



## Water Quality and Your Farm

### Introduction to the HAPPI-Farm Series

Have you ever seen muddy water flowing down a stream or into the ocean after a heavy rain? Has the water near your favorite swimming beach or fishing spot been so green with algae that you went home for the day? Have you seen a streambed filled with thick vegetation? Have you seen coral reefs or coastal areas covered with a thin coating of mud? Are you worried about there being poisonous chemicals in the fish you eat or the water you drink or swim in?

All of these problems are the result of pollution of our surface waters by nutrients, chemicals, and sediment (soil that gets into water). Although some of this pollution comes from natural sources, most comes from human activities, including agricultural operations. You can do your part to help protect Hawaii's water resources by learning to recognize potential sources of pollution and then reducing or eliminating them.

You are reading the first in a set of 10 information and assessment materials developed by the Hawaii's Pollution Prevention Information (HAPPI) project. Each of the other nine addresses a different water pollution issue faced by agricultural operations. Each of them provides additional information on a specific topic and helps you assess your risks for water pollution. They also help you to develop an Action Plan to reduce those risks. Because all nine of the topics may not apply to your individual situation, the checklist on the next page will help you to choose the ones you need.

Drawing a map of your farm will help you to visualize the layout of your holdings and assess your management practices. Information from the map may help you determine which HAPPI project materials fit your situation. If you have a soil and water conservation plan,



you may already have a map of your farm. If you do not have such a map, HAPPI-Farm 2, *Mapping your farm*, will help you to make one.

#### For more information

HAPPI-Farm materials do not cover all potential risks to water quality and other natural resources. They are designed to create an awareness of potential risks to water quality and other natural resources. They suggest voluntary solutions to reduce pollution risks. They also help you to develop an action plan to protect your water and other natural resources. If you have specific questions about protecting your water and other natural resources, contact us:

#### *Water Quality Extension Program*

Dept. of Natural Resources and Environmental Management  
College of Tropical Agriculture and Human Resources  
University of Hawaii at Manoa

1910 East-West Road, Honolulu, HI 96822

Telephone: (808) 956-2617 or (808) 956-8825

Fax: (808) 956-6539

E-mail: <wq@ctahr.hawaii.edu>

Website: <<http://www2.ctahr.hawaii.edu/wq>>.

**Choosing the appropriate HAPPI-Farm materials**

<b>If you answer yes to these questions .....</b>	<b>then, see HAPPI-Farm number:</b>	<b>titled:</b>
Do you own or manage land for agriculture (annuals or perennials) or forestry? .....	3	<i>Land management</i>
Do you apply chemical fertilizer or manure to your crops or trees? .....	4	<i>Nutrient management</i>
Do you control pests in your agricultural operations? .....	5	<i>Pest management</i>
Do you use additional water (beyond natural rainfall) in your management activities? ....	6	<i>Irrigation management</i>
Do you have confined livestock (including horses) or poultry on your property .....	7	<i>Livestock management</i>
Do you have pasture areas on your property? .....	8	<i>Pasture management</i>
Do you store chemicals like cleaning supplies, oil or fuel on your property? .....	9	<i>Storage and disposal of chemicals and fuel</i>
Do you have forest or riparian (streamside) areas on your property? .....	10	<i>Forest and riparian areas management</i>
Does anyone reside on the property? .....	HAPPI-Home 1	<i>Water quality around your home</i>

**Statewide information sources**

For locally specific information, refer to HAPPI-1 *Pollution prevention contacts and information resources.*)

**CTAHR Cooperative Extension Service**

State office at UH-Manoa  
 (808) 956-8397, (808) 956-9150 (fax)  
 Web: <<http://www2.ctahr.hawaii.edu>>

**Natural Resources Conservation Service**

State office (Honolulu)  
 (808) 541-2600, (808) 541-1335 (fax)  
 Web page: <<http://www.hi.nrcs.usda.gov/>>

**Poison Control Center**

Oahu: 941-4411  
 Other islands: 1-800-362-3585

**Hawaii State Department of Agriculture**

Main office: (808) 973-9560  
 Pesticides Branch: (808) 973-9401  
 Agricultural Resources Management Branch  
 (includes irrigation systems): (808) 973-9473  
 Web: <<http://www.hawaiiag.org/hdoa/>>

**Hawaii State Department of Health**

(Environmental Health Division)  
 Web: <<http://www.hawaii.gov/health/eh/index.html>>

*HDOH (continued)*

Clean Water Branch (coastal and inland waters)  
 (808) 586-4309, (808) 586-4352 (fax)

Safe Drinking Water Branch  
 (808) 586-4258, (808) 586-4370 (fax)

Solid and Hazardous Waste Branch  
 (808) 586-4226, (808) 586-7509

Wastewater Branch (wastewater systems)  
 (808) 586-4274, (808) 586-4370 (fax)

Noise, Radiation, and Indoor Air Quality Branch  
 (lead, indoor air quality)  
 (808) 586-4700, (808) 586-4729 (fax)

Hawaii Department of Health offices can be contacted toll-free from other islands by dialing the following numbers and asking for the appropriate extension. The extension number is the last five digits of the Oahu phone number. For example, the extension for the Clean Water Branch is 64309.

- Hawaii: 974-4000;
- Kauai: 274-3141;
- Maui: 984-2400;
- Molokai and Lanai: 1-800-468-4644



The HAPPI-Farm series was adapted by Michael Robotham, Carl Evensen, and Linda J. Cox from *Home•A•Syst: an environmental risk-assessment guide for the home* by Alyson McCann, National Farm•A•Syst / Home•A•Syst Program, Gary Jackson, Coordinator, Madison, Wisconsin. Hawaii's Pollution Prevention Information (HAPPI) is produced for Farm•A•Syst/Home•A•Syst for Hawaii, a project of the University of Hawaii College of Tropical Agriculture and Human Resources (UH-CTAHR) and the USDA Cooperative Extension Service (USDA-CES). Funding for the program is provided by a U.S. EPA 319(h) grant administered by the Hawaii State Department of Health.