Storm Analysis

As of 9/12/2018 12:00 HST, water levels across the Hawaiian Islands remain slightly elevated and range between 0.3 and 0.9 feet above normal tide levels. Data availability at Hilo, HI have resumed once a data transmission issue was resolved.
Winds are increasing on the islands of Oahu and Kauai, where winds are measuring between 15 to 25 knots with slightly higher gusts. Winds are decreasing on the Big Island of Hawaii and the island of Maui, where winds are now measuring between 10 to 15 knots with slightly higher gusts. Barometric pressure continues to slowly fall at most locations across Hawaii, with the exception of Hilo, HI where pressure is rising as Olivia continues to move westward.

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: CMF

Select Central Pacific Hurricane Center Advisory Information:

Tropical Storm Olivia Advisory Number 49
NWS Central Pacific Hurricane Center Honolulu HI EP172018
1100 AM HST Wed Sep 12 2018

...OLIVIA MAKES BRIEF LANDFALL OVER NORTHWEST MAUI AND THEN OVER LANAI AS IT MOVES WESTWARD...

WATCHES AND WARNINGS
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CHANGES WITH THIS ADVISORY:
None.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

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

Interests in the Northwest Hawaiian Islands should monitor the progress of Olivia.

A Tropical Storm Warning means that tropical storm conditions are expected or occurring somewhere in the warning area.

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 AM HST (2100 UTC), the center of Tropical Storm Olivia was located near latitude 20.9 North, longitude
157.1 West, which is just west of the island of Lanai. Olivia is moving toward the west near 15 mph. A turn toward the west-southwest will occur today, with a similar west-southwest motion expected through Friday.

Maximum sustained winds are near 45 mph (75 km/h) with higher gusts. Gradual weakening is forecast during the next 48 hours.

Tropical-storm-force winds extend outward up to 90 miles (150 km) from the center.

The estimated minimum central pressure is 1005 mb (29.68 inches).

HAZARDS AFFECTING LAND
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WIND: Tropical storm conditions are ongoing in Maui County. Tropical storm conditions are expected over Oahu this afternoon. Remember that wind gusts can be much stronger near higher terrain, and in the upper floors of high-rise buildings. Winds can also be especially gusty through gaps between mountains and where winds blow downslope.

RAINFALL: Showers will continue to increase over the main Hawaiian Islands today. Olivia is expected to produce total rainfall accumulations of 5 to 10 inches in some areas, with isolated maximum amounts of 15 inches possible, especially in higher terrain. This rainfall may produce life-threatening flash flooding. Nearly 8 inches of rain has already fallen over parts of Maui.

SURF: Large swells generated by Olivia will impact the main Hawaiian Islands through tonight. This will result in dangerously high and potentially damaging surf, mainly along exposed east facing shores.

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

Forecaster Wroe

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.

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

Last Observed Sample: 09/12/2018 11:54 (HST). Data relative to MHHW
  Observed: -1.14 ft.  Predicted: -1.86 ft.  Residual: 0.72 ft.
  Historical Maximum Water Level: Jul 24 2017, 1.54 ft.
  Next High Tide: 09/12/2018 16:53 (HST), -0.17 ft.

Wind Speed / Gusts / Direction

Last Observed Sample: 09/12/2018 11:54 (HST)
  Wind Speed: 19 knots  Gusts: 28 knots  Direction: 106° T
NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI

Barometric Pressure

Last Observed Sample: 09/12/2018 11:54 (HST)
Barometric Pressure: 1011.9 mb

NOAA/NOS/CO-OPS 1617433 Kawaihae, HI

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

Last Observed Sample: 09/12/2018 11:42 (HST). Data relative to MHHW
Observed: -1.15 ft. Predicted: -1.88 ft. Residual: 0.73 ft.
Historical Maximum Water Level: Dec 15 2016, 1.33 ft.
Next High Tide: 09/12/2018 17:58 (HST), -0.45 ft.
NOAA/NOS/CO-OPS 1617433 Kawaihae, HI

Wind Speed / Gusts / Direction

Last Observed Sample: 09/12/2018 11:42 (HST)
Wind Speed: 18 knots  Gusts: 21 knots  Direction: 288° T

NOAA/NOS/CO-OPS 1617433 Kawaihae, HI

Barometric Pressure

Last Observed Sample: 09/12/2018 11:42 (HST)
Barometric Pressure: 1010.1 mb
NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI

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

Last Observed Sample: 09/12/2018 11:42 (HST). Data relative to MHHW
- Observed: -0.98 ft.
- Predicted: -1.49 ft.
- Residual: 0.51 ft.
- Next High Tide: 09/12/2018 16:03 (HST), -0.14 ft.

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NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI

**Wind Speed / Gusts / Direction**

Last Observed Sample: 09/12/2018 11:42 (HST)
- Wind Speed: 15 knots
- Gusts: 21 knots
- Direction: 62° T
NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI

Barometric Pressure

Last Observed Sample: 09/12/2018 11:42 (HST)
Barometric Pressure: 1010.5 mb

NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI

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

Last Observed Sample: 09/12/2018 11:54 (HST). Data relative to MHHW
Observed: -0.48 ft. Predicted: -1.40 ft. Residual: 0.92 ft.
Historical Maximum Water Level: Aug 21 2017, 1.47 ft.
Next High Tide: 09/12/2018 16:08 (HST), -0.35 ft.
Last Observed Sample: 09/12/2018 11:54 (HST)
Wind Speed: 24 knots Gusts: 28 knots Direction: 57° T

Last Observed Sample: 09/12/2018 11:54 (HST)
Barometric Pressure: 1012.3 mb
NOAA/NOS/CO-OPS 1612340 Honolulu, HI

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

Last Observed Sample: 09/12/2018 11:42 (HST). Data relative to MHHW

- Observed: -1.01 ft.
- Predicted: -1.50 ft.
- Residual: 0.49 ft.

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

Next High Tide: 09/12/2018 17:59 (HST), -0.35 ft.

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NOAA/NOS/CO-OPS 1612340 Honolulu, HI

Wind Speed / Gusts / Direction

Last Observed Sample: 09/12/2018 11:42 (HST)

- Wind Speed: 11 knots
- Gusts: 19 knots
- Direction: 58° T
NOAA/NOS/CO-OPS 1612340 Honolulu, HI

Barometric Pressure

Barometric Pressure: 1011.3 mb

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI

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

Last Observed Sample: 09/12/2018 11:48 (HST).

Data relative to MHHW:
- Observed: -1.02 ft.
- Predicted: -1.37 ft.
- Residual: 0.35 ft.

Historical Maximum Water Level: Sep 11 1992, 3.15 ft.

Next High Tide: 09/12/2018 17:30 (HST), -0.36 ft.
Wind Speed / Gusts / Direction

Last Observed Sample: 09/12/2018 11:48 (HST)
Wind Speed: 14 knots Gusts: 19 knots Direction: 30° T

Barometric Pressure

Last Observed Sample: 09/12/2018 11:48 (HST)
Barometric Pressure: 1014.5 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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