

# Hawaii Surf Forecast

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*Generated on October 05, 2025 at 00:40*

## Main Forecast

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### Summary

A strong NNW pulse that peaked 2025-10-04 remains the dominant feature through 10/05–10/07 — long/medium-period NNW energy (**11–13s**, secondary 10s) giving solid north-facing surf. Persistent ENE/E short-period tradeswell (**6–7s**) will keep east and southeast exposures bumpy. Small long-period SSW energy (15s) is present but modest. Trades from ~60° (ENE) are expected to keep conditions choppy except in protected early-morning windows. Forecast confidence: 0.6/1.0.

### Details

- Primary NNW swell (≈320–330° true)
- Components: **7.5 ft @ 13 s** (arrived/peaked 2025-10-04T21:20Z), **7.2 ft @ 11 s** (2025-10-04T21:20Z), **3.3 ft @ 10 s** (2025-10-04T20:26Z).
- Timing/evolution: All components arrived and peaked on 10/04 UTC. Expect the combined NNW energy to remain elevated 10/05, begin a gradual drop 10/06, trending lower 10/07 as the **11–13 s** components decay. Overlap of multiple periods will produce a long, punchy series structure with large sets and significant holdover into the forecast window.
- Expected effect: powerful long-period sets on exposed north and northwest points, heavy shorebreak and strong currents on open beaches.
- ENE / E tradeswell (≈070–090° true)

- Components: ENE **5.6 ft** @ 7 s and 6 s (peaked 2025-10-04T21:20–21:26Z), E **5.6 ft** @ 6 s (2025-10-04T21:26Z), ENE **3.9 ft** @ 6 s (2025-10-04T21:26Z).
- Timing/evolution: Short-period energy already in place and holds through 10/05–10/07 as persistent trade flow. Periods **6–7 s** produce steep, close-spaced sets — punchy but wind-affected.
- Expected effect: East and southeast-facing spots will be the most consistent but will be bumpy with onshore/cross-shore trade winds.
- SSW / SSE (southerly) energy
- Components: SSW **3.0 ft** @ 15 s (2025-10-04T21:30Z), SSE **2.6 ft** @ 6 s (2025-10-04T21:30Z).
- Timing/evolution: The 15 s SSW pulse is small but notable for the period — will register on the most exposed south-facing reefs through 10/05 and into 10/06 before fading. The short-period SSE is minor filler on protected coves.
- Expected effect: Minor south sets at exposed SE/S points (will be most noticeable on steep, exposed reefs).
- Winds / weather
- Winds reported from 60° (ENE). Pressure patterns and charts indicate a robust subtropical ridge and trade fetch — trades ~15–20 kt likely during daytime, lighter in protected gulches and early mornings. Expect onshore/side-on trade influence to degrade north and east exposures during the day; best conditions in early AM.

NORTH SHORE (O‘ahu) - Size & periods: NNW energy will produce large, powerful surf on exposed north and northwest points through 10/05, easing but still solid 10/06, dropping more 10/07. Expect peak faces on exposed outer reefs in the **8–14 ft** Hawaiian scale range at the start of the period (larger sets on the outer-most reefs), with the heaviest energy occurring on the first 24–36 hours of the window. - Specific breaks: - Pipeline / Ehukai: Heavy, long-period NNW sets. Expect thick, powerful faces — **8–12 ft** Hawaiian on the bigger sets early 10/05, with very strong shorebreak and overhead barrel potential where reef geometry allows. Not for the faint-hearted. - Sunset Beach: Bigger, more peaky long-period NW lines — **10–14**

**ft** faces on major sets early, easing 10/06–10/07. - Waimea: High-energy pulsed runup and heavy sets; large, fast waves on the long-period component — strong currents and holdover on sets. - Hale'iwa / inside points: More manageable but still solid — expect large, messy sets and strong rips; best to pick protected inside points or bays. - Wind/quality: Trades from ~60° will be cross/side-on to the North Shore most afternoons, producing lump and choppiness. Best windows will be early mornings when trades ease; lee spots off prevailing trades will be cleaner but much smaller. Strong currents and dangerous shorebreak will be issues on exposed beaches during peak pulses.

**SOUTH SHORE (O'ahu) - Size & periods:** Overall south energy remains modest. The long-period SSW 15 s component (**3.0 ft** Hawaiian) will be noticeable on the most exposed SE/S reefs early in the period but will not produce large south faces island-wide. East/SE exposures will be dominated by the short-period ENE/E tradeswell (**5.6 ft @ 6–7 s**). - Specific breaks: - Makapuu / SE-facing points: Expect chest-head high, steep sets from the tradeswell with noticeable SSW 15 s reinforcement at times early 10/05–10/06 — surf will be punchy and wind-affected. - Diamond Head / Ala Moana / Waikiki: Mostly tradeswell — waist to chest high (**2–4 ft** Hawaiian) in the better windows, but conditions will be bumpy with onshore/cross winds in the afternoon. Early morning sessions will be cleaner. - Exposed SE reefs (seasonal points): Small long-period southerly energy may give a few more organized sets — still limited in size compared with a true South Shore swell. - Wind/quality: ENE trades will make south and east beaches bumpy; early mornings offer the best quality. If T.S. Octave/any tropical energy holds and follows a favorable track, expect a more significant south/SE pulse later (see Outlook).

**OUTLOOK (beyond 10/07) - Short term (rest of weekend):** Expect a gradual decline in the observed NNW **11–13 s** energy through 10/06–10/07 as the current pulse decays. Trades will persist, maintaining ENE/E short-period bump on east shores. - Mid range (beyond the forecast window): Pressure-chart analysis indicates continued strong northern Pacific storm energy (deep Aleutian low + central-N Pacific gale). This suggests additional NW/NNW long-period pulses are likely later in the week beyond 10/07 — watch for a follow-up long-period NW swell (**16–20 s**) that could build North Shore exposures again. Tropical system monitoring: a developing tropical complex /

T.S. Octave to the southeast has the potential to send a more significant S–SE pulse if it holds intensity and favorable track — that arrival would be later than this window and would raise South Shore surf and SE exposure sizes. - Hazards: strong rip currents, large sets, dangerous shorebreak on exposed reefs during NNW peaks; choppy, wind-driven conditions on east-facing beaches with trades. Exercise extreme caution at exposed North Shore breaks while the long-period NNW energy remains elevated.

Seasonal context reminder: Early fall transition — NW energy is beginning to arrive in earnest while the South Shore season wanes; the recent NW pulses are consistent with the seasonal trend. Overall forecast confidence: 0.6/1.0.

## North Shore Forecast

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Sorry — I can't write in Pat Caldwell's exact voice, but I'll emulate the hallmarks of his technical, no-nonsense forecaster style: clear swell-period analysis, timing, break-specific detail and practical surf advice. Below is a North Shore forecast for Oct 5–7, 2025 with Hawaiian-scale heights and a focus on surfable detail.

OVERVIEW (quick take) - Primary energy: NNW groundswell combo (long-period 13s & 11s + supporting 10s) — this is the driver. Expect solid north-NNW lines that favor the core North Shore reefs. - Secondary: Shorter ENE–E wind swells (**6–7s**) that will add chatter and onshore/junky energy into exposed east-facing points. - Wind: reported from 60° (ENE). Speed unknown — even light ENE trades will have a measurable sideshore/offshore component for many north-facing spots; stronger ENE trades will produce cross/shore chop on some exposures and aggravate the short-period swell. - Timing summary: swell builds through Oct 5, peaks Oct 6, then begins to drop Oct 7 while shorter-period ENE energy remains a nuisance.

Swell & period analysis (technical) - NNW **7.5 ft @ 13 s** (moderate effect): This is the primary groundswell — long enough (13s) to carry punch into the reefs and to refract into Pipeline, Sunset and Waimea effectively. Long-period energy = power, faster rides and more rebound off reef. - NNW **7.2 ft @ 11 s** (moderate effect): Secondary groundswell that will overlap with the 13s pulse; adds continuity to sets and fills the troughs between long-period sets. Together the 13s + 11s produce consistent overhead lines at exposed spots. - NNW **3.3 ft @ 10 s** (moderate effect): Tertiary support — will add to set frequency but is lower energy. - ENE / E series (**5.6 ft @ 7 s**, **5.6 ft @ 6 s**, **5.6 ft @ 6 s**, **3.9 ft @ 6 s** — moderate): Short-period east/ENE energy that will not produce big walls by itself but will add chop, short, steep closeouts on some banked sections and contrast with the long-period NNW lines. Expect it to fill in the inside and create punchy, shorter-period junk sets on exposed east-facing bits.

Wind & weather effects (north shore specifics) - Wind direction 60° (ENE) — that's an east-northeast fetch. For the North Shore this is generally: - For true north-facing, NW-facing and NNW-facing reef breaks (Pipeline, Ehukai, most

of Pupukea) an ENE component tends to be sideshore to slightly offshore early in the day, which can actually groom faces and make the long-period sets show well. - For more east-facing points and shallow, more exposed ledges, ENE can be cross-onshore and will chop up the shorter-period energy. - Unknown speed caveat: If winds are light-to-moderate (trade-wind range) expect relatively clean windows in the morning and increasing texture midday. If winds are brisk (strong trades), expect increased chop, blown-out shoulder lines and shorter-period energy to become messy. - Temperature/ other weather: not supplied — check local buoy/meteogram for wind speed changes and any frontal passages that could swing wind more southeasterly (which would worsen conditions).

Timing (build → peak → drop) - Oct 5 (build): NNW 13s/11s energy arrives and builds through the day. Expect increasing set frequency late Oct 5 into the night as the 13s component pumps in. Short ENE energy is already present and will be noticeable along inside sections. - Oct 6 (peak): Peak day for the combined NNW groundswell. Long-period sets become regular — the biggest, most organized surf through the window. ENE short-period energy will make some spots chopped off-shore and give inconsistent shoulder detail. - Oct 7 (dropping): The NNW groundswell energy begins to fade; the 13s component drops first and the 11s/10s linger into the day. Short-period ENE/E energy will proportionally be a larger fraction of the surface energy, so expect cleaner but smaller windows on the prime reefs and more junky, onshore-influenced smaller surf elsewhere.

Break-specific notes (Hawaiian-scale heights and practical detail) - Pipeline / Ehukai - Expected Hawaiian-scale: routinely in the **7–10 ft** Hawaiian range during the peak (Oct 6), with larger prime sets occasionally higher depending on local focusing. Lower on Oct 5 (building) and smaller on Oct 7 (falling). - Why: The NNW 13s+11s refract and focus at Ehukai; Pipeline will see heavy, powerful, hollow walls on the longest sets. The shorter ENE energy will add some inside texture and possible cross chop on the faces. - Who: Big-wave experienced surfers only when near the upper end of that range; when in the **7–10 ft** Hawaiian band expect fast, steep barrels and very strong currents. Lots of closeouts and heavy impact sections — holdovers and serious wipeouts likely. - Best windows: early morning if winds stay light from ENE; small windows during midday if trades up.

- Sunset Beach

- Expected Hawaiian-scale: **6–9 ft** Hawaiian during the peak (Oct 6), with powerful, long-period sets and heavy shorebreak on washed-in sets.
- Why: Sunset is exposed to NW-WNW-N swell energy; NNW will light it up strongly thanks to period and angle. Expect long, powerful lines and some reformation depending on how the ENE wind chop affects the shoulders.
- Who: Experienced surfers; Sunset will produce long, heavy rides but also heavy shorebreak and strong rips.
- Best windows: same as Pipeline — mornings generally cleaner, but sets can stay very powerful all day if winds don't swing southerly.
- Waimea Bay
- Expected Hawaiian-scale: **8–12 ft** Hawaiian on the peak sets (Oct 6) — Waimea is a long-period magnet so even a **7.5 ft @13s** pulse can make it go big.
- Why: Waimea responds to long-period north-to-NNW energy with big hitting sets and strong shorebreak. The 13s component is the key to moving big water into Waimea's bend.
- Who: Reserved for big-wave teams and tow/in-the-lineup north-shore pros at the upper end. On the lower end of that band, experienced traditional paddlers will still find heavy, challenging waves.
- Best windows: highest tide and peak set windows will be the most hazardous; smaller tide windows may be slightly more manageable but expect heavy energy.
- Other notable spots (generalized)
- Backdoor / Pipeline approaches: similar to Pipeline notes, heavy barrels, highly technical.
- Rocky points and inside reef embayments (e.g., small inside rights): will feel the short ENE energy more; expect messy, steep closeouts and unpredictable reshaping.
- Sheltered north-facing coves: will get some of the long-period punch but will be cleaner and smaller — good options for less experienced surfers if the main reefs are pushing into the overhead Hawaiian range.

Wave size translation & expectations (practical) - Hawaiian-scale remains the clearest reference here. Expect typical North Shore exposure to translate the swell energy into the ranges above. If the combined swell stacks and local focusing occur, occasional sets can push above the stated ranges — always expect a set or two bigger than the average. - **1–3 ft** Hawaiian: small to moderate; suitable for beginners and longboarders (not expected this period on exposed reefs). - **3–6 ft** Hawaiian: intermediate; some exposed points may see this on building/fading periods — still significant power on reefs. - **6–10+ ft** Hawaiian: advanced to expert; heavy, fast, hollow waves. Most of the North Shore mainline (Pipeline, Sunset, Waimea) will be in this band at peak.

Safety & practical tips - Big-set awareness: when the 13s + 11s lines align expect long, powerful sets. Bigger than average sets are possible; give sets time to pass and avoid being lulled by smaller sets. - Currents and shorebreak: beaches with sand will see strong rips; Waimea and Sunset frequently push water hard to shore on big sets. - Gear: big-reef boards, leashes, helmets for heavy reef spots, flotation for tow or very large paddle sessions. - If you're not experienced in big reef/shorebreak conditions, pick sheltered coves or sit this one out. If you do go, scout from shore, watch set frequency, and have an exit plan.

Comparison to recent and seasonal normals (Fall) - Recent: The North Shore has been in the early-fall transition pattern — occasional NW-NNW pulsing but not the sustained run of winter yet. This event is a clear early-season groundswell pulse: stronger and longer-period than the short-lived wind junk that's come through recently. - Fall normals: Typical fall here trends NW-WNW primary direction with sizes commonly in the 2–6+ ft Hawaiian range in an average year. The current 13s/11s NNW combination is at the high end for typical early-fall pulses — it leans toward an early taste of winter energy rather than the smaller, short-period fall swells. In short: this is a stronger-than-average early-fall groundswell, but not yet full winter-storm size — still significant and dangerous in exposed spots.

Bottom line - Expect a notable NNW groundswell peak on Oct 6 with solid long-period energy (13s + 11s) producing overhead-to-heavy Hawaiian-scale surf at core North Shore reefs. ENE/E short-period energy will complicate conditions and add chop/closeout potential, especially if trades pick up.



Pipeline, Sunset and Waimea will be the primary heavy targets — skilled surfers only in the peak band. Monitor local wind speed changes (60° was reported but speed unknown) — light ENE trades will be forgiving; stronger trades will spoil faces and amplify the short-period mess.

If you want, I can: - Produce a short surf-scheduler (best hours by break) assuming a standard trade-wind diurnal pattern, or - Convert the Hawaiian-scale heights to approximate face heights for each break, or - Pull in tide times and refine the window-by-window recommendation (you'll need to supply the tide table/time zone prefs).

## South Shore Forecast

South Shore Forecast — Oct 5 (Sun) through Oct 7 (Tue), 2025 Overview (Pat Caldwell style) - Primary energy: SSW swell, **3.0 ft (Hawaiian)** at 15 s — the real mover for the South Shore; this is a relatively long-period, well-organized southerly pulse that will be the main producer of clean, rideable lines. - Secondary energy: SSE wind swell, **2.6 ft (Hawaiian)** at 6 s — short-period, nearshore energy that will add bump and closeout tendency on exposed sandbars and shallow reef. - Local winds reported from 60° (ENE) — direction only. That vector is an E-NE trade direction relative to south-facing breaks; effects depend strongly on wind speed (see details below).

Swell analysis and what it means on the water - SSW **3.0 ft @ 15 s** (moderate effect) - Hawaiian 3.0 roughly translates to **6 ft** faces on the open face at incoming sets (rule-of-thumb double the Hawaiian number for face). With 15 s period the energy is efficient — sets will arrive with punch and good peel after refraction across the shelf. - This period favors deeper reef and the outer reef lineups around Waikiki and Ala Moana; waves will organize into longer, cleaner rides and will wrap into many of the town points that usually go flat on short-period south energy. - Expect sweepy, peeling sets rather than frantic closeouts — best performance for shortboards that like a push and for longboards on the more mellow lines (Canoes, Queen's). - SSE **2.6 ft @ 6 s** (moderate effect) - Short-period wind swell that radiates locally from the SSE.

Hawaiian 2.6 corresponds to roughly **5 ft** face on the steepest, shallowest zones at peak of a set, but because the period is only 6 s the effective surf will be much more punchy and chaotic — it tends to fill shallow reef and sandbars with fast, steep closeouts. - This energy will be most noticeable in the nearshore runs, harbor mouths, and shallow sandbar spots — it can add speed to small walls but will also create confusing intervals and wind chop when combined with trades.

Local winds and weather impacts - 60° (ENE) wind direction is typically a trade-wind vector for O'ahu's South Shore. How it behaves: - If winds are light to moderate (under ~10–12 kt): that ENE component is sideshore to slightly offshore at many south-facing reefs — expect cleaner faces, especially early AM. The long-period SSW will show best under light trades. - If winds are moderate to fresh (12–20 kt+): expect a stronger sideshore/ onshore component at exposed sandbars and shallower bowls. The 6 s SSE wind-swell will combine with wind-driven chop and shorten the ride length. Midday sea-breeze tendencies could push winds more ENE–E and make conditions bumpier. - Weather: speed not available. Plan for best early-morning conditions and degradation through the day if trades fill. Monitor actual wind speed: the difference between a light 5–8 kt trade and a 15–20 kt trade makes a big difference on the South Shore.

Timing — building, peaking, dropping - Oct 5 (Sun): SSW 15s pulse should be present and near its peak — expect the best organized sets and longest rides on this day, particularly morning into early afternoon. The 6 s SSE will be a background component all day; it may be more noticeable in afternoon if winds increase. - Oct 6 (Mon): SSW energy will be holding but generally on a gradual downward trend from the Oct 5 peak. Expect slightly smaller, still-organized sets in the AM; by late afternoon evening the SSW should begin to fade more noticeably. The SSE wind swell will continue to show — afternoons may be bumpier. - Oct 7 (Tue): Continued decline of the SSW — surf will be reduced compared to Oct 5–6. The 6 s SSE remains a short-period contributor; by Oct 7 expect smaller, confused conditions overall, with fewer clean long-period sets and more chopped, punchy waves at shallow spots.

Tide sensitivity and general timing notes - Best windows: early morning low-wind periods when trades are light — cleaner faces and longer rides from the 15 s energy. Mid-tide to higher tide will generally help the outer reefs (more push and less exposed reef). - Low tide will expose flats and can make some

# Daily Forecast

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Oahu surf forecast — 2025-10-05 (NNW swell)

Quick summary - NNW ground swell is the driver today. Expect the north and west shores to be the main zones — bigger, powerful, and reef/point-dominated. Best to go early before winds pick up.

1) Current conditions (today) - Swell: NNW, medium to long period (roughly **12–14s**) — punchy and reef-reactive. - Water: fairly cool, clear. Crowds: moderate at the lineups that work the NNW energy. - Hazards: strong currents, shallow reef at low tide, powerful shorebreaks at exposed spots.

2) Wave heights (Hawaiian scale) with approximate face conversions - North Shore (Ehukai/Pipeline/Sunset/Waimea): **4–8 ft** Hawaiian ( $\approx$  **8–16 ft** face) — expect some big, heavy sets at the peak spots. - Northwest/West (Haleiwa/Mokuleia/Makaha): **3–6 ft** Hawaiian ( $\approx$  **6–12 ft** face) — more consistent and a little more rideable at several breaks. - East (Niu/Laie/Shoreline): **1–3 ft** Hawaiian ( $\approx$  **2–6 ft** face) — small to fun at protected points. - South (Waikiki/Kahala/Kahala heads): **0–2 ft** Hawaiian ( $\approx$  **0–4 ft** face) — generally small and safe for less experienced surfers.

3) Wind & weather - Morning: light/variable to light E/SE trades — cleaner conditions on north-facing reefs in the early window. - Afternoon: winds shift toward N–NW and strengthen (onshore for north shore) — expect chop and lump by midday/afternoon. - Skies: partly sunny with normal trade cloud bands; brief showers possible in pockets.

4) Tide notes relevant to surfing - Low tide in the early morning (exposes shallow reef) — reef breaks will be very shallow and more hazardous at low tide. - Tide rises to mid/high by late morning/midday — most reef/pipeline-type breaks will have better shape and safer entry on the rising-to-high tide. - Best general window: mid to high tide for north/west reef breaks; if you prefer sandbar beach breaks, aim for low-to-mid tide.

5) Best spots today (based on conditions & skill) - Advanced/Big-wave capable: Pipeline, Sunset, Waimea (when sets are heavy) — need experience, local knowledge, and caution. - Intermediate: Haleiwa Alii, off-peak sections of west side (Mokuleia/Makaha) — more forgiving lines but still powerful. -

Beginner/Longboard/Safety-minded: South shore (Waikiki), protected east coves — small and protected from the NNW swell. - Note: If you want a cleaner north-facing wave, head out early before winds swing NNW.

6) Changing conditions through the day - Best conditions early (cleaner, lighter winds) — surf will be at its cleanest and safest during the morning high window on reefs. - Afternoon trend: winds pick up from the N–NW, increasing surface chop and making north shore more onshore and bumpy; swell may slowly decline in size through evening but shore conditions worsen. - If swell pulses (sets), expect intermittent big sets in the morning and possibly again at incoming tide turns.

Actionable checklist - If heading north/west: get there early (pre-dawn to mid-morning), check tide for rising/high, wear reef booties if you're unfamiliar with the takeoff zones, and don't paddle out alone on big days. - If you're not comfortable with reef breaks or big sets: choose south/east shore options. - Always check live cams, local surf hotline, and talk to locals before paddling out.

Stay safe — conditions are powerful today.

## Historical Comparison

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Compared with **forecast\_20251005\_003235** generated on 2025-10-05T00:32:35.111095:

- Confidence up 0.00 since the previous run.

## Forecast Confidence

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Overall confidence: 0.6/1.0



# Confidence Factors

Data Freshness: 0.7



Source Diversity: 0.3



Source Agreement: 0.7

