Storm Analysis

As of 8/23/2018 00:00 HST water levels across the Hawaiian Islands remain slightly elevated and generally range around half a foot above normal tide levels. Winds of 10 - 20 knots are being observed at most stations with gusts over 20 knots measured on the islands of Hawai‘i (Hilo) and Maui (Kahului) over the past 6 hours. Barometric pressure has begun to slowly decrease across the region.
Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional real-time and historical inundation information for select stations affected by this storm, please visit Coastal Inundation Dashboard. For additional data, please see the Center for Operational Oceanographic Products & Services website.

For more information or archived products and reports, please visit the Storm QuickLook Homepage.

Analyst: PFF

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Select Central Pacific Hurricane Center Advisory Information:

BULLETIN
Hurricane Lane Advisory Number 35
NWS Central Pacific Hurricane Center Honolulu HI EP142018
1100 PM HST Wed Aug 22 2018

...DANGEROUS HURRICANE LANE TRACKING TOWARD THE HAWAIIAN ISLANDS...

SUMMARY OF 1100 PM HST...0900 UTC...INFORMATION

LOCATION...16.3N 156.9W
ABOUT 235 MI...380 KM SSW OF KAILUA-KONA HAWAII
ABOUT 350 MI...565 KM S OF HONOLULU HAWAII
MAXIMUM SUSTAINED WINDS...145 MPH...230 KM/H
PRESENT MOVEMENT...NW OR 315 DEGREES AT 7 MPH...11 KM/H
MINIMUM CENTRAL PRESSURE...939 MB...27.73 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

None.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...
* Oahu
* Maui County...including the islands of Maui, Lanai, Molokai and Kahoolawe
* Hawaii County

A Hurricane Watch is in effect for...
* Kauai County...including the islands of Kauai and Niihau

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. A warning is typically issued 36 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous. Preparations to protect life and property should be rushed to completion.
A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

Interests in the Northwestern Hawaiian Islands should monitor the progress of Hurricane Lane.

For storm information specific to your area, please monitor products issued by the National Weather Service office in Honolulu Hawaii.

DISCUSSION AND OUTLOOK
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At 1100 PM HST (0900 UTC), the eye of Hurricane Lane was located by satellite and radar near latitude 16.3 North, longitude 156.9 West. Lane is moving toward the northwest near 7 mph (11 km/h). This general motion is expected through Thursday, with a gradual turn toward the northwest. On Friday, a turn toward the north is anticipated as Lane's forward motion slows even more. A turn back toward the west is expected on Saturday. On the forecast track, the center of Lane will move very close to or over the main Hawaiian Islands tomorrow through Friday.

Maximum sustained winds remain near 145 mph (230 km/h) with higher gusts. Lane is a powerful category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some weakening is forecast during the next few days, but Lane is expected to remain a hurricane as it approaches the islands.

Hurricane-force winds extend outward up to 40 miles (65 km) from the center and tropical-storm-force winds extend outward up to 140 miles (220 km).

The estimated minimum central pressure is 939 mb (27.73 inches).

HAZARDS AFFECTING LAND
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WIND: Tropical storm conditions are expected on portions of the Big Island beginning early Thursday morning, with hurricane conditions expected in some areas Thursday afternoon or Thursday night. Tropical storm conditions are expected to begin over portions of Maui County on Thursday, with hurricane conditions expected in some areas Thursday night into Friday. Tropical storm conditions are expected to begin on Oahu late Thursday night, with hurricane conditions expected Friday into Friday night.

RAINFALL: Rain bands from Hurricane Lane will continue to overspread the Hawaiian Islands tonight and Thursday. Excessive rainfall associated with Lane will impact the Hawaiian Islands into the weekend, leading to significant and life-threatening flash flooding and landslides. Lane is expected to produce total rain accumulations of 10 to 20 inches, with localized amounts in excess of 30 inches over the Hawaiian Islands.

SURF: As Lane is slow-moving, large swells generated by Lane will severely impact the Hawaiian Islands over the next couple of days. These swells will produce very large and damaging surf along exposed west and south facing shorelines. A prolonged period of high surf will likely lead to significant coastal erosion.

STORM SURGE: The combination of a dangerous storm surge and large breaking waves will raise water levels by as much as 2 to 4 feet above normal tide levels along south and west facing shores near the center of Lane. The surge will be accompanied by large and destructive waves.

NEXT ADVISORY
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Next intermediate advisory at 200 AM HST.
Next complete advisory at 500 AM HST.

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Forecaster Birchard

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Last Observed Sample: 08/22/2018 23:42 (HST). Data relative to MHHW
Observed: -0.51 ft. Predicted: -1.11 ft. Residual: 0.60 ft.
Historical Maximum Water Level: Jul 24 2017, 1.54 ft.
Next High Tide: 08/23/2018 01:07 (HST), -0.96 ft.

Wind Speed: 10 knots  Gusts: 14 knots  Direction: 239° T
NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI

Barometric Pressure

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<tr>
<th>Pressure (mb)</th>
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<tbody>
<tr>
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<tr>
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Barometric Pressure: 1013.6 mb

Last Observed Sample: 08/22/2018 23:42 (HST)

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NOAA/NOS/CO-OPS 1617433 Kawaihae, HI

Preliminary Water Level, relative to Mean Higher High Water (MHHW)

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<thead>
<tr>
<th>Height in Feet (MHHW)</th>
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<tbody>
<tr>
<td>-2.5</td>
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Preliminary Water Level: -0.97 ft.  Predicted: -1.52 ft.  Residual: 0.55 ft.

Last Observed Sample: 08/22/2018 23:42 (HST). Data relative to MHHW

Historical Maximum Water Level: Dec 15 2016, 1.33 ft.

Next High Tide: 08/23/2018 02:16 (HST), -1.18 ft.
Wind Speed / Gusts / Direction

Last Observed Sample: 08/22/2018 23:42 (HST)

Wind Speed: 1 knots Gusts: 2 knots Direction: 308° T

Barometric Pressure

Last Observed Sample: 08/22/2018 23:42 (HST)
Barometric Pressure: 1011.0 mb
NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI

Preliminary Water Level, relative to Mean Higher High Water (MHHW)

Last Observed Sample: 08/22/2018 23:42 (HST). Data relative to MHHW

Observed: -0.51 ft. Predicted: -0.93 ft. Residual: 0.42 ft.
Historical Maximum Water Level: Aug 21 2017, 1.33 ft.
Next High Tide: 08/23/2018 00:19 (HST), -0.91 ft.

Last Observed Sample: 08/22/2018 23:42 (HST)
Wind Speed: 21 knots Gusts: 28 knots Direction: 45° T
NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI

Barometric Pressure

Barometric Pressure: 1013.0 mb

NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI

Preliminary Water Level, relative to Mean Higher High Water (MHHW)

Last Observed Sample: 08/22/2018 23:42 (HST). Data relative to MHHW

Observed: -0.41 ft. Predicted: -1.00 ft. Residual: 0.59 ft.

Historical Maximum Water Level: Aug 21 2017, 1.47 ft.

Next High Tide: 08/23/2018 00:12 (HST), -0.98 ft.
NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI

Wind Speed / Gusts / Direction

Wind Speed: 10 knots  Gusts: 15 knots  Direction: 65° T

Barometric Pressure

Last Observed Sample: 08/22/2018 23:42 (HST)
Barometric Pressure: 1014.8 mb
Last Observed Sample: 08/22/2018 23:18 (HST). Data relative to MHHW

Observed: -0.93 ft. Predicted: -1.35 ft. Residual: 0.42 ft.

Historical Maximum Water Level: Sep 11 1992, 1.47 ft.

Next High Tide: 08/23/2018 02:13 (HST), -0.99 ft.

Last Observed Sample: 08/22/2018 23:18 (HST)

Wind Speed: 2 knots Gusts: 5 knots Direction: 93° T
NOAA/NOS/CO-OPS 1612340 Honolulu, HI

Barometric Pressure

Last Observed Sample: 08/22/2018 23:18 (HST)
Barometric Pressure: 1014.1 mb

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI

Last Observed Sample: 08/22/2018 23:42 (HST). Data relative to MHHW
Observed: -1.01 ft. Predicted: -1.10 ft. Residual: 0.09 ft.
Historical Maximum Water Level: Sep 11 1992, 3.15 ft.
Next High Tide: 08/23/2018 01:50 (HST), -0.91 ft.
NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI

Last Observed Sample: 08/22/2018 23:42 (HST)
Wind Speed: 14 knots  Gusts: 17 knots  Direction: 51° T

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI

Last Observed Sample: 08/22/2018 23:42 (HST)
Barometric Pressure: 1015.5 mb
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<th>Station Name</th>
<th>Date/Time</th>
<th>Observed Water Level</th>
<th>Predicted Tide</th>
<th>Residual Water Level</th>
<th>24 Hour Maximum Storm Tide</th>
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