

Benchmark Case Study - Hawaii

(present management system)

Conservation Effects Worksheet

Orchard - Macadamia

(land use and crop)

Resource Setting: Pahala, Hawaii

Shallow soils over pahoehoe.

Moderate to steep slopes.

Highly erodible.

Present Management System:

No vegetative cover.

Terrace system

Windbreaks planted (3 row) every 500-ft.

Irrigation system

Diversion ditches spaced 500 to 800 feet apart.

Debris basin

Grassed waterways.

Resource Problems Before Treatment:

Sheet and rill erosion

Orchard trees planted in waterways

Gully erosion

Close tree spacing (orchard)

Nutrient and pesticide in runoff

Terraces not maintained

No vegetative cover within orchard

ACTIONS (Kinds, Amounts, Timing)	EFFECTS (Effects of Continuing Bench System)
Close spacing (18 X 25) No vegetative cover - mechanical harvest Irrigation Windbreaks Herbicide Pesticide Terraces Debris Basin	Maximize tree/acre; better sales Reduce labor; mulching leaves Higher yields Reduce wind damage; wildlife habitat Control weeds; no ground cover; better harvest Reduce crop damage Reduce sheet and rill erosion Save dirt
Comments:	