Advanced Hydrologic Prediction
Service - AHPS

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www.srh.weather.gov
Advanced Hydrologic Prediction Service - AHPS

- Enhance current services and products through:
  - Probabilistic Forecasts
  - Graphical Products
  - Flood Inundation Mapping

www.srh.weather.gov
AHPS Basic Services

- AHPS Webpage at Forecast Office (WFO) level
  - Hydrograph
  - River Impacts

- Probabilistic forecasts
  - Graphical Products
    - Created by RFC
    - Products located on WFO AHPS web-page

www.srh.weather.gov
To Begin

- Go to NWS webpage web page
  - Weather.GOV
- Or Lake Charles Webpage at
  - www.srh.noaa.gov/lch
Click on Water Tab
National Hydrologic Assessment is Now Available: Above Average Flood Risk in Nation’s Midsection, Northeast and Parts of the West

3798 Total Gauges
46 Locations in Flood

- 235 Gauges: Observations older than 24 hours
- 15 Gauges: Out of Service

Hydrologic Resources
- Text Products
- River Forecast Centers
- About AHPS
- Partners

Additional Resources
- National Significant River Flood Outlook
- U.S. Geological Survey Streamflow Information
- Snow Information
AHP Downloads

While the AHP Displays allow for the use of interactive toggles with the image, AHPs data can also be utilized within GIS software. This page links to "Shapefiles" and "KMZ" files which are compressed "KML" files compatible with several GIS software applications. A list of some of the software applications that support Shapefiles and KML can be found here. Or, visit the NWS website Standards Description Website which explains KML in more detail.

Shapefiles and KMZ Files

- **Shapefile (Observed)** (250k) Updated every 15 minutes
- **Shapefile (Forecast)** (173k) Updated every 15 minutes
- **KMZ (Observed)** (356k) Updated every 15 minutes
- **KMZ (Forecast)** (345k) Updated every 15 minutes

**RSS**

- **AHPS RSS**
Click on map to drill down

National Hydrologic Assessment is Now Available: Above Average Flood Risk in Nation's Midsection, Northeast and Parts of the West

3604 Total Gauges
40 Locations in Flood

1 Gauges: Major Flooding
3 Gauges: Moderate Flooding
ALERT!! A Flood Warning is in effect for portions of the area. View all valid statements/warnings or choose a specific point or river to get the details for that location.

Weather Forecast Office Lake Charles, LA
NOTE: Graphical forecasts are not available for the Vermillion River at Lafayette, Surrey Street. During times of high water, forecast crest information can be found in the text products.
### Flood Impacts

24.9 THE RIVER IS AT ITS FLOOD OF RECORD. WATER SEVERAL FEET DEEP IN PORTIONS OF CROWLEY, LAFAYETTE, KAPLAN AND OTHER NEARBY COMMUNITIES. PORTIONS OF HWY 167 BETWEEN LAFAYETTE AND ABBEVILLE UNDER 5 FEET OF WATER.

18.4 THE RIVER IS AT ITS 100 YEAR FLOOD LEVEL. MAJOR FLOODING WILL OCCUR.

16.0 WIDESPREAD MAJOR FLOODING WILL OCCUR.

14.6 WIDESPREAD MODERATE FLOODING WILL OCCUR.

14.0 MODERATE FLOODING IN LAFAYETTE, WITH SIGNIFICANT FLOODING NEAR WHERE COULEES AND BAYOUS INTERSECT THE VERMILION RIVER.

13.5 FLOODING OF SOME YARDS NEAR THE RIVER WILL OCCUR. SIGNIFICANT FLOODING OF BEAVER PARK AND VERMILIONVILLE WILL OCCUR.

11.5 MINOR FLOODING OF BEAVER PARK AND VERMILIONVILLE NEAR THE RIVER WILL OCCUR.

10.0 MINOR FLOODING OF HEYMANN PARK OFF OF HIGHWAY 90 WILL OCCUR.

### About This Location

Latitude: 30.217200° N, Longitude: 91.992800° W, Horizontal Datum: NAD83

<table>
<thead>
<tr>
<th>River Stage Reference Frame</th>
<th>Gauge Height</th>
<th>Flood Stage</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>NWS stage</td>
<td>0 ft</td>
<td>10 ft</td>
<td>Interpreting hydrographs and NWS watch, warnings, and forecasts, and inundation maps</td>
</tr>
<tr>
<td>Vertical Datum</td>
<td>Elevation (gauge height = 0)</td>
<td>Elevation (gauge height = flood stage)</td>
<td>Elevation information source</td>
</tr>
<tr>
<td>NAVD88</td>
<td>-2.74 ft</td>
<td>7.26 ft</td>
<td>Survey grade GPS equipment, FEMA flood plain maps, newer USGS topographic maps</td>
</tr>
<tr>
<td>NGVD 29</td>
<td>N/A</td>
<td>N/A</td>
<td>Older USGS topographic maps, NGVD29 benchmarks</td>
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</table>
### Multiple data sources

<table>
<thead>
<tr>
<th></th>
<th>Topographic Maps</th>
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<tbody>
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<td>Older USGS topographic maps, NGVD29 benchmarks</td>
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<tr>
<td>MSL</td>
<td>Older USGS topographic maps, MSL benchmarks</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

**Other Data Sources:**

- Corps of Engineers (COE) Info for Lafayette, Surrey Street
- U.S. Geological Survey (USGS) Data and Site Info for Lafayette, Surrey Street

### Hydrologic Resources

- Text Products
- Past Precipitation
- Forecast Precipitation
- River Forecast Centers
- Lake Charles Hydrology page
- Inundation Mapping Locations

### Additional Resources

- Area Hydrographs
- Current river stages
- Snow Information

### Collaborative Agencies

The National Weather Service prepares its forecasts and other services in collaboration with agencies like the US Geological Survey, US Bureau of Reclamation, US Army Corps of Engineers, Natural Resource Conservation Service, National Park Service, ALERT Users Group, Bureau of Indian Affairs, and many state and local emergency managers across the country. For details, please [click here](http://example.com).
New! Subscribe to NWISWeb notifications

USGS 07386880 Vermilion River at Surrey St. at Lafayette, LA

PROVISIONAL DATA SUBJECT TO REVISION

Available data for this site

- Time-series: Real-time data

Data for this site provided through cooperative programs with the U. S. Army Corp of Engineers (New Orleans District) and the Bayou Vermilion District, Lafayette Parish.

This station managed by the Baton Rouge Field Office.
Hydrologic Text Information
Issued by NWS Lake Charles, LA

- **Flash Flood Warning**
  Issued when rapidly rising water poses an immediate hazard to life and property. [more info...]

- **Flash Flood Statement**
  Provides additional information on Flash Flood Warnings. [more info...]

- **Flood Warning**
  Issued when rising water will impact life and property. [more info...]

- **Flood Statement**
  Provides information on elevated streams or rivers, urban flooding, and updated or or cancellation information for Flood Watches or Warnings. [more info...]

- **Flood Watch**
  Issued to alert the public to the possibility of flooding. [more info...]

- **Hydrologic Outlook**
  Provides information on longer range conditions. [more info...]

- **River and Lake Summary**
  Daily observed and forecast river and lake conditions. [more info...]

- **Hydrologic Summary**
  Daily observed hydrologic conditions. [more info...]

- **Hydrologic Statement**
  Hydrologic forecasts and related information. [more info...]

Last Issued: 454 PM CDT THU MAY 15 2008

Last Issued: 950 AM CDT TUE MAY 27 2008

Last Issued: 1019 AM CDT TUE MAY 27 2008
Weather Forecast Office Lake Charles, LA

Vermilion River

Select the points: and Select the information you want:

- at Lafayette, Surrey Street
- All
- Stage/Forecast Graph (Description)
- Stage/Forecast Text
- Flood Impacts
- Location Map
- Record Crest History
- Low Flow
- Low Water Impacts
- Low Water Records
- XML

Make my River Page!  Clear

Return to Area Map

Collaborative Agencies

The National Weather Service prepares its forecasts and other services in collaboration with agencies like the...
at Lafayette, Surrey Street
Flood Stage: 10 Feet
Latest Stage: 8.97 ft at 02:15 UTC 05/28

Complete information about the Vermilion River at Lafayette, Surrey Street available from NWS Lake Charles, LA.

VERMILION RIVER AT LAFAYETTE, SURREY STREET GAGE

Latest observed value: 8.98 ft at 8:15 PM CDT 27-May-2008. Flood Stage is 10.0 ft.

Flow Stage:
- 12.36 ft
- Major Stage: 16.0 ft
- Moderate Stage: 14.0 ft
- Flood Stage: 10.0 ft

Site Time (CDT)

Graph Created (8:09pm May 27, 2008) — Observed

VLSL! (plotting HGRG) "Gage 0" Datum: n/a

Observations courtesy of the US Geological Survey

NOTE: Graphical forecasts are not available for the Vermilion River at Lafayette, Surrey Street. During times of high water, forecast crest information can be found in the text products.
Click here for Precipitation interface for Lake Charles, LA.
Lake Charles, LA (LCH): Current Month to Date Departure from Normal Precipitation
Valid at 5/27/2008 1200 UTC - Created 5/27/08 22:47 UTC

Inches
8
7
6
5
4
3
2
1
0
-1
-2
-3
-4
-5
-6
-7
-8

Map Overlay

Topo
Pcpn Amount
Counties

1. Timeframe
- Current Data
- Archive: Month/Year
- Archive: Daily

2. Product
- Observed Normal
- Departure from Normal
- Percent of Normal

3. Location
- States
- NWS RFC/Regions
- NWS WFOs

4. Units
- English
- Metric

Update URL for Bookmarking
Zoom Out to CONUS
Last Update: 05/27/2008 2220 GMT

(1) Choose Format
- Shapefile
- netCDF

(2) Select Download
- Continental U.S. & Puerto Rico
- Legend File

(3) Select Date
- May
- 27
- 2008

(4) Press the "Download" Button

File Name | Files Included | Size
--- | --- | ---
nws_precip_20080527.tar.gz | nws_precip_20080527.shp, nws_precip_20080527.shx, nws_precip_20080527.dbf, nws_precip_20080527.prj | Approx 0.5 to 7.0 MB

General Information

The precipitation data are quality-controlled, multi-sensor (radar and rain gauge) precipitation estimates obtained from National Weather Service (NWS) River Forecast Centers (RFCs). The original data are in XMRG format and projected in the Hydrologic Rainfall Analysis Project (HRAP) grid coordinate system, a polar stereographic projection true at 60°N / 105°W. Our software reads each participating RFC's XMRG file and grabs the 24-hour precipitation estimate for each HRAP grid cell.

Use the form above to download these files. Alternatively you can download a program called wget that mimics ftp capability. Due to increased web security, the anonymous FTP server is no longer available.
Possible Enhancements For the Vermilion

- Adding Graphical Forecast Information
- Additional Forecast Points ex Carencro/Perry
- Flood Inundation maps