

Layer Name: Streams with aquatic resources (from 1990 Hawaii Stream Assessment)

File Name: strmsaq

Layer Type: Line

Status: Complete

Geog. Extent: Islands of Oahu, Molokai, Maui, Kauai and Hawaii

Projection: Universal Trans Mercator, Zone 4 (Meters)

Datum: NAD 83 HARN

Description: Streams identified by the Hawaii Stream assessment as having aquatic significance

Source: Unknown

History: Created as part of the Hawaii Stream Assessment (HSA), a cooperative project between the State of Hawaii and the National Park Service. Stream geography was derived from USGS DLGs. For more information on the HSA, contact the Commission on Water Resource Management, Department of Land and Natural Resources, P.O. Box 621, Honolulu, HI 96809. Also refer to the following publication: https://files.hawaii.gov/dlnr/cwrm/publishedreports/R84_HSA.pdf.

Attributes: Lines:

CODE	HSA Stream Code
STREAM	Stream Name
INDICATORS	Number of indicator species present
NUMBNG1S	Number of Native Species Group 1 (NG1) present (4 possible) Note: NG1 is made up of four native species considered to be representative of potentially high quality stream ecosystems. These species are: three species of O'opu (goby) (<i>Awaous stamineus</i> , <i>Lentipes concolor</i> , <i>Sicyopterus stimpsoni</i>) and Hihiwai (a snail) (<i>Neritina granosa</i>).
NG1S	Native Species Group 1 (NG1) rank
NUMBNG2S	Number of Native Species Group 2 (NG2) present (7 possible) Note: NG2 is made up of seven native species that are considered more common. Presence of these species was considered to be typical of a healthy native stream ecosystem.
NG2S	Native Species Group 2 (NG2) rank
NUMBNATIVE	Total Number of Native Species Present
NGDIVERSE	Diversity of Native Species
NGSPAWN	Native Species Spawning and Recruitment
AG1S	Number of Introduced Species Group 1 (IG1) Present Note: IG1 is made up of noxious, non-native stream animals that may prey upon and/or out-compete native species.
AG2S	Number of Introduced Species Group 2 (IG2) Present Note: IG2 consists of the non-native species considered to be innocuous to Hawaii's streams.
HABITAT	Overall suitability of habitat for aquatic species
CHANNELED	Amount of stream channelization
DATAQUALITY	Quality of Data
FINALRANK	Final rank awarded by Hawaii Stream Assessment Committee

ATTRIBUTE Values:

NG1S:	Definition:
E	Excellent - More than 2 species are present, or 2 species present with one common to abundant
G	Good - Two species present, or one species that is common to abundant
P	Poor - Fewer than 2 species present, and uncommon
U	Unknown
NG2S:	Definition:
E	Excellent - More than 2 species are present, or 2 species present with one common to abundant
G	Good - Two species present, or one species that is common to abundant
P	Poor - Fewer than 2 species present, and uncommon
U	Unknown
NGDIVERSE:	Definition:
E	Excellent - At least 2 species present from each of the groups NG1 and NG2
G	Good - At least 1 of the species present from each of the groups NG1 and NG2
P	Poor - One or fewer species present from groups NG1 or NG2
U	Unknown
NGSPAWN:	Definition:
E	Excellent - Evidence of significant spawning or recruitment by any NG1 fish
G	Good - Evidence of significant spawning or recruitment by any NG2 species or occasional spawning or recruitment by any NG1 species
P	Poor - No spawning or recruitment by NG1 or NG2 species)
U	Unknown
HABITAT:	Definition:
E	Excellent - Good pools and riffles with a gentle slope in the lower reaches, gravel bottom with minimal sedimentation, and continuous water flows with low turbidity except during freshets).
G	Good - Steep slope in the lower reaches with nearly continuous to intermittent water flows or gentle slope with significant sedimentation).
P	Poor - Limited intermittent water flows with extended disappearance of riffles
U	Unknown
DAMSDIVERT:	Definition:
E	Excellent - No dams or diversions
G	Good - No dams or diversions in the middle to lower reaches
P	Poor - Dams or diversions below the upper reaches or a loss of 50% of the mean annual flow
U	Unknown
CHANNELED:	Definition:
E	Excellent - No channelization
G	Good - Channelization limited to grading or straightening with retention of gravel substrate
P	Poor - Concrete linings, chutes or flumes installed

U Unknown

ATTRIBUTE Values (continued):

DATAQUALITY: Definition:

E Excellent - Two or more recent surveys (1975-1994)

G Good - At least one recent survey

P Poor - One or more surveys, all prior to 1975

U Unknown

FINALRANK: Definition:

L Limited

M Moderate

O Outstanding

S Substantial

U Unknown or unranked

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