



science for a changing world

Prepared in cooperation with the State of Hawaii Department of Land and Natural Resources
Commission on Water Resource Management

Effects of Surface-Water Diversions on Habitat Availability for Native Macrofauna, Northeast Maui, Hawaii

Scientific Investigations Report 2005-5213

U.S. Department of the Interior
U.S. Geological Survey

EXHIBIT E-69

TRIAL EXHIBIT AB-161

Table 8. Summary of PHABSIM modeled habitat for intensively studied diverted stream sites, northeast Maui, Hawaii.

[ft²/s, cubic foot per second; ft², square feet; values shown represent a range of results for all aquatic species except opae using riffle models A and B; NA, not applicable]

| Stream site | Median base flow remaining in stream (ft ³ /s) | | Habitat available at diverted median base-flow conditions relative to habitat available at natural median base-flow condition (percent of natural habitat) | Flow needed to produce habitat relative to habitat available at natural median base-flow conditions (ft ³ /s) | | | Amount of habitat relative to habitat available at natural median base-flow conditions with flow at percentage of natural base flow |
|-----------------------|---|---------------------------------|--|--|-------------------------------|---------------------------------|---|
| | Diverted conditions | Natural (undiverted) conditions | | 50 percent of natural habitat | 90 percent of natural habitat | 50 percent of natural base flow | |
| Hanawi lower | 21 | 26 | 99-101 | NA | NA | NA | 99-101 |
| Hanawi middle | 11 | 16 | 99-101 | NA | NA | NA | 100-101 |
| Kopilunula lower | 2.8 | 9.5 | 51-53 | 2.6-2.7 | 7.6-7.7 | 70-71 | 94-95 |
| Kopilunula middle | 1.2 | 6.5 | 51-52 | 1.1-1.2 | 4.8 | 77-78 | 96-97 |
| Wailanui lower | 1.1 | 6.7 | 51-52 | 1-1.1 | 4.2-4.4 | 83-84 | 97 |
| Wailuanui middle | 1.0 | 6.1 | 50-54 | .66-1 | 4.7-4.9 | 73-75 | 95-96 |
| Honomanu lower | 0 | 9.0 | 0 | .94-1 | 4-4.5 | 90-92 | 99-100 |
| Waikamoi middle-lower | .20 | 6.7 | 27-46 | .13-1.1 | 4.9-5.1 | 78-82 | 96 |
| Waikamoi middle-upper | 1.6 | 6.6 | 56-57 | 1.2 | 3.8-4.1 | 81-84 | 99 |

Table 9. Summary of PHABSIM modeled opae habitat for intensively studied diverted middle stream sites, northeast Maui, Hawaii.

[ft²/s, cubic foot per second; ft², square feet; values shown represent a range of results using riffle models A and B; NA, not applicable]

| Stream site | Median base flow remaining in stream (ft ³ /s) | | Habitat available at diverted median base-flow conditions relative to habitat available at natural median base-flow condition (percent of natural habitat) | Flow needed to produce habitat relative to habitat available at natural median base-flow conditions (ft ³ /s) | | | Amount of habitat relative to habitat available at natural median base-flow conditions with flow at percentage of natural base flow |
|-----------------------|---|---------------------------------|--|--|-------------------------------|---------------------------------|---|
| | Diverted conditions | Natural (undiverted) conditions | | 50 percent of natural habitat | 90 percent of natural habitat | 50 percent of natural base flow | |
| Hanawi middle | 11 | 16 | 94-95 | NA | NA | NA | 98-99 |
| Kopilunula middle | 1.2 | 6.5 | 65-66 | NA | 4.4-4.5 | 82-83 | 97 |
| Wailuanui middle | 1.0 | 6.1 | 64-70 | NA | 4.1-4.4 | 82-84 | 97 |
| Waikamoi middle-lower | .20 | 6.7 | 40-64 | .61 | 2.4-4.4 | 84-92 | 97-98 |
| Waikamoi middle-upper | 1.6 | 6.6 | 70 | NA | 3.7-3.8 | 86-87 | 98 |

Waikamoi Stream & Waterfalls

Last updated 28 May 2020 by Visitor in Adventures & Sight (14) or (4, Photo (nature), Hana to Hana, Road to Hana, Waterfalls



A visitor stands at the top of Waikamoi Stream's first waterfall, just a few steps from the road.

Rating: ★★★★★

In a nutshell: A drive-up stop, one waterfall and pool are right next to the road. The second, larger waterfall and pool just upstream are impressively beautiful, and tragically underrated by other guidebooks.

Minuses: Unpredictable flow; also unpredictable visitor count (can be packed or empty, with no rhyme or reason.)

Sound bite: "This is all I wanted to do in Hawaii."

DETAILS:

A popular, user-friendly (but frequently under-rated) stop on the Road to Hana. The reason this is so underrated by the other guidebooks is that they came to see it on the wrong day. The water source is heavily tapped and diverted above and these falls can be essentially "turned off" by [1] to feed thirsty sugar plantations. You can tell if this is worth a stop by looking at the waterfall closest to the road. If it is flowing, then you're in for a treat.

The first waterfall is literally steps from the road, and has a beautiful pool tailor-made for swimming. The bigger second waterfall has multiple places to sit at the bottom and let the water fall on you. The last time I was there, a family was sitting under the waterfall, and I overheard the father (pleasantly claim "this is all I ever wanted to do in Hawaii" I don't know if I personally would be satisfied with just Waikamoi - but it is a really sweet place, that is so easily accessible without any serious hiking, that for someone doing an unplanned drive thru, it could be the nicest waterfall they swim in.

Getting to the second fall requires a scramble up a (usually) mostly-dry stream bed - but unless the water is raging, it is pretty easy (and if the water is raging, don't even try it).

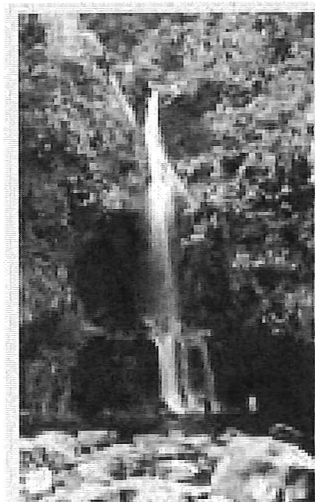
Key info:

Mile Marker: HS 9 (Hana Hwy) aka Hwy 300

GPS Coordinates: 20.872255, -156.187316

Facilities: No facilities


[Get directions](#)



A couple enjoy sitting under the larger falls at Waikamoi.


Open the sites & adventures map

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Iao Valley Inn
\$100 - \$345

Guests rave about the two B&B rooms and a private cottage on 30+ acres nestled at the base of the mountains of sacred Iao Valley.
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[MauGuidebook.com article](#)



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