

Continuation of Low-Flow Monitoring Stations on
Maui, Moloka'i, and Hawai'i

Item B-5

Ayron M. Strauch, Hydrologist
Stream Protection and Management Branch

COMMISSION ON WATER RESOURCE MANAGEMENT

Ke Kahuwai Pono

"The trustee who oversees the rightful sharing of water."



Prepared in cooperation with the State of Hawai'i Commission on Water Resource Management and in collaboration with the University of Hawai'i Water Resources Research Center

Water-Resource Management Monitoring Needs, State of Hawai'i



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Scientific Investigations

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

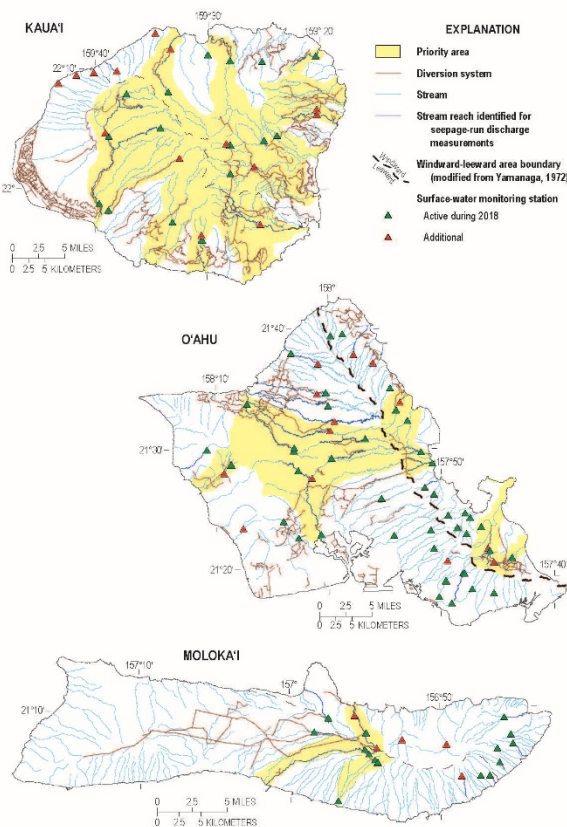


Figure ES2. Maps showing the surface-water resource-monitoring program for the Hawaiian Islands of Kauai, Oahu, Molokai, Maui, and Hawaii. No surface-water monitoring needs were identified for the island of Lanai, because no water-resource needs were identified by the State.

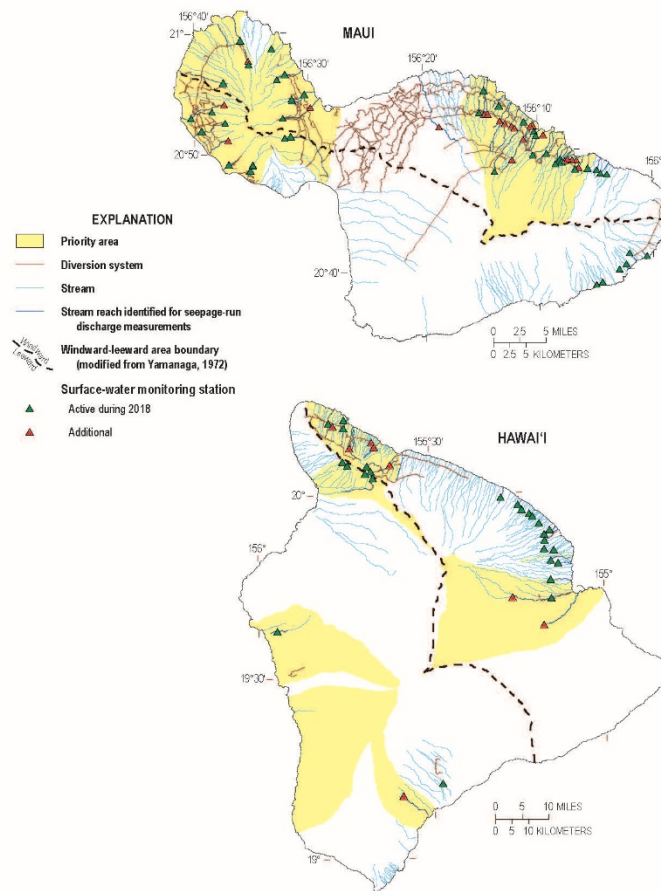
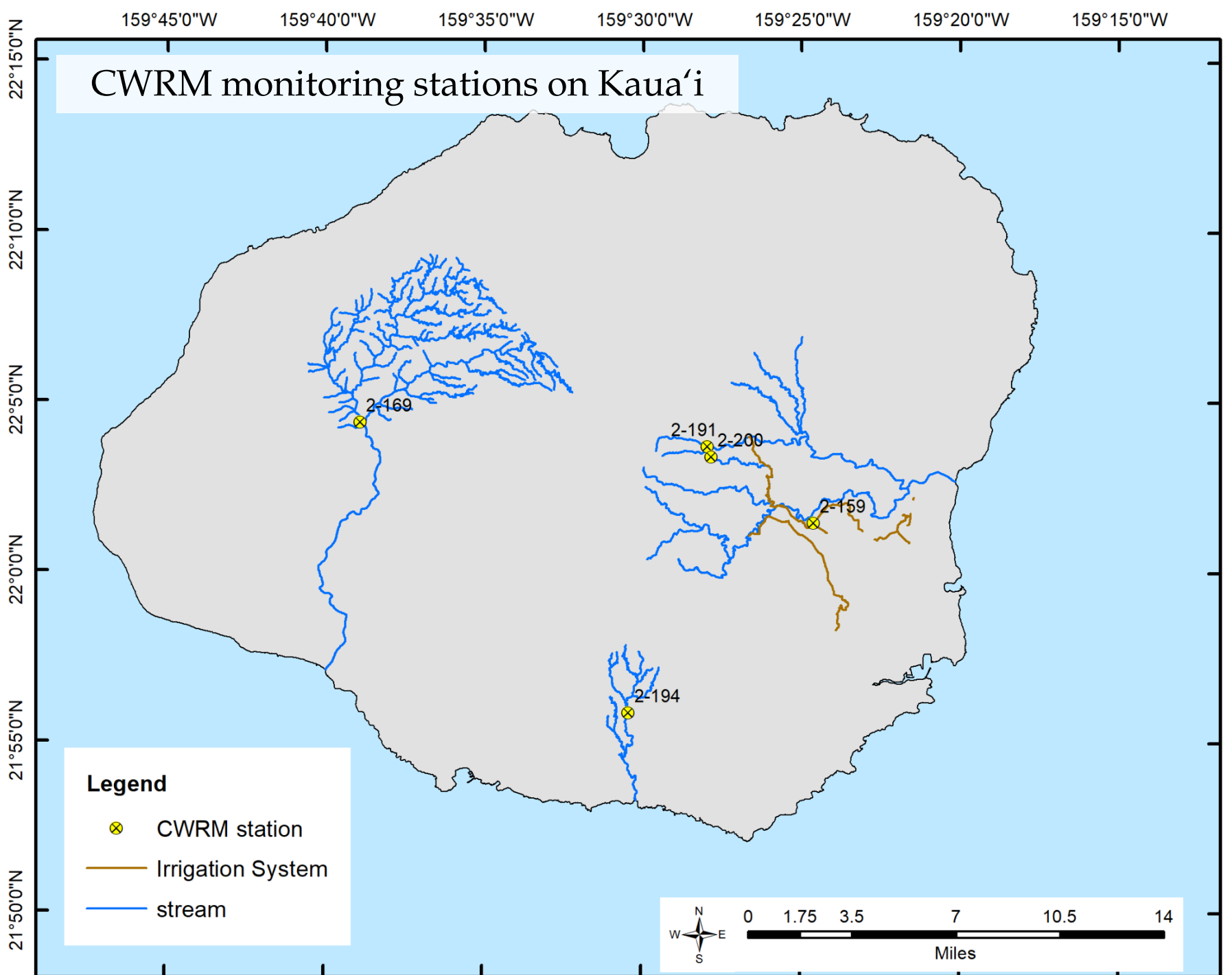
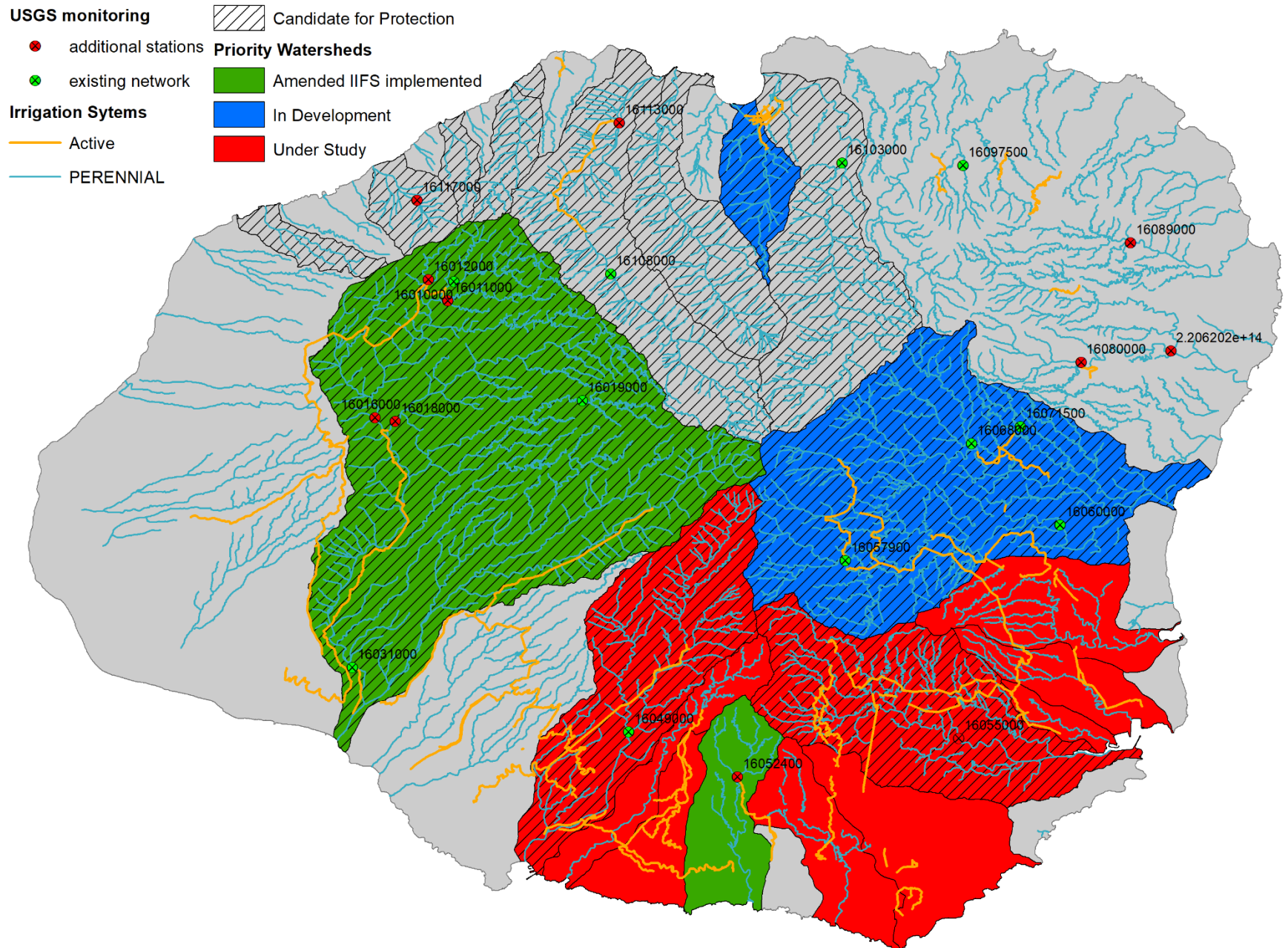


Figure ES2. —Continued



Surface Water Monitoring needs Assessment: Kaua'i



157°15'0"W

157°10'0"W

157°5'0"W

157°0'0"W

156°55'0"W

156°50'0"W

156°45'0"W

CWRM monitoring stations on Moloka'i

Legend

- ⊗ CWRM station
- Irrigation System
- stream

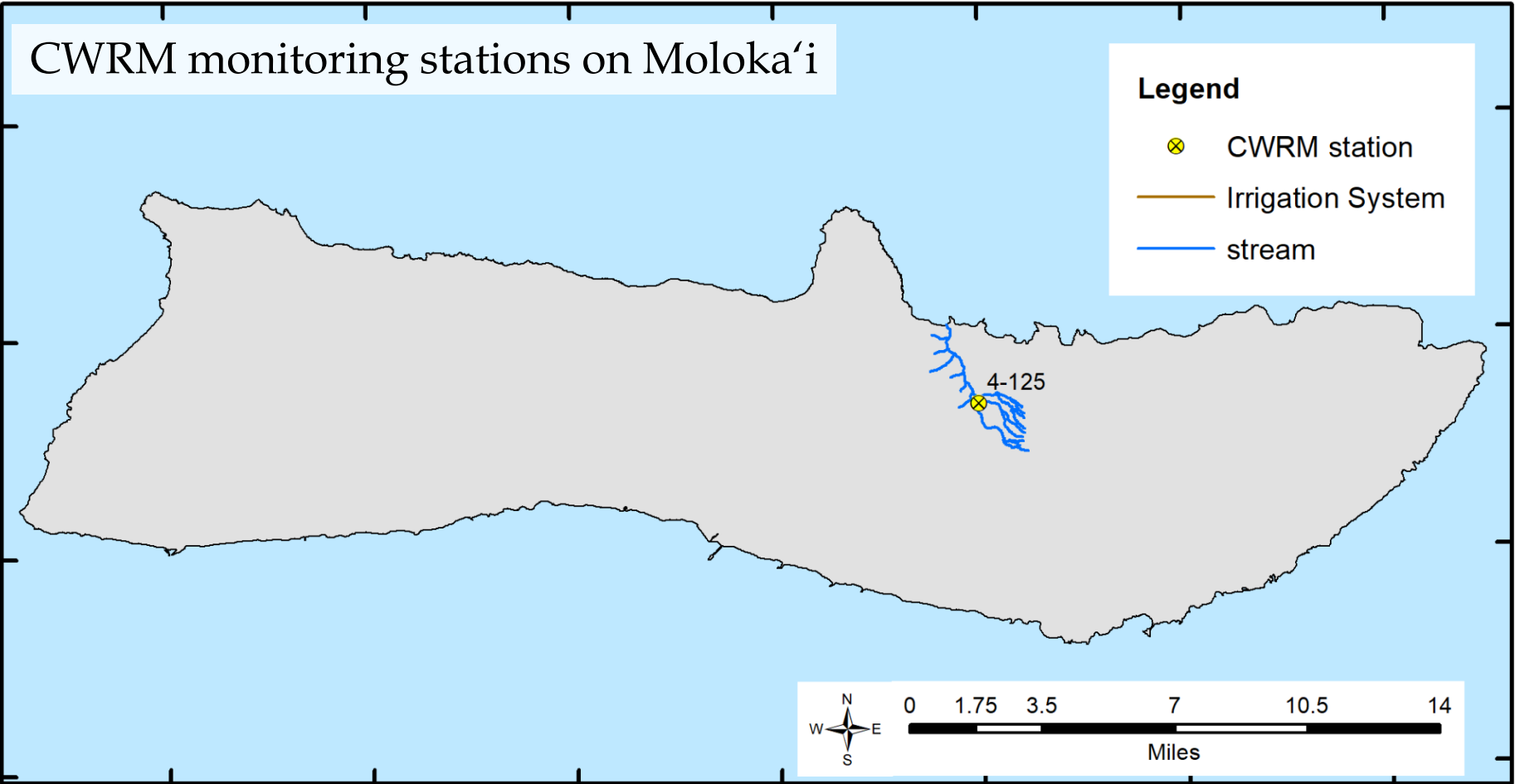
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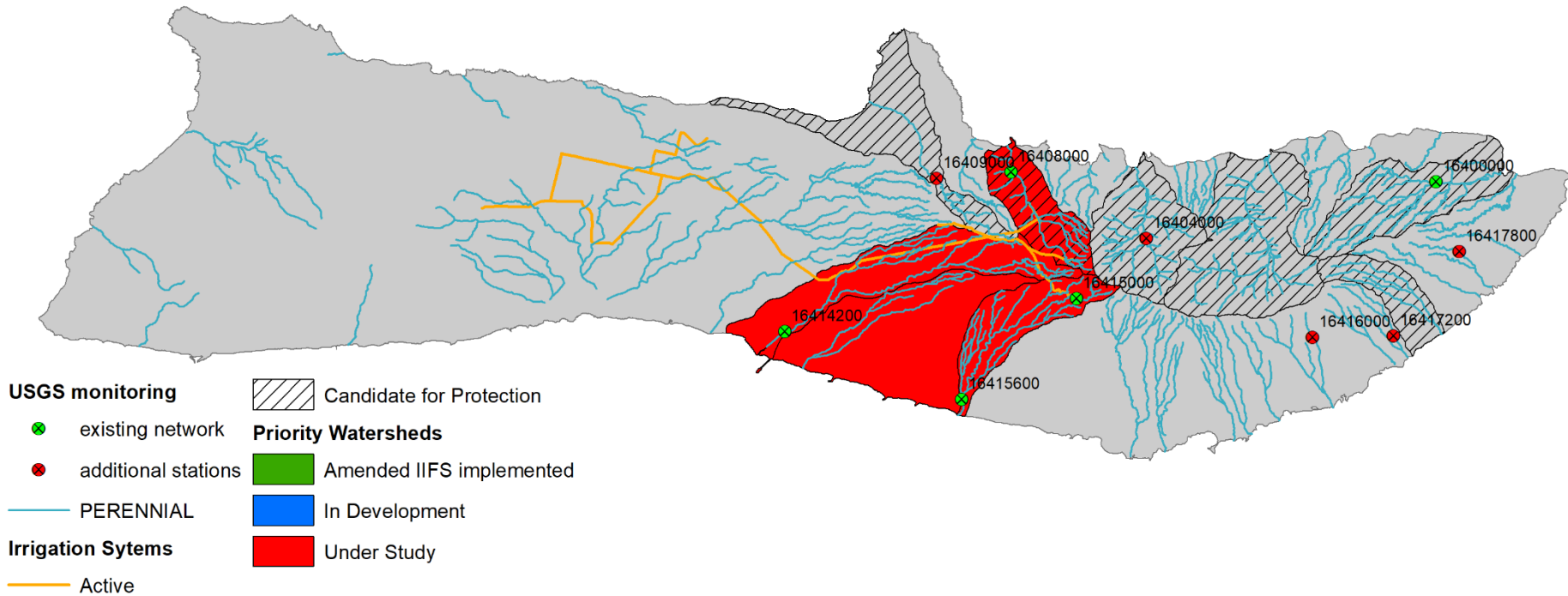
0 1.75 3.5 7 10.5 14

Miles

21°15'0"N
21°10'0"N
21°5'0"N
0'0"N



Surface Water Monitoring needs Assessment: Moloka'i



156°40'0"W 156°35'0"W 156°30'0"W 156°25'0"W 156°20'0"W 156°15'0"W 156°10'0"W 156°5'0"W 156°0'0"W

21°0'0"N
20°55'0"N
20°50'0"N
20°45'0"N
20°40'0"N
20°35'0"N
20°30'0"N

Legend

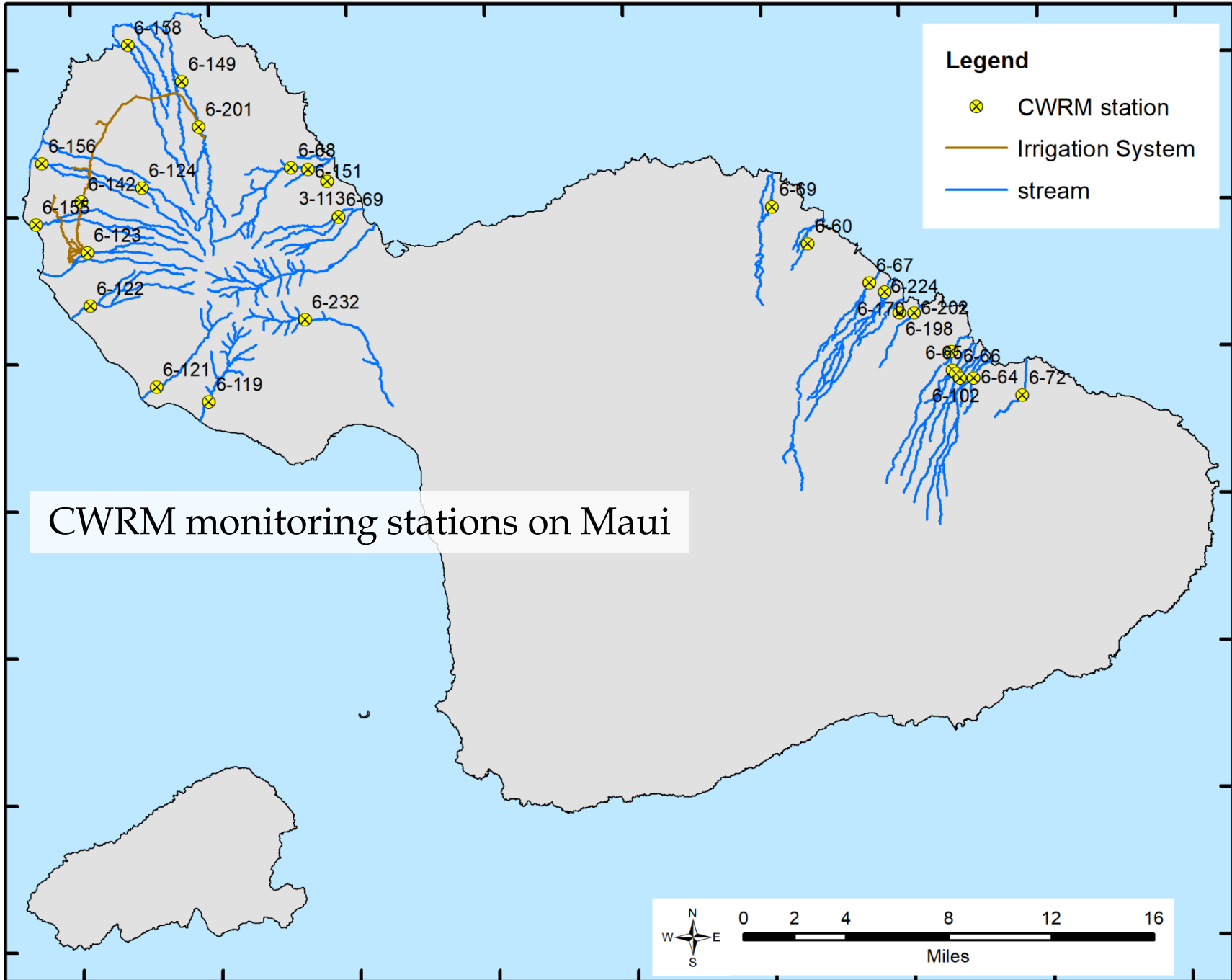
- ⊗ CWRM station
- Irrigation System
- stream

CWRM monitoring stations on Maui

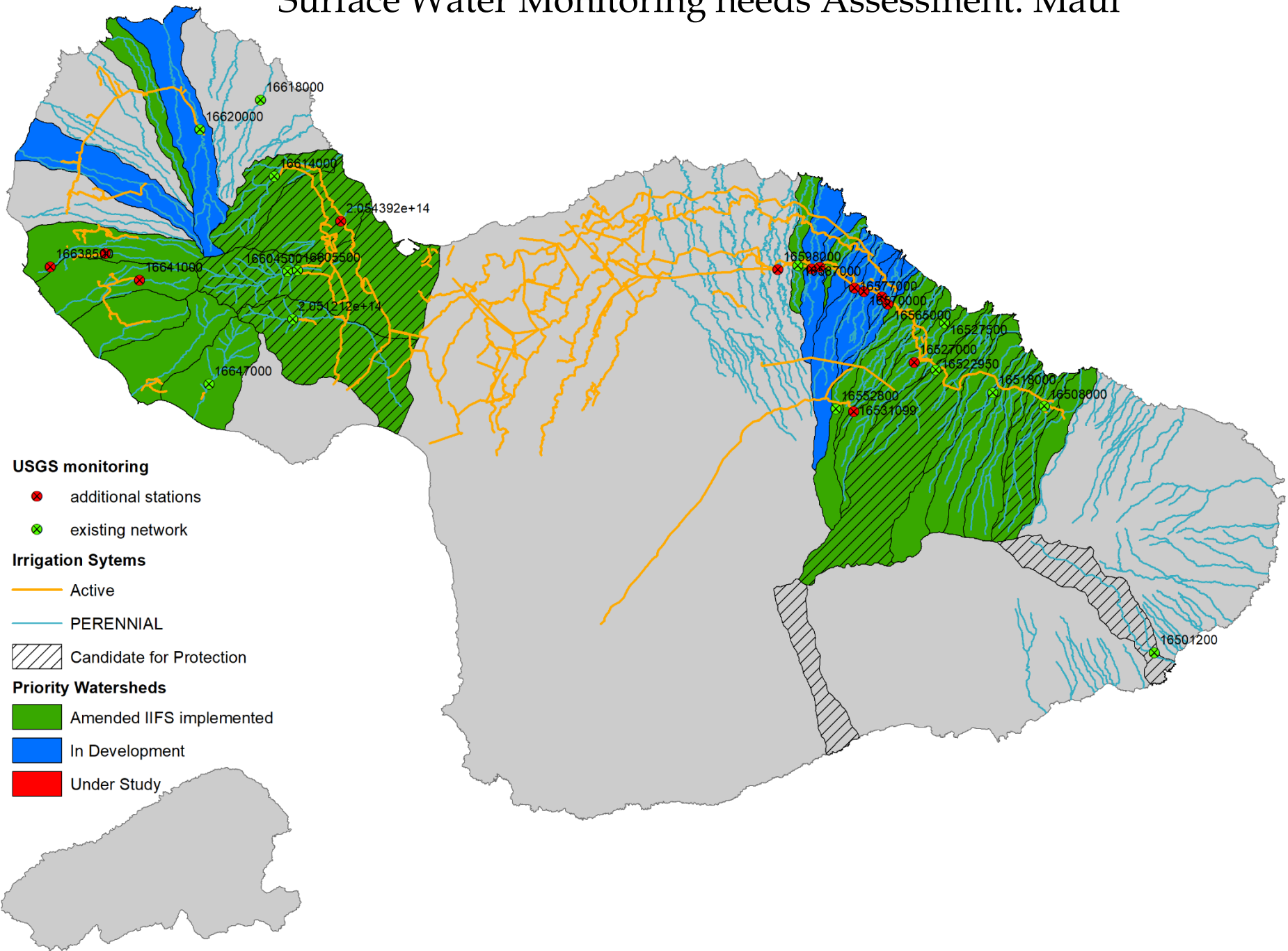
N
W E
S

0 2 4 8 12 16

Miles



Surface Water Monitoring needs Assessment: Maui

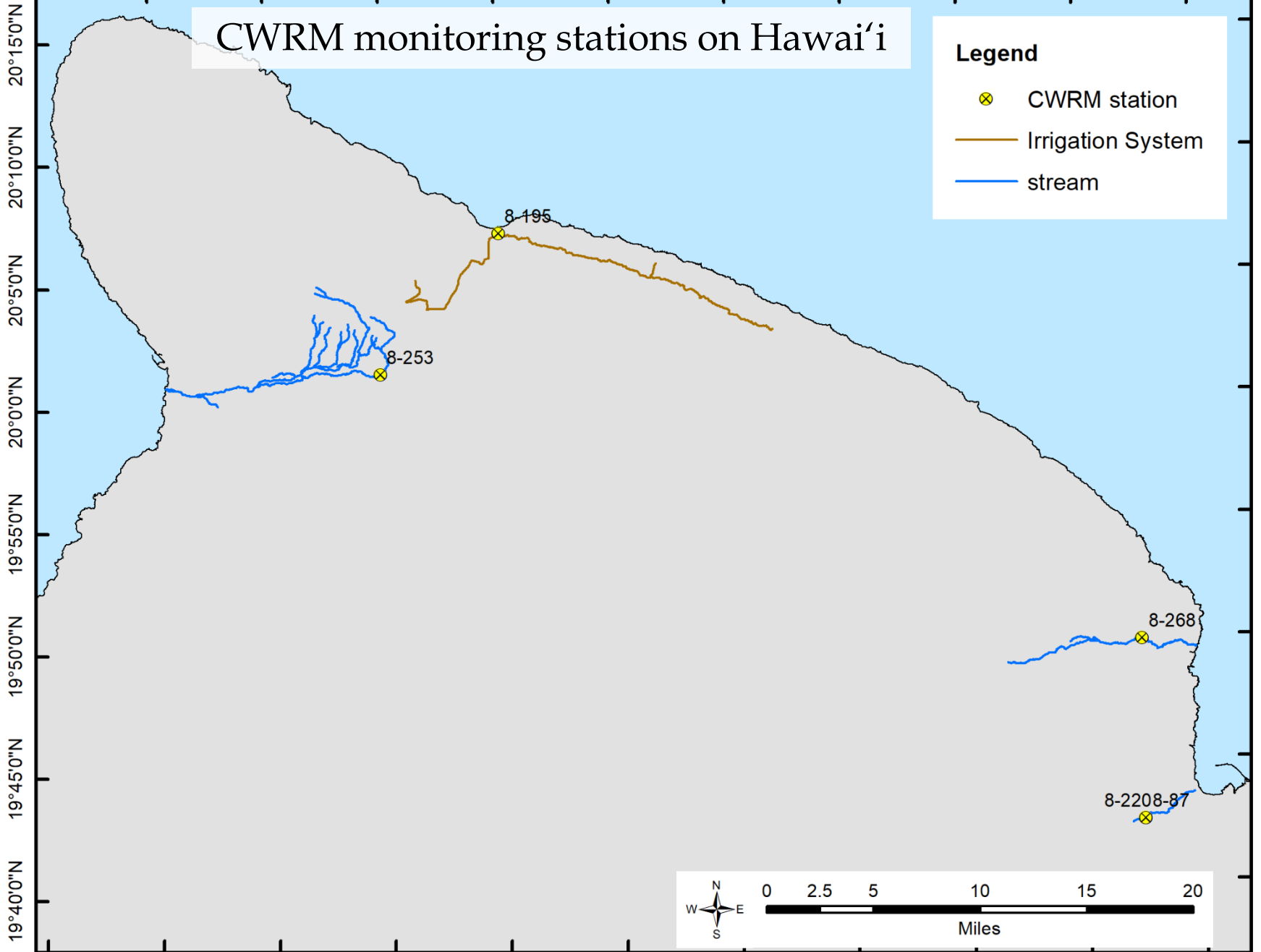


155°50'0"W 155°45'0"W 155°40'0"W 155°35'0"W 155°30'0"W 155°25'0"W 155°20'0"W 155°15'0"W 155°10'0"W 155°5'0"W

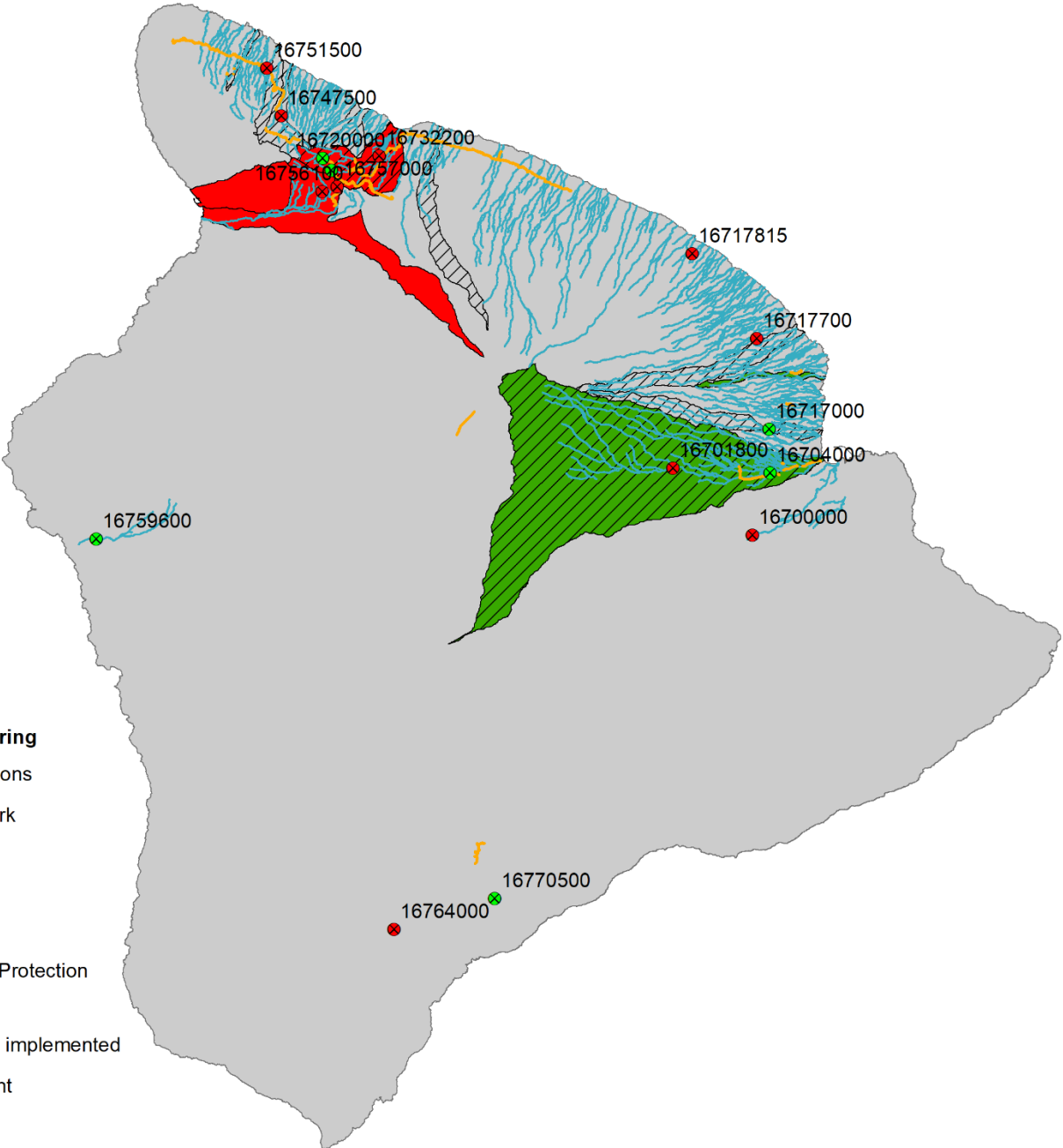
CWRM monitoring stations on Hawai'i

Legend

- ⊗ CWRM station
- Irrigation System
- stream



Surface Water Monitoring needs Assessment: Hawai'i



USGS Hawaii monitoring

- additional stations
- existing network

Irrigation Systems

- Active
- PERENNIAL

▨ Candidate for Protection

Priority Watersheds

- Amended IIFS implemented
- In Development
- Under Study

Existing Low-Flow Monitoring Stations
USGS 16751500 Awini Puali Gulch



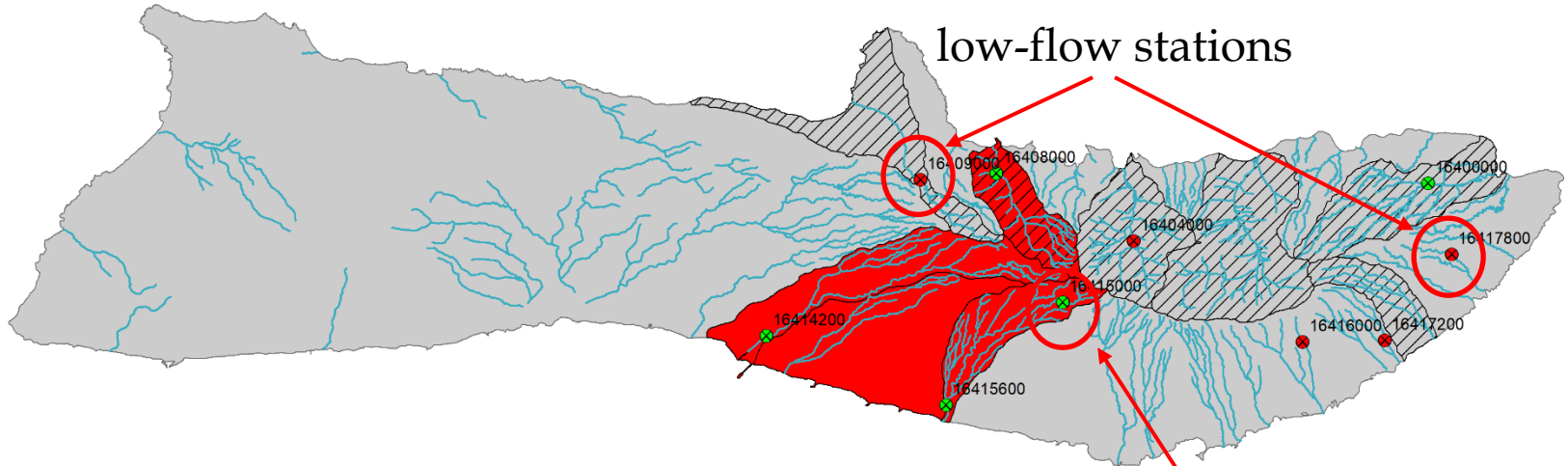
Existing Low-Flow Monitoring Stations

USGS 16717700 Hakalau at 1300 ft



Current Low-Flow Stations to be Continued

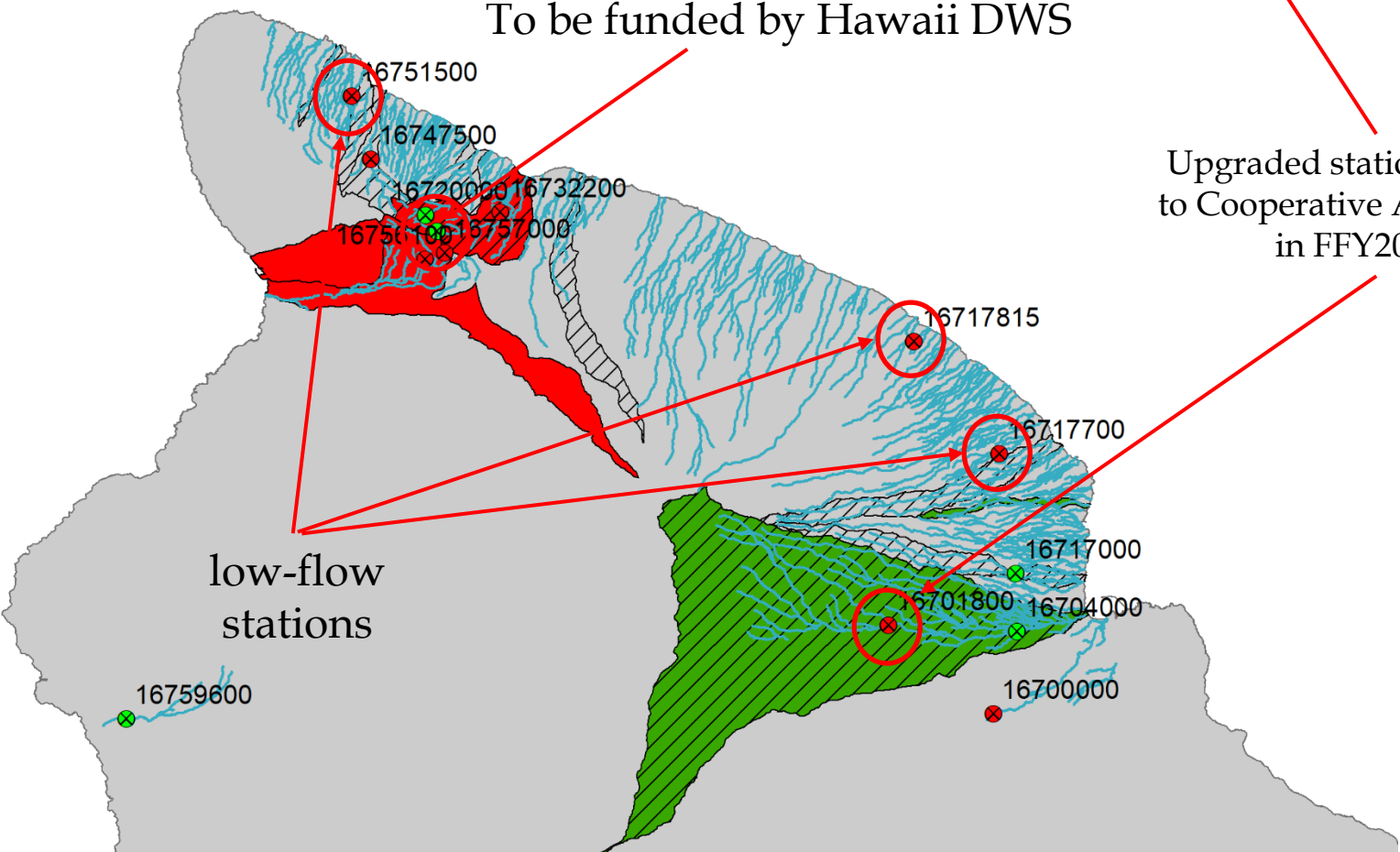
Station number	Island	Station name	CWRM FFY2022 cost	Notes
16409000	Molokai	Waihanau Stream nr Kalaupapa	\$18,700	Potential climate change monitoring station; historically a DHHL water resource
16417800	Molokai	LB Honoulimaloo Str US diversion	\$18,700	Potential climate change monitoring station;
16522950	Maui	Piinaau Str 470ft US Koolau Ditch	\$18,700	Index station for East Maui IIFS; Potential climate change monitoring station
16717815	Hawaii	Manowaiopae Stream near Spencer Road	\$18,700	Potential climate change monitoring station; USDA Forest Service co-funding station
16757000	Hawaii	Waikoloa Stream nr Kamuela	\$18,700	Index station for potential IIFS; County drinking water supply; climate change monitoring station
16751500	Hawaii	Awini Puali Gulch US Kohala Ditch	\$18,700	Potential climate change monitoring station
16717700	Hawaii	Hakalau Stream nr alt 1300 ft	\$34,200	Potential climate change monitoring station; additional costs related to permitting and installation of upgraded station; \$8,200 to be paid by DOT
16717815	Hawaii	Manowaiopae Stream near Spencer Road	\$18,700	Potential climate change monitoring station; additional costs related to permitting and installation of upgraded station; \$7,000 to be paid by the USDA Forest Service
		Total cost	\$146,400	



low-flow stations

To be funded by Hawaii DWS

Upgraded stations added to Cooperative Agreement in FFY2020



low-flow stations

