

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)
		NORTHERN INDIANA (IWX)
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR:
		MONTH                      YEAR
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		JANUARY                      2010
		SIGNATURE
		Michael Rehbein Service Hydrologist
		DATE
		February 9, 2010

*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 .

### ...Another quiet month for the Northern Indiana HSA...

January saw a rather quiet month as far as rivers are concerned. Although snowfall was above normal in parts of the area, the liquid equivalent was below normal across the entire area. Temperatures across the area averaged just below normal as extensive cloud cover throughout the month kept high temperatures cooler than normal and low temperatures above normal.

At Fort Wayne, temperatures averaged about half a degree below normal. The average high temperature was 28.9 degrees which was 2.1 degrees below the normal value of 31.0 degrees. However, the average low temperature was 17.2 degrees which was 1.1 degrees above the normal value of 16.1 degrees. This led to an average of 23.0 degrees which was 0.6 degrees below the normal value of 23.6 degrees. For the month, there was only 0.63 inches of liquid equivalent precipitation. This was 1.42 inches below the normal value of 2.05 inches. The greatest 24-hour liquid equivalent was 0.31 inches on the 24<sup>th</sup>. The snowfall total for the month was 7.7 inches. This was 2.2 inches below the normal value of 9.9 inches. For the season, 17.2 inches of snow has fallen and this is 4.5 inches below the normal value of 21.7 inches. The largest 24-hour total was 4.1 inches and the greatest snow depth was 5 inches on the 8<sup>th</sup>.

At the South Bend airport, temperatures and liquid equivalent precipitation were similar to those at Fort Wayne. For the month, the average high temperature was 29.0 degrees. This was 2 degrees below the normal value of 31.0 degrees. The average low temperature was 16.9 degrees which was 1.2 degrees above the normal value of 15.7 degrees. This resulted in an average temperature of 23.0 degrees which was 0.4 degrees below the normal value of 23.4 degrees. Liquid equivalent precipitation for the month was also below normal. For the month, 1.22 inches of liquid was reported. This was 1.05 inches below the normal value of 2.27 inches. The greatest 24-hour total was 0.33 inches from the 1<sup>st</sup> to the 2<sup>nd</sup>. Snowfall was above the normal total for the month as 27.4 inches were reported at the airport. This was 4.2 inches above the normal value of 23.2 inches. The greatest 24-hour snowfall total was 9.1 inches and the greatest depth was 15 inches on the 2<sup>nd</sup>. For the season, 38.9 inches of snow has fallen in South Bend. This is 11.7 inches below the normal value of 50.6 inches.

### ...Soil Moisture/Drought conditions...

Soil moisture continues to be near normal values. According to the Drought Monitor valid February 2, 2010, the entire Northern Indiana HSA is not experiencing drought or near drought conditions.

**...Only one brief flood this month...**

There was only one site that exceeded flood stage during January. The Kankakee River at Davis Route 30 went above its 10 foot flood stage on the 24<sup>th</sup> before falling below flood stage on the 27<sup>th</sup>. It crested at 10.82 feet on the 25<sup>th</sup>.

**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  
 JANUARY                  2010

RIVER AND STATION	FLOOD STAGE (Feet)	ABOVE FLOOD STAGES (Date)		CREST	
		FROM	TO	STAGE (Feet)	DATE
KANKAKEE RIVER @ DAVIS ROUTE 30	11.0	01/24/2010	01/27/2010	10.82	01/25/2010

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)	
		NORTHERN INDIANA (IWX)	
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR:	
		MONTH	YEAR
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		FEBRUARY	2010
		SIGNATURE	
		Michael Rehbein Service Hydrologist	
		DATE	
		March 11, 2010	

*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 .

### ...Another quiet hydrologic month across the Northern Indiana HSA...

February was another quiet month across northern Indiana, southwest Lower Michigan and northwest Ohio. Monthly average temperatures were generally below normal and precipitation was just below normal values. Although liquid equivalent precipitation was below normal, snowfall totals were generally 3 to 6 inches above normal. With little in the way of melting occurred due to the cooler than normal temperatures, there was little fluctuations in river levels across the area.

In Fort Wayne, the average high temperatures were just below freezing (31.8 degrees) for the month. This was 3.6 degrees below the normal value of 35.4 degrees. The average low for the month was 19.4 degrees which was just slightly above the normal value of 19.2 degrees. This resulted in an average temperature of 25.6 degrees, which was 1.7 degrees below the normal value of 27.3 degrees. The liquid equivalent precipitation at the airport was 1.06 inches. This was 0.88 degrees below the normal value of 1.94 inches. The greatest 24-hour value was 0.54 inches that occurred from the 21<sup>st</sup> to the 22<sup>nd</sup>. Snowfall for the month was well above normal. For the month, 12.1 inches fell at the airport. This was 4.5 inches above the normal value of 7.6 inches. The greatest snow depth recorded was 6 inches on the 10<sup>th</sup>.

Conditions were similar at the South Bend airport. For the month, the average high temperature was 31.3 degrees. This was 4.2 degrees below the normal value of 35.5 degrees. The average monthly low temperature was 20 degrees. This was 1 degree above the normal value of 19 degrees. This resulted in an average temperature of 25.7 degrees which was 1.6 degrees below the normal value of 27.3 degrees. There was 1.34 inches of liquid equivalent precipitation reported in South Bend. This was 0.64 inches below the normal value of 1.98 inches. Snowfall was above the normal value. For the month, 18.4 inches was recorded which was 2.9 inches above the normal value of 15.5 inches. The greatest snow depth was 6 inches on both the 16<sup>th</sup> and 17<sup>th</sup>.

### ...River conditions very stable...

With the majority of the monthly precipitation tied up in snowfall, there was little change in river levels across the HSA. Hydrographs across the region were basically flat lines, with the exception of the few rivers that had very minor ice jam issues. These ice jam locations were not even close to flood stage.

**...Drought conditions across the area...**

According to the March 2, 2010 issuance of the Drought Monitor, the entire HSA was experiencing normal soil moisture conditions.

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**NATIONAL WEATHER SERVICE**

Hydrologic Service Area (HSA)  
 NORTHERN INDIANA (IWX)

**FLOOD STAGE REPORT**

REPORT FOR:  
 MONTH            YEAR  
 FEBRUARY        2010

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

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)	
		NORTHERN INDIANA (IWX)	
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR:	
		MONTH	YEAR
		MARCH	2010
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 15, 2010	

*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 .

### **...Above normal temperatures and below normal precipitation...**

March saw a return of some minor flooding across northern portions of the HSA. The combination of previous snowmelt and a rainfall event that saw around an inch of rain allowed a few river sites to briefly exceed flood stage. For the entire month, however, rainfall totals were below the climatological normals. Temperatures averaged 2 to 5 degrees above normal values, bringing welcome warmth after a cold winter.

At Fort Wayne, the average high temperature was 53.5 degrees. This was more than 6 degrees (6.1 degrees) above the normal value of 47.4 degrees. Overnight lows averaged 33.1 degrees. This was 4.3 degrees above the normal value of 28.8 degrees. The average temperature for Fort Wayne during the entire month was 43.3 degrees. This was 5.2 degrees above the normal value of 38.1 degrees. Rainfall was about a quarter of an inch below normal. For the month, 2.60 inches were observed at the airport. This was 0.26 inches below the normal value of 2.86 inches. The greatest 24-hour precipitation amount was 0.96 inches on the 28<sup>th</sup>. There was no snowfall reported for the month. This was 4.7 inches below the normal value. This left the seasonal snowfall total at 29.3 inches which was also 4.7 inches below normal.

Conditions at South Bend were comparable to those at Fort Wayne. For the month, the average high temperature was 52.4 degrees. This was 5.6 degrees above the normal value of 46.8 degrees. The average low temperature for the month was 31.0 degrees -- which was 2.8 degrees below the normal value of 28.2 degrees. This resulted in a mean temperature of 41.7 degrees for the month of March. That was 4.2 degrees above the normal value of 37.5 degrees. There was 1.72 inches of rain at the South Bend airport. This was 1.17 inches below the normal value of 2.89 inches. The greatest 24-hour rainfall total was 1.03 inches on the 11<sup>th</sup>. There was only a trace of snow for the month. This left the seasonal total at 57.3 inches which was 17.5 inches below the normal value of 74.8 inches.

### **...Minor flooding occurs across parts of the HSA...**

Despite the fact that the precipitation was below normal for the month across the region, there was some minor flooding that occurred in parts of the HSA. The combination of the snowmelt and brief heavy rains allowed a few locations to exceed flood stage. The Wabash River briefly exceeded flood stage at

Linn Grove, near Bluffton and at Bluffton. However, the river fell below flood stage within 48 hours. The Saint Joseph River (Ohio) saw minor flooding at Montpelier and Newville. The flood lasted for about 5 days at Newville and only 24 hours at Montpelier. The Tiffin River at Stryker was the longest lasting flood. It crested at 13.19 feet on the 15<sup>th</sup> and was above the 11 foot flood stage for 8 days.

**...Soil moisture levels remain near normal...**

Thanks to the snowmelt and the limited rainfall, soil moisture levels remained near normal levels. According to the latest Drought Monitor, the entire HSA was free of drought conditions.

**FLOOD STAGE REPORT**

REPORT FOR:  
 MONTH            YEAR  
 MARCH            2010

RIVER AND STATION	FLOOD STAGE (Feet)	ABOVE FLOOD STAGES (Date)		CREST	
		FROM	TO	STAGE (Feet)	DATE
KANKAKEE RIVER @ DAVIS ROUTE 30	10.0	03/12/2010	03/17/2010	11.1	03/14/2010
DOWAGIAC RIVER @ SUMNERVILLE	8.0	03/12/2010	03/13/2010	8.24	03/12/2010
ST. JOSEPH RIVER (OH) @ MONTPELIER	12.0	03/14/2010	03/15/2010	12.01	03/14/2010
ST. JOSEPH RIVER (OH) @ NEWVILLE	12.0	03/13/2010	03/18/2010	12.94	03/15/2010
ST. MARY'S RIVER @ DECATUR	17.0	03/14/2010	03/15/2010	17.34	03/14/2010
TIFFIN RIVER @ STRYKER	11.0	03/11/2010	03/19/2010	13.19	03/15/2010
TIPPECANOE RIVER @ NORWAY	11.5	03/13/2010	03/14/2010	11.76	03/14/2010
WABASH RIVER @ LINN GROVE	11.0	03/15/2010	03/16/2010	11.55	03/15/2010
WABASH RIVER NEAR BLUFFTON (DCP)	12.0	03/15/2010	03/16/2010	12.37	03/16/2010
WABASH RIVER @ BLUFFTON	10.0	03/15/2010	03/17/2010	10.09	03/16/2010

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		NORTHERN INDIANA (IWX)	
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR:	
		MONTH	YEAR
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		APRIL	2010
		SIGNATURE	
		DATE	
		Michael Rehbein Service Hydrologist	May 5, 2010

*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 .

### ...Second warmest April on record/Rainfall totals mixed...

This April was the second warmest April on record. Frequent temperatures in the 60s and 70s across the northern Indiana HSA result in temperatures averaging 6 to 8 degrees above normal. Rainfall totals, however, were mixed. Rainfall was below normal at South Bend but was just above normal at Fort Wayne. There were 2 days that generated heavy rainfall across the area which resulted in minor flooding at a couple of river locations.

In Fort Wayne, the average high temperature at the airport was 69.0 degrees. This was 9.2 inches above the normal value of 59.8 degrees! The average low temperature was 43.9 degrees. This was 5.7 degrees above the normal value of 38.2 degrees. This resulted in an average temperature of 56.5 degrees which was 7.5 degrees above the normal value of 49.0 degrees. Rainfall at Fort Wayne was just slightly above normal for the month. There was 3.60 inches reported at the airport. This was 0.06 inches above the normal value of 3.54 inches. The greatest 24-hour rainfall total was 1.26 inches from the 7<sup>th</sup> to the 8<sup>th</sup>. There was only a trace of snowfall recorded. This was 1.1 inches below the normal value of 1.1 inches. This left the seasonal total at 29.3 inches which was 5.8 inches below the normal value of 35.1 inches.

For the month, the average temperature at the South Bend airport was 66.2 degrees. This was 7.3 degrees above the normal value of 58.9 degrees! The average low temperature was 42.4 degrees which was 4.7 degrees above the normal value of 37.7 degrees. This resulted in an average temperature of 54.3 degrees which was 6 degrees above the normal value of 48.3 degrees. Rainfall, however, was below normal for the month. There was 2.38 inches of rain observed at the airport. This was 1.24 inches below the normal value of 3.62 inches. The greatest 24-hour total was 0.96 inches from the 24<sup>th</sup> to the 25<sup>th</sup>. There was only a trace of snowfall observed. This was 1.7 inches below the normal value of 1.7 inches. This left the seasonal total at 57.3 inches which was 19.2 inches below the normal value. The trace of snow was reported on the 8<sup>th</sup>.

### ...Only two locations exceeded flood stage this month...

Given the normal or below normal totals, there was very little in the way of flooding across the northern Indiana HSA. One location, the Tiffin River at Stryker, went above flood stage on 2 different occasions. The first was on the 8<sup>th</sup> and lasted until the 11<sup>th</sup>. Flood stage is 11 feet and it crested at 12.62 feet on the

8<sup>th</sup>. Its second rise above flood stage occurred on the 26<sup>th</sup> and lasted until the 30<sup>th</sup>. It crested at 12.15 feet on the 28<sup>th</sup>. The only other location to exceed flood stage this month was the Spy Run Creek at Fort Wayne Children's Zoo. The heavy rain on the 7<sup>th</sup> and 8<sup>th</sup> caused the creek to exceed its flood stage of 11 feet. It rose above flood stage on the 7<sup>th</sup> and fell below flood levels on the 8<sup>th</sup>. Its crest was 11.21 feet on the 8<sup>th</sup>.

**...Drought conditions non-existent this month...**

Due to the fact that rainfall has only been slightly below normal for the year, drought conditions are not present across the northern Indiana HSA. This information was taken from the April 27<sup>th</sup> version of the Drought Monitor.

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  
 APRIL            2010

RIVER AND STATION	FLOOD STAGE (Feet)	ABOVE FLOOD STAGES (Date)		CREST	
		FROM	TO	STAGE (Feet)	DATE
TIFFIN RIVER @ STRYKER	11.0	04/08/2010	04/11/2010	12.62	04/08/2010
TIFFIN RIVER @ STRYKER	11.0	04/26/2010	04/30/2010	12.15	04/28/2010
SPY RUN CREEK @ FT. WAYNE CHILDREN'S ZOO	11.0	04/07/2010	04/08/2010	11.21	04/08/2010

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		NORTHERN INDIANA (IWX)
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR:
		MONTH                      YEAR MAY                              2010
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 21, 2010

*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 .

### **...Heavy rains bring flooding to Northern Indiana HSA...**

Heavy rains across the northern Indiana HSA during the second half of May brought flooding...mainly over extreme northern Indiana, southwestern Lower Michigan and northwest Ohio. The Maumee River Basin saw most of the flooding as the Tiffin, the Maumee, the St. Joseph and Spy Run Creek all went into flood. The Spy Run Creek established a new record stage of 13.67 feet on the night of the 22<sup>nd</sup>.

Warm and very moist conditions prevailed across the HSA during the month of May. Average temperatures were up to 5 degrees above normal and precipitation was nearly twice the normal values at both climate sites. For the month of May, the average high temperature at Fort Wayne was 74.6 degrees. This was 3 degrees above the normal value of 71.6 degrees. The average low temperature was 53.8 degrees which was 4.7 degrees above the normal value of 49.1 degrees. These readings resulted in an average temperature for the month of 64.2 degrees which was 3.8 degrees above the normal value of 60.4 degrees. Rainfall was very nearly double the normal value. There was 7.02 inches reported at the airport of the month. This was 3.27 inches above the normal value of 3.75 inches. The greatest 24-hour rainfall total was 1.63 inches from the 20<sup>th</sup> to the 21<sup>st</sup>.

Temperatures were not quite as warm at South Bend...but the rainfall totals were well above the climatological normal values. At the airport, the average high temperature was 71.2 degrees. This was 0.5 degrees above the normal value of 70.7 degrees. The average low was 51.4 degrees which was 3 degrees above the normal value of 48.4 degrees. This resulted in an average temperature of 61.3 degrees which was 1.7 degrees above the normal value of 59.6 degrees. There was 6.04 inches of rain reported last month. This was 2.54 inches above the normal value of 3.50 inches. The greatest 24-hour total was 1.13 inches on the 31<sup>st</sup>.

### **...Active growing season likely helped to reduce flooding...**

An active growing season likely helped to reduce the amount of flooding that occurred with the heavy rainfall in May. The corn and soybean fields across the region have experienced rapid growth over the past few weeks as a result of the rains in May.

As was stated earlier, the Maumee River basin experienced the brunt of the flooding during the month of May. The heavy rains in the city of Fort Wayne on the 21<sup>st</sup> caused the Spy Run Creek and the Children's Zoo to rapidly rise above flood stage and it reached its crest of 13.67 feet. This set a new record stage for the creek at the zoo. Flood mitigation efforts by the city of Fort Wayne helped to lessen the effect on residents in the vicinity of the creek.

The main stem Maumee River rose above flood stage at 4 different locations including Defiance, Fort Wayne and New Haven. Flood stage was exceeded by 1.64 feet at Defiance to 3.38 feet at Coliseum Blvd in Fort Wayne. The St. Joseph (OH) River had 3 locations exceed flood stage. Newville observed a crest 3.99 feet above flood stage, Montpelier reported a crest 3.53 feet above flood stage and near St. Joe in Fort Wayne saw a stage 2.83 feet above flood stage.

**...Abundant rainfall leaves soil moisture levels high...**

The abundant rainfall last month has helped the area crops to grow extremely quickly over the past few weeks. Additional rounds of showers and thunderstorms have maintained this moisture. As a result, drought conditions are not present and not expected for the near future.

**FLOOD STAGE REPORT**

REPORT FOR:  
 MONTH            YEAR  
 MAY                2010

RIVER AND STATION	FLOOD STAGE (Feet)	ABOVE FLOOD STAGES (Date)		CREST	
		FROM	TO	STAGE (Feet)	DATE
BEAN CREEK @ POWERS	15.0	05/22/2010	05/25/2010	18.89	05/22/2010
CEADER CREEK @ 18 <sup>TH</sup> STREET IN AUBURN	9.0	05/22/2010	05/22/2010	9.45	05/22/2010
FISH CREEK @ HAMILTON	9.0	05/22/2010	05/23/2010	9.57	05/22/2010
KANKAKEE RIVER @ DAVIS ROUTE 30	10.0	05/22/2010	05/23/2010	10.05	05/22/2010
MAUMEE RIVER @ FORT WAYNE	17.0	05/22/2010	05/24/2010	19.74	05/22/2010
MAUMEE RIVER @ COLISEUM BLVD	17.0	05/22/2010	05/25/2010	20.38	05/22/2010
MAUMEE RIVER @ NEW HAVEN	17.0	05/22/2010	05/24/2010	20.26	05/22/2010
MAUMEE RIVER @ DEFIANCE	10.0	05/22/2010	05/24/2010	11.64	05/23/2010
ST. JOSEPH RIVER (OH) @ MONTPELIER	12.0	05/22/2010	05/26/2010	15.53	05/23/2010
ST. JOSEPH RIVER (OH) @ NEWVILLE	12.0	05/22/2010	05/29/2010	15.99	05/24/2010
ST. JOSEPH RIVER (OH) NR ST. JOE FORT WAYNE	12.0	05/22/2010	05/27/2010	14.83	05/22/2010
SPY RUN CREEK @ FT. WAYNE CHILDREN'S ZOO	11.0	05/21/2010	05/22/2010	13.67 *	05/22/2010
TIFFIN RIVER @ STRYKER	11.0	05/22/2010	05/29/2010	14.85	05/24/2010

\* indicates record flood

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		NORTHERN INDIANA (IWX)	
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR:	
		MONTH	YEAR
		JUNE	2010
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 19, 2010	

*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 .

### **...Above normal temperatures combined with above normal precipitation...**

June continued the trend of above normal temperatures and above normal precipitation across the northern Indiana HSA. Rainfall readings of up to 2 inches above normal were recorded across the region. Despite these observed rainfall totals, the rivers were relatively behaved this month, possibly due to the rapid growth noted in area crops.

For the month, Fort Wayne reported an average high temperature of 83.3 degrees. This was 2.7 degrees above the normal value of 80.6 degrees. The average low temperature was 64.5, and this was 5.7 degrees above the normal value of 58.8 degrees. This resulted in an average temperature of 73.9 degrees which was 4.2 degrees above the normal of 69.7 degrees. There was nearly 5 inches (4.92) of rain reported at the Fort Wayne airport. This was 0.88 inches above the normal of 4.04 inches. The greatest 24-hour total was 1.46 inches which occurred on the 23<sup>rd</sup>.

At South Bend, the average high temperature was right on the normal value (79.6 degrees). The average low temperature was 60.7 degrees. This was 2.4 degrees above the normal value of 58.3 degrees. These values resulted in an average temperature for the month of 70.1 degrees. This was 1.1 degree above the normal value of 69.0. Precipitation for the month was more than an inch and a half above the normal. There was 5.71 inches of rain reported at the airport. This was 1.52 inches above the normal value of 4.19 inches. The greatest 24-hour total was 1.40 inches recorded on the 23<sup>rd</sup>.

### **...Only minimal flooding reported this month...**

Despite the above normal rainfall totals for the month, there were only two river sites that exceeded flood stage during the month of June. The Tiffin River at Stryker, Ohio went above flood stage on the 7<sup>th</sup> and was above the 11 foot flood stage for two days. It crested at 11.93 feet on the 8<sup>th</sup>. The Wabash River at Bluffton, Indiana exceeded its 10 foot flood stage from the 17<sup>th</sup> to the 18<sup>th</sup>. Its crest was 10.6 feet on the 17<sup>th</sup>.

### **...Drought conditions nonexistent across the northern Indiana HSA...**

Due to the at or above normal rainfalls for the majority of the Spring and early Summer, drought conditions are non-existent across the northern Indiana HSA. The corn and bean crops appear to be doing very well.

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 (04-2006)  
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**NATIONAL WEATHER SERVICE**

Hydrologic Service Area (HSA)  
 NORTHERN INDIANA (IWX)

**FLOOD STAGE REPORT**

REPORT FOR:  
 MONTH            YEAR  
 JUNE              2010

RIVER AND STATION	FLOOD STAGE (Feet)	ABOVE FLOOD STAGES (Date)		CREST	
		FROM	TO	STAGE (Feet)	DATE
TIFFIN RIVER @ STRYKER	11.0	06/07/2010	06/09/2010	11.93	06/08/2010
WABASH RIVER @ BLUFFTON	10.0	06/17/2010	06/18/2010	10.6	06/17/2010

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)	
		NORTHERN INDIANA (IWX)	
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR:	
		MONTH	YEAR
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		JULY	2010
		SIGNATURE	
		Michael Rehbein Service Hydrologist	
		DATE	
		August 3, 2010	

*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 .

### **...Hot and relatively dry conditions for the month of July...**

The northern Indiana HSA saw temperatures soar into the 90s on many occasions across the area. This resulted in average temperatures of 2 to 5 degrees above the climatological normals. With the exception of one very heavy rainfall report at South Bend, precipitation amounts were below normal for the month. There was one rainfall of more than 3 inches at South Bend which caused the monthly total to top the average.

The average high temperature at Fort Wayne was 88.0 degrees. This was 3.7 degrees above the normal value of 84.3 degrees. The overnight lows averaged 66.8 degrees. This was 4.3 degrees above the normal value of 62.5 degrees. This resulted in an average temperature of 77.4 degrees which was 4 degrees above the normal value of 73.4 degrees. These temperatures were aided by the fact there was 13 days in which the high temperature was 90 degrees or hotter. The warmest reading was 95 degrees which was recorded on the 23<sup>rd</sup> and 24<sup>th</sup>. By comparison, in a normal year, there are 6.4 days in which the temperature reaches or exceeds 90 degrees. This year saw more than twice the normal value. As far as precipitation goes, July was a dry month. There was only 2.74 inches of rainfall reported at the airport. This was 0.84 inches below the normal value of 3.58 inches. The greatest 24-hour total was 1.55 inches which occurred on the 24<sup>th</sup> to the 25<sup>th</sup>.

Temperatures were slightly cooler at the South Bend airport during the month of July. For the month, the average high temperature was 85.7 degrees. This was 2.6 degrees above the normal value of 83.1 degrees. The average low temperature was 65.5 degrees. This was 2.7 degrees above the normal value of 62.8 degrees. This resulted in an average temperature for the month of 75.6 degrees. This was 2.6 degrees above the normal value of 73.0 degrees. There were 7 days in which the high temperature reached or exceeded 90 degrees. This was 1.3 days above the normal value of 5.7 days. The warmest reading was 94 on the 23<sup>rd</sup>. There was 4.35 inches of rainfall for the month of July. This was 0.62 inches above the normal value of 3.73 inches. The greatest 24-hour rainfall total was 3.02 inches which occurred from the 23<sup>rd</sup> to the 24<sup>th</sup>.

### **...All rivers remained below flood stage for the month...**

The rivers were all well behaved during the month of July. Since most areas saw below normal rainfall for the month, there was very little rise on area rivers. Even with the 3 inch rainfall at South Bend, the rivers in that area of the HSA remained below flood stage. The Dowagiac River at Sumnerville did rise to Action Stage, but it crested 6.64 feet on the 25<sup>th</sup>. This was still 1.36 feet below flood stage.

**...Drought conditions still non-existent...**

Despite the fact that rainfall totals were largely below normal and temperatures were well above normal, drought conditions were not a problem for the northern Indiana HSA. Widespread rains at the beginning of August suggest drought problems may not arise in the near future.

**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              2010

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

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)
		NORTHERN INDIANA (IWX)
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR: MONTH                      YEAR
		AUGUST                      2010
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 14, 2010

*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 return to the northern Indiana HSA...**

Despite the fact that Fort Wayne had near normal precipitation for the month, hot conditions that prevailed during the month have led to increasingly dry conditions across northern Indiana, southwest Lower Michigan and northwest Ohio. Temperatures across the region averaged between 3 and 4 degrees above the climatological means for the month.

At the Fort Wayne airport, the average high temperature for the month was 85 degrees. This was 3.2 degrees above the normal value of 81.8 degrees. The average low temperature was 64.1 degrees. This was 3.7 degrees above the normal value of 60.4 degrees. This led to an average temperature of 74.5 degrees which was 3.4 degrees above the normal value of 71.1 degrees. There were 4 days during the month when the high temperature was 90 degrees or higher. The normal value for this is 3.1 days. Precipitation for the month averaged just below normal. There was 3.55 inches for the month which was 0.05 inches below the normal value of 3.60 inches. The greatest 24-hour total was 1.88 inches which was recorded on the 3<sup>rd</sup> and 4<sup>th</sup>.

Temperature conditions were very similar at the South Bend airport. The average high temperature was 84.2 degrees. This was 3.5 degrees above the normal value of 80.7 degrees. The average low temperature was 65.1 degrees which was 3.8 degrees above the normal value of 61.3 degrees. This resulted in a mean temperature for the month of 74.6 degrees. This was 3.6 degrees above the normal value of 71 degrees. There were 6 days where the high temperature exceeded 90 degrees. This was twice the normal value of 2.9 days. Precipitation was significantly below normal for the month of August. For the entire month, there was 0.92 inches of rain. This was 3.06 inches below the normal value of 3.98 inches. The greatest 24-hour total was 0.45 inches on the 21<sup>st</sup>.

### **...River levels are low across the area...**

River levels across the region are low for this time of year, but remain well above record low levels. No river sites reached flood stage during the month. Corn harvest is well underway across the area so this should help river levels to rise with any precipitation that falls during the month of September.

### **...Some areas are approaching drought conditions...**

According to the Drought Monitor dated August 31, 2010, portions of the IWX HSA are experiencing “Abnormally Dry” or drought intensity D0. The areas experiencing these conditions include all of northwest Ohio, extreme southern Lower Michigan and the northeastern corner of Indiana. There have been some rains in early September, so these areas have already shown some improvement. Additional rainfall is expected in the next couple of days so additional improvement in these dry conditions is likely.

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 (04-2006)  
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**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            2010

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

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)
		NORTHERN INDIANA (IWX)
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR: MONTH                      YEAR
		SEPTEMBER              2010
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 4, 2010

*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 rainfall leading to abnormally dry conditions across the HSA...**

Rainfall totals were once again below the climatological normals during the month of September. Temperatures were once again above normal at both Fort Wayne and South Bend which continues a trend that had become established during the late summer months.

At Fort Wayne, the average high temperature was 77.4 degrees for the month. This was 2 degrees above the normal value of 75.4 degrees. There were 3 days in which the high temperature was 90 degrees or higher. This was more than double the average of 1.2 days. The average low temperature was 53.8 degrees. This was 1 degree above the normal value of 52.8 degrees. This resulted in an average temperature of 65.6 degrees. This was 1.5 degrees above the normal value of 64.1 degrees. Rainfall was about an inch and a half below normal. For the month, only 1.36 inches of rain was reported at the Fort Wayne airport. This was 1.45 inches below the normal value of 2.81 inches. The greatest 24-hour rainfall total was 0.69 inches which occurred from the 1<sup>st</sup> to the 2<sup>nd</sup>.

Conditions at South Bend were comparable to those at Fort Wayne. The average high temperature was 73.9 degrees. This was 0.3 degrees above the normal value of 73.6 degrees. There were 2 days in which the high temperature was 90 degrees or warmer. This was more than double the average of 0.9 days. The average low temperature was 53.9 degrees for the month. This was 0.6 degrees above the normal value of 53.3 degrees. This resulted in an average temperature for the month of 63.9 degrees which was 0.5 degrees above the normal value of 63.4 degrees. Precipitation at South Bend was also well below normal for the month. There was 2.13 inches reported at the airport which was 1.66 inches below the normal value of 3.79 inches. The greatest 24-hour rainfall total was 0.96 inches which occurred from the 2<sup>nd</sup> to the 3<sup>rd</sup>.

**...Rivers remained well below flood stage during the month...**

With rainfall well below normal for the month, rivers remained well below flood stage during the month of September. While flows were low, they remained above record low levels during the month. The low river levels on the Saint Joseph River (MI) aided in the draw down of the river so that AEP could perform repairs/maintenance on the Twin Branch Dam.

**...Near drought conditions across the northern Indiana HSA...**

With rainfall totals well below normal, soil moisture values continue to decline. According to the latest Drought Monitor, nearly the entire IWX HSA is experiencing Abnormally Dry (D0) conditions. The only area experiencing normal soil moisture levels is the extreme southwest part of our area.

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 (04-2006)  
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**U.S. DEPARTMENT OF COMMERCE**  
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**NATIONAL WEATHER SERVICE**

Hydrologic Service Area (HSA)  
 NORTHERN INDIANA (IWX)

**FLOOD STAGE REPORT**

REPORT FOR:  
 MONTH            YEAR  
 SEPTMEBER    2010

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

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)
		NORTHERN INDIANA (IWX)
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR: MONTH                      YEAR
		OCTOBER                      2010
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 15, 2010

*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 .

### **...Warmer than normal temperatures and below normal precipitation again...**

October saw area temperatures once again warmer than the climatological normals while precipitation values were below normal. As a result...drought conditions were strengthening across portions of the northern Indiana Hydrological Service Area. An additional result was river levels that were close to record low levels.

At the Fort Wayne airport, the average high temperature was 67.9 degrees. This was 4.9 degrees above the normal value of 63 degrees. The average low temperature was 42.3 degrees which was a half degree above the normal value of 41.8 degrees. This resulted in an average temperature of 55.1 degrees which was 2.7 degrees above the normal value of 52.4 degrees. For the month, there was only 0.58 inches of rainfall. This was more than 2 inches below the normal value of 2.63 inches. The greatest 24-hour rainfall total was 0.27 inches on the 26<sup>th</sup>. There was no snow reported during the month.

At South Bend, temperatures were still above normal, but not quite as warm as those at Fort Wayne. The average high temperature was 65.6 degrees. This was 3.8 degrees above the normal value of 61.8 degrees. The average low temperature was actually slightly below normal. The average low was 42.1 degrees which was 0.2 degrees below the normal value of 42.3 degrees. This resulted in an average temperature of 53.9 degrees which was 1.8 degrees above the normal value of 52.1 degrees. Rainfall total for the month was 1.87 inches. This was 1.40 inches below the normal value of 3.27 inches. The greatest 24-hour total was 0.79 inches which occurred on the 24<sup>th</sup> to the 25<sup>th</sup>.

### **...Several rivers near all time low levels...**

There were a number of rivers in the IWX HSA that were at or near record low levels during the first week of the month. The following table is a list of river sites that were at or near record low levels.

Bean Creek at Powers on the 7<sup>th</sup>  
 Cedar Creed at Auburn on the 1<sup>st</sup>  
 Eel River at North Manchester on the 1<sup>st</sup>  
 Fish Creek at Hamilton on the 7<sup>th</sup>  
 Little River above Huntington on the 7<sup>th</sup>

Maumee River at Fort Wayne on the 5<sup>th</sup>  
Maumee River at New Haven on the 6<sup>th</sup>  
Maumee River near Defiance on the 7<sup>th</sup>  
Maumee River at Napoleon on the 7<sup>th</sup>  
North Branch of the Elkhart River at Cosperville on the 7<sup>th</sup>  
Pigeon Creek at Angola on the 6<sup>th</sup>  
Pigeon River near Scott on the 7<sup>th</sup>  
St. Joseph River (MI) at Three Rivers on the 5<sup>th</sup>  
St. Joseph River (MI) at Mottville on the 1<sup>st</sup>  
St. Joseph River (MI) at Elkhart on the 3<sup>rd</sup>  
St. Joseph River (MI) at Niles on the 6<sup>th</sup>  
Tiffin River at Stryker on the 7<sup>th</sup>  
Tippecanoe River at Ora on the 7<sup>th</sup>  
Wabash River near Bluffton on the 8<sup>th</sup>  
Yellow River at Plymouth on the 7<sup>th</sup>

**...Drought conditions strengthening across the region...**

The above normal temperatures and below normal precipitation across the region has led to increasing drought conditions over the IWX HSA. The Drought Monitor as of November 2, 2010 has the entire IWX HSA in D0 or D1 drought conditions. D2 drought conditions were located across central portions of Indiana...and without significant precipitation this month, D2 conditions could make its way into portions of the Northern Indiana HSA.

**NWS Form E-3**  
 (04-2006)  
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**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            2010

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

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)
		NORTHERN INDIANA (IWX)
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR: MONTH                      YEAR
		NOVEMBER                  2010
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 6, 2010

*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 .

### **...Drought conditions ease slightly over the HSA in November...**

Slightly above normal rainfall occurred across portions of the northern Indiana HSA last month and this led to some areas' drought conditions easing slightly. Above normal rainfall was confined to eastern parts of the area this month while western parts of the region were slightly below normal.

The Fort Wayne airport finally recorded above normal precipitation for the first time in several months. They also reported mean temperatures that averaged slightly above normal. The average high temperature was 52.9 degrees. This was nearly four and a half degrees above the normal value of 48.5 degrees. The average low temperature was 29.3 degrees. This was 3.4 degrees below the normal value of 32.7 degrees. This resulted in an average temperature for the month of November that was 41.1 degrees. This was half a degree above the normal value of 40.6 degrees. Precipitation was above normal values for the first time since June. For the month, 4.01 inches of rainfall was reported at the airport. This exceeded the normal value of 2.98 inches by 1.03 inches. The greatest 24-hour rainfall total was 1.92 inches. This fell on the 24<sup>th</sup> to the 25<sup>th</sup>. There was only a trace of snowfall reported at the airport. This was 3 inches below normal.

South Bend continued its run of below normal precipitation months while temperatures remained above normal for the month. The average high temperature was 51.1 degrees. This was 3.4 degrees above the normal high of 47.7 degrees. The average low temperature was 31.4 degrees. This was 1.2 degrees below the normal of 32.6 degrees. This resulted in an average temperature of 41.3 degrees which was 1.2 degrees above normal. Precipitation remained below climatological normals during the month. There was 2.76 inches of liquid equivalent precipitation during the month. This was 0.63 inches below the normal value of 3.39 inches. The greatest 24-hour total was 0.87 inches on the 22<sup>nd</sup>. There was 1.3 inches of snow reported during the month which occurred on the 5<sup>th</sup>. This was 6.4 inches below the normal value of 7.7 inches.

### **...No flooding across the northern Indiana HSA...**

Although there were some areas that experienced above normal precipitation during the month, there was no flooding reported at any river location this month. There was a significant rise on the upper

portions of the Wabash River late in the month. The Bluffton site reported river levels at just above the 7 foot action stage on the 26<sup>th</sup> and 27<sup>th</sup>. All river levels have since dropped to well below action level stages.

**...Drought conditions ease slightly last month...**

Drought conditions have improved across much of the northern Indiana HSA. Last month, nearly the entire region was under drought conditions D1. This month, only a small area in the central parts of the HSA remain in D1 conditions. The remainder of the area is in drought condition D0. This was taken from the latest Drought Monitor dated November 30, 2010.

**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      2010

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

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)
		NORTHERN INDIANA (IWX)
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR:
		MONTH                      YEAR DECEMBER                  2010
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 4, 2011

*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 .

### ...Colder and drier than normal conditions across the northern Indiana HSA...

Weather conditions across the northern Indiana were colder and drier than normal values. Temperatures were on the order of 4 to 6 degrees colder than climate normals. The trend of less than normal water equivalent precipitation continued into the month of December. However, snowfall totals were slightly above normal for the month.

At the Fort Wayne airport, the average high temperature was 30.1 degrees. This was more than five and a half degrees below the normal value of 35.8 degrees. Meanwhile, the average low temperature was 17.2 degrees. This was 5.1 degrees below the normal value of 22.3 degrees. This resulted in an average temperature for the month of 23.7 degrees. This was 5.3 degrees below the normal value of 29.0 degrees. There were 22 days in which the high temperature for the day was below 32 degrees. Precipitation for the month continued below normal values. There was just 1.08 inches of liquid equivalent precipitation for the entire month. This was 1.69 inches below the normal value of 2.77 inches. The greatest 24-hour liquid equivalent amount was 0.44 inches from the 11<sup>th</sup> to the 12<sup>th</sup>. Of this precipitation, there was 10.9 inches of snow reported at the airport. This was 2.6 inches above the normal value of 8.3 inches. The greatest 24-hour amount was 3.2 inches. The greatest snow depth was 3 inches on the 10<sup>th</sup> and 13<sup>th</sup>.

Conditions at the South Bend airport were similar to those at Fort Wayne. The average high temperature for the month was 30.4 degrees. This was 5.2 degrees below the normal value of 35.6 degrees. The average low was 19 degrees. This was 2.7 degrees below the normal value of 21.7 degrees. This resulted in a mean temperature for the month of 24.7 degrees which was 4 degrees below the normal value of 28.7 degrees. Liquid equivalent precipitation for the month was estimated to be 1.84 inches. This was 1.25 inches below the normal value of 3.09 inches. The greatest 24-hour total was 0.47 inches from the 11<sup>th</sup> to the 12<sup>th</sup>. Nearly two feet of snow (23.6 inches) fell during the month. This was 4.4 inches above the normal value of 19.2 inches. The greatest 24-hour total was 4.6 inches. The greatest snow depth was 5 inches which occurred on the 7<sup>th</sup> and 14<sup>th</sup>.

### ...River levels remain rather low across the region...

There was little change in river levels across the area as precipitation remained well below normal values. The limited rainfall did bring rivers up slightly during the first part of the month, but with little in the way of rainfall/snowmelt, rivers returned to their previous low levels by the middle of the month.

**...Drought conditions continue across the entire IWX HSA...**

According to the latest Drought Monitor, much of the entire northern Indiana HSA remained in at least drought level 0 conditions. A small area of north central and northeast Indiana continued with drought level 1 conditions.

**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  
 DECEMBER        2010

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