ HAMILTON | 9.0 | 2/6/2008 | 2/7/2008 | 10.23 | 2/6/2008 |

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|---------------------------|------|----------|-----------|-------|----------|
| PIGEON RIVER @ SCOTT | 6.0 | 2/6/2008 | 2/23/2008 | 7.01 | 2/7/2008 |
| SPY RUN CREEK @ FT. WAYNE | 11.0 | 2/4/2008 | 2/5/2008 | 11.63 | 2/5/2008 |
| SPY RUN CREEK @ FT. WAYNE | 11.0 | 2/5/2008 | 2/6/2008 | 11.88 | 2/6/2008 |

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| NWS Form E-5 (04-2006) (PRES. BY NWS Instruction 10-924) | U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE | HYDROLOGIC SERVICE AREA (HSA) Northern Indiana (IWX) |
| | | MONTHLY REPORT OF HYDROLOGIC CONDITIONS REPORT FOR: MONTH YEAR MARCH 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | SIGNATURE | |
| | Michael Rehbein, Service Hydrologist DATE April 4, 2008 | |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Cool and wet conditions prevail over the northern Indiana HSA...

Temperatures were cooler than normal and rainfall amounts were generally higher than normal for the month of March. After extremely wet conditions the previous two months, La Nina conditions maintained a moist flow into the Midwest region throughout March. The result was an active storm regime that brought one storm after another through the area. However, with the La Nina beginning to wind down, precipitation amounts decreased from the previous two months. As a result, the number of rivers that exceeded flood stage was dramatically lower than January and February.

For the month, Fort Wayne recorded an average high temperature of 43.5 degrees. This value was 3.9 degrees below the climatological normal value of 47.4 degrees. The average low temperature was 27.7 degrees which was 1.1 degrees below the normal of 28.8 degrees. Precipitation remained above normal for the month. There was 3.82 inches of liquid water equivalent precipitation for the month. This was 0.96 inches above the normal value of 2.86 inches. The greatest 24 hour precipitation amount was 1.01 inches which was reported on the 27th through the 28th. The snowfall total for the month was 6.3 inches which was 1.6 inches above the normal value of 4.7 inches.

South Bend also reported temperatures below normal for the month. The average high temperature was 42.7 degrees. This was 4.1 degrees below the normal value of 46.8 degrees. The average low temperature was 25.8 degrees which was 2.4 degrees below the average value of 28.2 degrees. South Bend actually reported a slightly below normal precipitation value for the month. For the month, 2.50 inches of precipitation was observed at the airport. This was 0.39 inches below the normal value of 2.89 inches. The greatest 24 hour total was 0.80 inches on the 27th. Snowfall for the month was significantly below normal. Only 2.9 inches of snow was reported which was a 5.8 inch deficit from the normal value of 8.7 inches.

...Flooding conditions...

March saw a significantly lower number of rivers that exceeded flood stage. All of the river flooding that was experienced this month was "minor" flooding. Several rivers were above flood stage twice during the month. These rivers included the Tiffin River at Stryker, the Wabash River at Bluffton and Linn Grove, the Auglaize River at Fort Jennings, and the St. Mary's River at Decatur. The Kankakee

River at Davis remained above flood stage for the entire month. This river has been above flood stage since January 6, 2008 which, as of the end of March, increases the number of days Davis has been above flood to 85. The Kankakee River at Davis remained above flood into the month of April.

...Drought conditions...

As a result of the precipitation observed, there are no drought issues for the entire Northern Indiana HSA.

FLOOD STAGE REPORT

REPORT FOR:
 MONTH YEAR
 MARCH 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|--------------------------------------|-----------------------|------------------------------|-----------|-----------------|-----------|
| | | FROM | TO | STAGE (Feet) | DATE |
| KANKAKEE RIVER @ DAVIS | 10.0 | 1/6/2008 | CONTINUED | 12.71 | 3/3/2008 |
| ST. JOSPEH (MI) RIVER @ SOUTH BEND | 5.5 | 3/4/2008 | 3/4/2008 | 5.5 | 3/4/2008 |
| ST. JOSEPH (MI) RIVER @ THREE RIVERS | 7.0 | 3/31/2008 | CONTINUED | 7.17 | 3/31/2008 |
| TIFFIN RIVER @ STRYKER | 11.0 | 3/3/2008 | 3/8/2008 | 12.81 | 3/6/2008 |
| TIFFIN RIVER @ STRYKER | 11.0 | 3/13/2008 | 3/24/2008 | 12.52 | 3/21/2008 |
| TIFFIN RIVER @ STRYKER | 11.0 | 3/28/2008 | CONTINUED | 13.09 | 3/31/2008 |
| TIPPECANOE RIVER @ ORA | 12.0 | 3/4/2008 | 3/7/2008 | 12.82 | 3/5/2008 |
| TIPPECANOE RIVER @ WINAMAC | 10.0 | 3/5/2008 | 3/6/2008 | 10.38 | 3/5/2008 |
| TIPPECANOE RIVER @ OSWEGO | 7.5 | 2/6/2008 | 3/21/2008 | 8.01 | 3/15/2008 |
| WABASH RIVER @ BLUFFTON | 10.0 | 3/5/2008 | 3/8/2008 | 11.7 | 3/6/2008 |
| WABASH RIVER @ BLUFFTON | 10.0 | 3/20/2008 | 3/23/2008 | 11.52 | 3/21/2008 |
| WABASH RIVER @ LINN GROVE | 11.0 | 3/4/2008 | 3/7/2008 | 12.01 | 3/5/2008 |
| WABASH RIVER @ LINN GROVE | 11.0 | 3/20/2008 | 3/22/2008 | 12.18 | 3/20/2008 |
| AUGLAIZE RIVER @ FORT JENNINGS | 13.0 | 3/4/2008 | 3/5/2008 | 13.22 | 3/5/2008 |
| AUGLAIZE RIVER @ FORT JENNINGS | 13.0 | 3/20/2008 | 3/21/2008 | 14.03 | 3/20/2008 |
| ST. MARY'S RIVER @ DECATUR | 17.0 | 3/6/2008 | 3/7/2008 | 17.23 | 3/7/2008 |
| ST. MARY'S RIVER @ DECATUR | 17.0 | 3/19/2008 | 3/23/2008 | 18.46 | 3/20/2008 |
| BLANCHARD RIVER @ OTTAWA | 23.0 | 3/20/2008 | 3/21/2008 | 23.71 | 3/21/2008 |
| ST. JOSEPH (OH) RIVER @ NEWVILLE | 12.0 | 3/30/2008 | CONTINUED | 12.74 | 3/31/2008 |

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| | | NORTHERN INDIANA (IWX) |
| MONTHLY REPORT OF HYDROLOGIC CONDITIONS | | REPORT FOR: MONTH YEAR |
| | | APRIL 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | | SIGNATURE |
| | | Michael Rehbein, Service Hydrologist |
| | | DATE |
| | | May 29, 2008 |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Drier and warmer conditions across the Northern Indiana HSA...

April marked an end to the wetter and cooler than normal conditions that had prevailed across the Northern Indiana HSA. The Kankakee River at Davis, which had been above flood stage for more than 3 months, finally fell below flood stage on April 19th. The last time the Kankakee River at Davis had reported a stage below flood was January 6, 2008.

For the month of April, Fort Wayne reported an average high temperature reading of 62.5 degrees. This was 2.7 degrees above the normal value of 59.8 degrees. The average low temperature was 39.6 degrees. This value was 1.4 degrees above normal. For the first time this year, precipitation values were below normal. For the month, 1.98 inches of precipitation was reported. This was 1.56 inches below the normal value of 3.54 inches. There was only a trace of snowfall reported, which was 1.1 inches below the normal value of 1.1 inches.

At South Bend, warmer and drier conditions prevailed as well. For the month, the average high temperature was 62.0 degrees. This was 3.1 degrees above the normal value of 58.9 degrees. The average low temperature was 39.2, and this was 1.5 degrees above the normal of 37.7 degrees. The precipitation amount for the month was 2.51 inches. This was 1.11 inches below the normal of 3.62 inches. There was only a trace of snowfall at South Bend as well. This was 1.7 inches below the normal value of 1.7 inches.

...Flooding conditions...

As was mentioned above, the Kankakee River at Davis finally fell below flood stage. The Tiffin River at Stryker experienced 2 minor flooding events. The first was a continuation of March flooding that ended on April 8th. The second event was a three day period from the 13th to the 16th. The St. Joseph (Ohio) River exceeded flood stage at Newville and at Montpelier. The St. Joseph (Michigan) River at Three Rivers experienced two minor flooding events. The first was a continuation of March flooding that ended on the 5th, and the second event was a one day event that began on the 13th and ended on the 14th.

...Drought conditions...

As a result of the extremely wet weather during the first part of the year, there were no drought conditions across northern Indiana, southwestern Lower Michigan, or northwest Ohio.

FLOOD STAGE REPORT

REPORT FOR:
 MONTH YEAR
 APRIL 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|--------------------------------------|-----------------------|------------------------------|-----------|-----------------|-----------|
| | | FROM | TO | STAGE (Feet) | DATE |
| KANKAKEE RIVER @ DAVIS | 10.0 | 1/6/2008 | 4/19/2008 | 11.55 | 4/2/2008 |
| TIFFIN RIVER @ STRYKER | 11.0 | 3/28/2008 | 4/8/2008 | 13.36 | 4/3/2008 |
| TIFFIN RIVER @ STRYKER | 11.0 | 4/13/2008 | 4/16/2008 | 11.72 | 4/14/2008 |
| ST. JOSEPH (OH) RIVER @ NEWVILLE | 12.0 | 3/30/2008 | 4/6/2008 | 13.23 | 4/3/2008 |
| ST. JOSEPH (OH) RIVER @ MONTPELIER | 12.0 | 4/1/2008 | 4/3/2008 | 12.48 | 4/2/2008 |
| ST. JOSEPH (MI) RIVER @ THREE RIVERS | 7.0 | 3/31/2008 | 4/5/2008 | 7.39 | 4/3/2008 |
| ST. JOSEPH (MI) RIVER @ THREE RIVERS | 7.0 | 4/13/2008 | 4/14/2008 | 7.03 | 4/14/2008 |

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| | | NORTHERN INDIANA (IWX) |
| MONTHLY REPORT OF HYDROLOGIC CONDITIONS | | REPORT FOR: MONTH YEAR |
| | | MAY 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | | SIGNATURE |
| | | Michael Rehbein, Service Hydrologist |
| | | DATE |
| | | June 11, 2008 |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Relatively quiet hydrologic conditions for the month of May...

The month of May saw a relatively quiet hydrologic time across the Northern Indiana HSA. While there were above normal precipitation amounts across the eastern part of the area...the western parts of the area saw slightly below normal precipitation amounts. The above normal precipitation noted at Fort Wayne was due in large part to a more than two and a quarter inch rainfall event on the 30th and 31st.

Temperatures for the month averaged around 3 degrees below normal. At Fort Wayne, the average high temperature was 68.3 degrees. This was 3.3 degrees below the normal value of 71.6 degrees. The average low temperature was 46.7 degrees which was 2.4 degrees below normal. As far as rainfall is concerned, Fort Wayne reported a total of 4.95 inches which was 1.2 inches above normal. However, a large part of that total, 2.28 inches, fell during a 24 hour period over the 30th and 31st. This rainfall total helped to briefly send Spy Run Creek above flood stage.

At South Bend, temperatures also averaged more than 3 degrees below normal for the month. The average high temperature was 67.2 degrees which was 3.5 degrees below normal. The average low was 44.7 degrees. This was 3.7 degrees below the normal of 48.4 degrees. Rainfall was 2.64 inches for May. This was 0.86 inches below the normal value of 3.50 inches. The greatest 24 hour rainfall total was 0.98 inches on the 27th.

...Flooding conditions...

Due to the relatively dry period for the majority of the month, there was almost no flooding in the Northern Indiana HSA. The heavy rains did occur during the lat few days of the month, particularly over the eastern part of the area. The Eel River at North Manchester exceeded flood stage on the 31st and continued into June. Spy Run Creek at the Fort Wayne's Children's Zoo also went above flood stage during the early morning hours on the 31st. The creek fell below flood stage later that day.

...Drought conditions...

Due to the heavy rains from earlier in the year, soil conditions remain somewhat moist and no drought conditions are noted over northern Indiana, southwestern Lower Michigan, or northwest Ohio.

NWS Form E-3
 (04-2006)
 (PRES. BY NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

Hydrologic Service Area (HSA)
 NORTHERN INDIANA (IWX)

FLOOD STAGE REPORT

REPORT FOR:
 MONTH YEAR
 MAY 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|--|-----------------------|------------------------------|-----------|-----------------|-----------|
| | | FROM | TO | STAGE (Feet) | DATE |
| EEL RIVER @ NORTH MANCHESTER | 9.0 | 5/31/2008 | CONTINUED | 9.65 | 5/31/2008 |
| SPY RUN CREEK @ FT. WAYNE CHILDREN'S ZOO | 11.0 | 5/31/2008 | 5/31/2008 | 12.45 | 5/31/2008 |

| | | |
|--|---|--|
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| | | NORTHERN INDIANA (IWX) |
| MONTHLY REPORT OF HYDROLOGIC CONDITIONS | | REPORT FOR: MONTH YEAR |
| | | JUNE 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | | SIGNATURE |
| | | Michael Rehbein, Service Hydrologist |
| | | DATE |
| | | July 14, 2008 |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Very quiet in the Northern Indiana HSA...

June was a rather quiet month on the rivers across northern Indiana, southwestern Lower Michigan, and northwest Ohio. Once again, there were parts of the area that experienced well above normal rainfall and parts that were well below normal. The eastern part of the HSA saw above normal rainfall totals for the month while the western part was well below normal.

For the month of June, Fort Wayne saw afternoon high temperatures average very close to normal. The average high temperature was 81.0 degrees which was 0.4 degrees above normal. Low temperatures averaged 61.0 degrees which was 2.2 degrees above the normal of 58.8 degrees. More than five and a half inches (5.55) of rain was observed at the airport. This was 1.51 inches above the normal value of 4.04 inches.

In South Bend, temperature trends were similar to Fort Wayne. The average high temperature was 80.4 degrees which was 0.8 degrees above the normal value of 79.6 degrees. The average low temperature was 60.1 degrees which was 1.8 degrees above the normal value of 58.3 degrees. South Bend reported 2.84 inches of rain for the month. This was 1.35 inches below the normal value of 4.19 inches.

...Flooding conditions...

The only flooding for this month was a brief continuation of flooding from May on the Eel River at North Manchester. Flooding began on the Eel on May 31st and ended on June 1st. For the remainder of the month, although there was above normal rain over the eastern part of the area, there was only minimal effect on the rivers. There were no additional reports of flooding over the Northern Indiana HSA.

...Drought conditions...

According to the latest drought assessment (http://www.cpc.noaa.gov/products/expert_assessment/drought_assessment.shtml), there are no drought conditions in the Northern Indiana HSA.

NWS Form E-3
 (04-2006)
 (PRES. BY NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL WEATHER SERVICE

Hydrologic Service Area (HSA)
 NORTHERN INDIANA (IWX)

FLOOD STAGE REPORT

REPORT FOR:
 MONTH YEAR
 JUNE 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|------------------------------|-----------------------|------------------------------|----------|-----------------|-----------|
| | | FROM | TO | STAGE (Feet) | DATE |
| EEL RIVER @ NORTH MANCHESTER | 9.0 | 5/31/2008 | 6/1/2008 | 9.65 | 5/31/2008 |

| | | |
|--|---|--|
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| | | NORTHERN INDIANA (IWX) |
| MONTHLY REPORT OF HYDROLOGIC CONDITIONS | | REPORT FOR: MONTH YEAR |
| | | JULY 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | | SIGNATURE |
| | | Michael Rehbein, Service Hydrologist |
| | | DATE |
| | | August 11, 2008 |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Rainy conditions give way to dry conditions, temperatures near normal...

July started off rather wet across the Northern Indiana HSA, but a dry second half of the month resulted in below normal rainfall totals for the month. All in all, July was a fairly quiet month with regards to hydrology. While rainfall was below normal for the month, temperatures were very close to normal levels.

At Fort Wayne, temperatures averaged just a fraction of a degree below normal. The average high temperature for the month was 84.0 degrees which was 0.3 degrees below the normal value of 84.3 degrees. The average low temperature was 62.3 degrees which was 0.2 degrees below the normal value of 62.5 degrees. The total rainfall for the month at the airport was 3.15 inches. This was 0.43 inches below the average value of 3.58 inches. The greatest 24-hour rainfall total at Fort Wayne was 1.45 inches which occurred from the 8th to the 9th.

At South Bend, average temperatures were just a fraction of a degree away from normal values. The average high temperature was 83.6 degrees which was one-half inch below the normal value of 83.1 degrees. The average low temperature was 62.4 degrees which was 0.4 degrees below the normal value of 62.8 degrees. Rainfall for the month of July was 2.38 inches. This was 1.35 inches below the normal value of 3.73 inches. The greatest 24-hour total for the month was 0.80 inches which occurred from the 19th to the 20th.

...Flooding Conditions...

There was very little in the way of flooding activity across the Northern Indiana HSA. The Tiffin River at Stryker, Ohio rose above flood stage on the 4th of July. It reached a peak of 14.13 feet on the 6th, then fell below flood stage on the 13th. Fourteen feet resulted in minor flooding with mainly agricultural interests and secondary roads.

The only other river to surpass flood stage was the Saint Joseph (Ohio) River at Montpelier. The St. Joe River briefly exceeded flood stage beginning on the 5th and ending on the 6th. The river crested at 12.59 feet on the 5th. This was minor flooding of agricultural and low land areas near the river.

...Drought Conditions...

According to the Drought Monitor dated August 5, 2008 (<http://drought.unl.edu/dm/monitor.html>), the Northern Indiana HSA is not experiencing drought conditions. However, given that the second half of the month was rather dry, there was some significant drying of the soils across the region.

NWS Form E-3
 (04-2006)
 (PRES. BY NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

Hydrologic Service Area (HSA)
 NORTHERN INDIANA (IWX)

FLOOD STAGE REPORT

REPORT FOR:
 MONTH YEAR
 JULY 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|------------------------------------|-----------------------|------------------------------|-----------|-----------------|----------|
| | | FROM | TO | STAGE (Feet) | DATE |
| TIFFIN RIVER @ STRYKER | 11.0 | 7/4/2008 | 7/13/2008 | 14.13 | 7/6/2008 |
| ST. JOSEPH (OH) RIVER @ MONTPELIER | 12.0 | 7/5/2008 | 7/6/2008 | 12.59 | 7/5/2008 |

| | | |
|--|---|--|
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| | | NORTHERN INDIANA (IWX) |
| MONTHLY REPORT OF HYDROLOGIC CONDITIONS | | REPORT FOR: MONTH YEAR |
| | | AUGUST 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | | SIGNATURE |
| | | Michael Rehbein, Service Hydrologist |
| | | DATE |
| | | September 2, 2008 |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Dry conditions prevail across the Northern Indiana HSA in August...

August proved to be a dry month across the northern Indiana HSA. Most areas experienced rainfall deficits of an inch and a half or more for the month. Temperatures averaged about normal for the month. In most areas, afternoon highs averaged slightly above normal while overnight lows were below average. The lack of precipitation maintained already low river levels, particularly across the eastern half of the area. The Maumee River at Defiance saw readings from near zero to 1.25 feet. These values were well below the 10 foot flood stage.

As was mentioned above, temperatures averaged out to be near normal. At Fort Wayne, the average high temperature for the month was 83.1 degrees. This was 1.3 degrees above the normal value of 81.8. The average low temperature was 59.2 degrees which was 1.2 degrees below the normal value of 60.4 degrees. The mean temperature for the month was 71.1 degrees which equaled the normal value. The month of August saw precipitation total 2.06 inches at Fort Wayne. This was 1.54 inches below the normal value of 3.60 inches. The greatest 24 hour precipitation total for the month was 1.07 inches from the 4th to the 5th.

Similar monthly conditions were noted at the South Bend airport. The average high temperature was 81.8 degrees. This was 1.1 degrees warmer than the normal value of 80.7 degrees. The average low temperature was 59.1 degrees which was 2.2 degrees cooler than the normal value of 61.3 degrees. For the entire month, the average temperature was 70.4 degrees which was only 0.6 degrees cooler than the normal value of 71.0 degrees. There was 1.90 inches of rainfall observed during the month. This was 2.08 inches below the normal value of 3.98 inches. The greatest 24 hour amount was 0.68 inches which occurred from the 28th to the 29th.

...Flood conditions...

Due to the dry conditions across the Northern Indiana HSA, there were no river locations that exceeded flood stage. Most river locations were fairly low due to the lack of rainfall.

...Drought conditions...

According to the Drought Monitor dated September 2, 2008, nearly the entire HSA was experiencing Abnormally Dry (D0) conditions. The Drought Monitor can be found at the following web site:
<http://www.drought.unl.edu/DM/monitor.html>.

NWS Form E-3
 (04-2006)
 (PRES. BY NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

Hydrologic Service Area (HSA)
 NORTHERN INDIANA (IWX)

FLOOD STAGE REPORT

REPORT FOR:
 MONTH YEAR
 AUGUST 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|----------------------|-----------------------|------------------------------|----|-----------------|------|
| | | FROM | TO | STAGE (Feet) | DATE |
| NO FLOODING OBSERVED | | | | | |

| | | |
|--|---|--|
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| | | NORTHERN INDIANA (IWX) |
| MONTHLY REPORT OF HYDROLOGIC CONDITIONS | | REPORT FOR: MONTH YEAR |
| | | SEPTEMBER 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | | SIGNATURE |
| | | Michael Rehbein, Service Hydrologist |
| | | DATE |
| | | October 7, 2008 |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Record Setting Rainfall in South Bend...

September was an extremely wet month across the northwestern part of the Northern Indiana HSA. After an extended period of below normal rainfall, South Bend reported near fourteen (14) inches of rain for the month. Meanwhile, eastern parts of the area saw rainfall totals near or slightly below normal values.

Temperatures were largely above normal for the month. Afternoon highs averaged 3 to 5 degrees above normal, and average lows were around 2 degrees above normal.

In Fort Wayne, the average high temperature for the month was 80 degrees. This was 4.6 degrees above the normal high temperature of 75.4 degrees. Average low temperatures were 1.9 degrees above normal. The normal low is 52.8 degrees, but the average low this month was 54.7 degrees. Rainfall was slightly below normal for the month. There was 1.83 inches of rain reported at the airport. This was 0.98 inches below the normal value of 2.81 inches. The greatest 24 hour rainfall total was 0.66 inches from 9/12 to 9/13.

In South Bend, temperature readings were very similar to those at Fort Wayne. The average high temperature was 76.1 degrees. This was 2.5 degrees above the normal value of 73.6 degrees. The average low was 55.6 degrees which was 2.3 degrees warmer than the average of 53.3 degrees. The total precipitation for the month of September was a whopping 13.92 inches. This was by far a record rainfall total for the month of September as well as the all time monthly record for rainfall. The previous all time record was 10.86 inches set in June of 1993. The previous September record was 9.01 inches set in 1977. The greatest 24 hour rainfall total was 6.88 inches from 9/13 to 9/14. The 4.07 inches of rain that fell on the 14th exceeded the daily record of 2.06 inches which occurred in 1993.

...Flooding Conditions...

Despite the record rainfall across the Northern Indiana HSA, flooding across the area was rather limited. The Kankakee River at Davis rose above Flood Stage on the 13th, then continued to rise to the Major Flood Category on the 15th. It continued to climb toward Record Stage (which is 13.79 feet), but stopped at 13.74 feet which is just short of the record. It fell below Major Stage on the 21st, and below

flood stage on the 30th. The St. Joseph (MI) River at Three Rivers and the Dowagiac River at Sunnerville both rose to Moderate Flood Stage during the month. The St. Joseph (MI) River at South Bend, Niles, and Mottville all exceeded flood stage as did the Paw Paw River at Riverside. All other locations remained below flood stage throughout the month.

...Drought Conditions...

According to the Drought Monitor issued September 30, 2008 (<http://drought.unl.edu/dm/monitor.html>), the eastern portion of the HSA is experiencing abnormally dry conditions. The north and western parts appear to be close to normal.

FLOOD STAGE REPORT

REPORT FOR:
 MONTH YEAR
 SEPTEMBER 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|--------------------------------------|-----------------------|------------------------------|-----------|-----------------|-----------|
| | | FROM | TO | STAGE (Feet) | DATE |
| KANKAKEE RIVER @ DAVIS | 10.0 | 9/13/2008 | 9/30/2008 | 13.74 | 9/15/2008 |
| ST. JOSEPH (MI) RIVER @ THREE RIVERS | 7.0 | 9/14/2008 | 9/23/2008 | 9.29 | 9/17/2008 |
| ST. JOSEPH (MI) RIVER @ SOUTH BEND | 5.5 | 9/15/2008 | 9/21/2008 | 6.7 | 9/16/2008 |
| ST. JOSEPH (MI) RIVER @ NILES | 11.0 | 9/15/2008 | 9/17/2008 | 12.22 | 9/15/2008 |
| ST. JOSEPH (MI) RIVER @ MOTTVILLE | 8.0 | 9/17/2008 | 9/21/2008 | 8.18 | 9/17/2008 |
| DOWAGIAC RIVER @ SUMNERVILLE | 8.0 | 9/13/2008 | 9/19/2008 | 11.6 | 9/15/2008 |
| PAW PAW RIVER @ RIVERSIDE | 11.0 | 9/16/2008 | 9/17/2008 | 11.24 | 9/18/2008 |

| | | |
|--|---|--|
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| | | NORTHERN INDIANA (IWX) |
| MONTHLY REPORT OF HYDROLOGIC CONDITIONS | | REPORT FOR: MONTH YEAR |
| | | OCTOBER 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | | SIGNATURE |
| | | Michael Rehbein, Service Hydrologist |
| | | DATE |
| | | November 13, 2008 |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...No Flooding across the Northern Indiana HSA...

Nearly normal rainfall totals for the month of October kept rivers within their banks. As a matter of fact, there were several locations where river levels fell to near record low levels. The month of October can be characterized, at least climatologically, as a nearly “normal” month.

At Fort Wayne, the average high temperature was almost a degree above normal. For the month, the high averaged 63.8 degrees which was 0.8 degrees above the normal of 63.0 degrees. The average low temperature was 40.2 degrees which was 1.6 degrees below the normal value of 41.8 degrees. For the entire month, the average temperature was very close to normal. The observed value of 52.0 degrees was 0.4 degrees below normal.

Rainfall was just slightly below normal for the month. At the airport, 2.32 inches of rain was recorded. This was 0.31 inches below climatological mean of 2.63 inches. The greatest 24-hour rainfall occurred on the 24th to 25th when 1.01 inches were recorded.

At South Bend, temperatures were very near, although below, normal for the month. The average high temperature recorded was 61.6 degrees which was 0.2 degrees below normal. The average low temperature was 41.7 degrees which was 0.6 degrees below the normal value of 42.3 degrees. The average temperature for the month was 51.6 degrees which was 0.5 degrees below the normal value of 52.1 degrees.

Rainfall at South Bend was very close to normal values for October. There was 3.13 inches recorded at the airport. This was only 0.14 inches below the normal value of 3.27 inches. The greatest 24-hour total was 1.07 inches from the 24th to the 25th.

...Record or near record low stages in the area...

A large number of rivers in the area recorded river levels at or very near record low levels during the month of October. Most of these levels were recorded early in the month and some of those levels stayed at those historic lows for several days. Several locations recorded the same record level twice

during the month, while one site, the Saint Mary's River at Muldoon Bridge in Fort Wayne recorded two different record levels during the month. The following table is a summary of the record or near record low stages for the month.

| <u>Location</u> | <u>Stage</u> | <u>Date(s)</u> |
|--|--------------|---------------------------------------|
| Auglaize River at Fort Jennings | 1.7 feet | 5 th |
| Bean Creek at Powers | 8.4 feet | 6 th |
| Eel River at North Manchester | 3.4 feet | 6 th |
| Elkhart River at Goshen | 2.2 feet | 6 th |
| Fish Creek at Hamilton | 3.2 feet | 5 th |
| Little River above Huntington | 1.5 feet | 7 th |
| Maumee River at Fort Wayne | 1.1 feet | 27 th |
| Maumee River at Coliseum Blvd | 1.9 feet | 5 th |
| Maumee River at New Haven | 2.7 feet | 5 th |
| Maumee River at Defiance | 0 feet | 11 th |
| Maumee River near Defiance Independence Dam | 1.6 feet | 5 th |
| Maumee River at Napoleon | 0.9 feet | 14 th and 29 th |
| North Branch of Elkhart River at Cosperville | 3.0 feet | 6 th |
| Mississinewa River at Marion | 0.9 feet | 1 st |
| Pigeon Creek near Angola | 5.6 feet | 6 th |
| Pigeon River near Scott | 2.9 feet | 6 th |
| St. Joseph (MI) River at South Bend | 1.0 feet | 5 th |
| St. Joseph (OH) River at Newville | 3.2 feet | 1 st and 12 th |
| Tiffin River at Stryker | 2.4 feet | 5 th |
| Tippecanoe River near Ora | 5.3 feet | 5 th |
| Tippecanoe River at Winamac | 3.7 feet | 5 th |
| Wabash River at Bluffton | 1.1 feet | 3 rd and 31 st |
| Wabash River at Logansport | 2.9 feet | 3 rd |
| Yellow River at Plymouth | 4.3 feet | 6 th |
| St. Mary's River at Muldoon Bridge | 0.8 feet | 4 th |
| St. Mary's River at Muldoon Bridge | 0.9 feet | 14 th |

...Drought conditions across the area...

Soil conditions across the HSA remained at near normal values. According to the latest Drought Monitor (November 4, 2008), the entire Northern Indiana HSA was not experiencing drought conditions. The latest Drought Monitor can be found at <http://drought.unl.edu/dm/monitor.html>.

NWS Form E-3
 (04-2006)
 (PRES. BY NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

Hydrologic Service Area (HSA)
 NORTHERN INDIANA (IWX)

FLOOD STAGE REPORT

REPORT FOR:
 MONTH YEAR
 OCTOBER 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|-------------------|-----------------------|------------------------------|----|-----------------|------|
| | | FROM | TO | STAGE (Feet) | DATE |
| NO FLOODING | | | | | |

| | | |
|--|---|--|
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| | | NORTHERN INDIANA (IWX) |
| MONTHLY REPORT OF HYDROLOGIC CONDITIONS | | REPORT FOR: MONTH YEAR |
| | | NOVEMBER 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | | SIGNATURE |
| | | Michael Rehbein, Service Hydrologist |
| | | DATE |
| | | December 3, 2008 |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Below normal temperatures and precipitation across the Northern Indiana HSA...

Below normal temperatures and precipitation were reported across the Northern Indiana HSA during the month of November. The synoptic pattern throughout a large part of the month was that of northwest mid level flow. That allowed a number of synoptic systems to cross the region. Although there were a significant number of weather systems, there was not a great deal of moisture available for precipitation. This resulted in rainfall deficits of an inch to an inch and a half. However, with northwest flow present, there were several lake effect snow events that occurred during the month which led to above normal snowfall totals in the northwestern part of the area.

For the month of November, the average high temperature at the Fort Wayne airport was 47.5 degrees. This was one degree below the normal value of 48.5 degrees. The average low temperature was 31.1 degrees which was 1.6 degrees below the normal value of 32.7 degrees. The average temperature for the month was 39.3 degrees which was 1.3 degrees below the normal of 40.6 degrees. There was just over two inches of precipitation for the month (2.03). This was 0.95 inches below the normal value of 2.98 inches. The greatest 24-hour total was 0.76 inches which occurred from the 12th to the 13th. Snowfall amount for the month was 2.3 inches which was 0.7 inches below the normal value of 3.0 inches. The greatest snowfall total on the ground reported was one inch on the 21st. The largest 24-hour snow fall was 1.3 inches.

The South Bend averages were similar to those at Fort Wayne for the month. The average high temperature was 45.5 degrees which was 2.2 degrees below the normal value of 47.7 degrees. The average low temperature was 31.0 degrees. This was 1.6 degrees below the normal value of 32.6 degrees. The monthly average temperature was 38.2 degrees and was 1.9 degrees below the normal value of 40.1 degrees. A little over two inches of precipitation was recorded at the airport (2.02). This was 1.37 inches below the normal value of 3.39 inches. The greatest 24-hour total was 0.35 inches from the 20th to the 21st. Snowfall for the month of November was more than twice the normal value. Nearly 17 inches of snow (16.9) was observed at South Bend. This was 8.7 inches above the normal value of 8.2 inches. The greatest snow depth during the month was 7 inches on the 21st and 22nd. The largest 24-hour snowfall total was 9.4 inches.

...Rivers remain well below normal flow levels...

The rivers across the IWX HSA remained well below normal levels. Several locations observed record or near record stages during the month. The following table is a list of record or near record low stages for the month.

| <u>Location</u> | <u>Stage (ft)</u> | <u>Date</u> |
|---|-------------------|------------------|
| Auglaize River at Fort Jennings | 1.7 | 6 th |
| Bean Creek at Powers | 8.5 | 4 th |
| Maumee River at Fort Wayne | 0.7 | 10 th |
| Maumee River at Ft. Wayne Coliseum Blvd | 1.5 | 11 th |
| Maumee River at New Haven | 2.4 | 11 th |
| Mississinewa River at Peoria | 1.7 | 9 th |
| Pigeon Creek near Angola | 5.4 | 11 th |
| Pigeon Creek near Angola | 5.5 | 5 th |
| Pigeon River at Scott | 2.8 | 10 th |
| Pigeon River at Scott | 2.8 | 12 th |
| St. Joseph River at South Bend | 0.5 | 28 th |

...Drought conditions across the area...

According to the latest Drought Monitor, dated 11/25/2008, the northern Indiana HAS is experiencing “normal” conditions. The Drought Monitor can be found at <http://www.ndmc.unl.edu/dm/monitor.html>.

NWS Form E-3
 (04-2006)
 (PRES. BY NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

Hydrologic Service Area (HSA)
 NORTHERN INDIANA (IWX)

FLOOD STAGE REPORT

REPORT FOR:
 MONTH YEAR
 NOVEMBER 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|----------------------|-----------------------|------------------------------|----|-----------------|------|
| | | FROM | TO | STAGE (Feet) | DATE |
| NO FLOODING REPORTED | | | | | |

| | | |
|--|---|--|
| NWS Form E-5 (04-2006) (PRES. BY NWS Instruction 10-924) | U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE | HYDROLOGIC SERVICE AREA (HSA) |
| | | NORTHERN INDIANA (IWX) |
| MONTHLY REPORT OF HYDROLOGIC CONDITIONS | | REPORT FOR: MONTH YEAR |
| | | DECEMBER 2008 |
| TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283 | | SIGNATURE |
| | | Michael Rehbein, Service Hydrologist |
| | | DATE |
| | | January 12, 2009 |

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

...Active weather patterns return to the Northern Indiana HSA...

December saw a return to a more active weather pattern across the northern Indiana HSA. After several months of below normal rainfall and snowfall totals, rainfall amounts were above normal for the month of December. During the month, there was a shift in the synoptic pattern that went from northwest flow and primarily snowfall to a southwest flow that was primarily freezing rain. Overall, temperatures were below normal and liquid equivalent precipitation was above normal. Snowfall remained below normal this month.

At Fort Wayne, the average high temperature reported at the airport was 35.8 degrees. This equaled the normal value for the month. The average low temperature was 19.4 degrees. This was 2.9 degrees below the normal value of 22.3 degrees. Precipitation for the month was more than an inch and a half above normal. For the month of December, 4.34 inches of liquid equivalent was reported at the airport. This was 1.57 inches above the normal value of 2.77 inches. Of this precipitation, there was 4.2 inches of snowfall. This amount was 4.1 inches below the normal value of 8.3 inches. The greatest 24-hour amount of precipitation was 1.07 inches which fell on the 19th.

At South Bend, temperatures averaged well below normal. For the month, the average high temperature was 34.3 degrees. This was 1.3 degrees below the normal value of 35.6 degrees. The average low temperature was 17.7 degrees. This was a full 4 degrees below the normal value of 21.7 degrees. Liquid equivalent precipitation was above normal for the month of December. There were 3.79 inches of precipitation reported which was 0.70 inches above the normal value of 3.09 inches. There was 16.8 inches of snow reported for the month which was 2.4 inches below the normal values of 19.2 inches. The greatest 24-hour amount of precipitation was 0.92 inches on the 9th. The greatest 24-hour snowfall total was 3.7 inches.

...Flooding conditions return to the area...

For the first time in several months, flooding conditions were reported across the northern Indiana area. The Kankakee River at Davis Route 30 was in flood twice during the month. The first was from the 10th to the 11th and crested at 10.13 feet. The second period began on the 27th and continued throughout the remainder of the month. The crest stage for this flood was 12.35 feet which was just into the Moderate

Flood stage. Other sites reporting flooding conditions included the St. Joseph (MI) River, Bean Creek, the Dowagiac River, the Eel River, the Elkhart River, the Maumee River, the St. Joseph (OH) River, the Tiffin River and the St. Mary's River. All of these floods fell into the minor category. All of these sites had returned to below flood stage except for the St. Joseph (OH) River at Newville and the Tiffin River at Stryker.

...Drought conditions across the Northern Indiana HSA...

According to the latest Drought Monitor dated January 6, 2009, the Northern Indiana HAS is not experiencing any drought conditions. The Drought Monitor can be found at the following web site: <http://www.drought.unl.edu/dm/monitor.html>.

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 DECEMBER 2008

| RIVER AND STATION | FLOOD STAGE (Feet) | ABOVE FLOOD STAGES (Date) | | CREST | |
|---|-----------------------|------------------------------|------------|-----------------|------------|
| | | FROM | TO | STAGE (Feet) | DATE |
| KANKAKEE RIVER @ DAVIS ROUTE 30 | 10.0 | 12/10/2008 | 12/11/2008 | 10.13 | 12/11/2008 |
| KANKAKEE RIVER @ DAVIS ROUTE 30 | 10.0 | 12/27/2008 | CONTINUED | 12.35 | 12/28/2008 |
| ST. JOSEPH RIVER (MI) @ SOUTH BEND | 5.5 | 12/28/2008 | 12/29/2008 | 6.0 | 12/28/2008 |
| ST. JOSEPH RIVER (MI) @ NILES | 11.0 | 12/28/2008 | 12/28/2008 | 11.0 | 12/28/2008 |
| BEAN CREEK @ POWERS | 15.0 | 12/27/2008 | 12/31/2008 | 17.48 | 12/28/2008 |
| DOWAGIAC RIVER @ SUMNERVILLE | 8.0 | 12/27/2008 | 12/30/2008 | 9.23 | 12/28/2008 |
| EEL RIVER @ NORTH MANCHESTER | 9.0 | 12/28/2008 | 12/29/2008 | 9.54 | 12/28/2008 |
| ELKHART RIVER @ GOSHEN | 7.0 | 12/28/2008 | 12/28/2008 | 7.0 | 12/28/2008 |
| MAUMEE RIVER @ FORT WAYNE | 17.0 | 12/28/2008 | 12/29/2008 | 17.36 | 12/28/2008 |
| MAUMEE RIVER @ COLISEUM BLVD FORT WAYNE | 17.0 | 12/28/2008 | 12/30/2008 | 18.13 | 12/28/2008 |
| MAUMEE RIVER @ NEW HAVEN | 17.0 | 12/28/2008 | 12/30/2008 | 17.76 | 12/29/2008 |
| MAUMEE RIVER @ DEFIANCE | 10.0 | 12/28/2008 | 12/29/2008 | 10.63 | 12/29/2008 |
| ST. JOSEPH RIVER (OH) @ NEWVILLE | 12.0 | 12/28/2008 | CONTINUED | 13.70 | 12/31/2008 |
| ST. JOSEPH RIVER (OH) NEAR FORT WAYNE | 12.0 | 12/28/2008 | 12/29/2008 | 12.84 | 12/28/2008 |
| ST. JOSEPH RIVER (OH) @ MONTPELIER | 12.0 | 12/29/2008 | 12/31/2008 | 12.85 | 12/30/2008 |
| TIFFIN RIVER @ STRYKER | 11.0 | 12/27/2008 | CONTINUED | 13.86 | 12/30/2008 |
| ST. MARY'S RIVER @ DECATUR | 17.0 | 12/28/2008 | 12/29/2008 | 17.8 | 12/28/2008 |