HAWAII WATER FOR KIDS (STATE SCIENCE FAIR)

STATE SCIENCE FAIR INFORMATION FROM THE SAFE DRINKING WATER BRANCH OF THE HAWAI'I STATE DEPARTMENT OF HEALTH

Volume 3, Issue 1 2006-2007 School Year

Phone: (808) 586-4258 FAX No: (808) 586-4351

SCIENCE FAIR COORDINATORS: Please announce, disseminate to schools, and post.

Have You Ever Wondered About the Water Coming from Your Tap?

Where does my water come from?

What's in My Water?

Where Do These Contaminants Come From?

How are Contaminants Removed From My Water?



If You Have and Are Interested in Learning More About Drinking Water/Groundwater Quality and Protection...

In the 2006-2007 School Year Issue of the Hawaii Water for Kids - State Science Fair:

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This newsletter is also available on the Safe Drinking Water Branch website at: www.hawaii.gov/health/environmental/water/sdwb

...Then Consider a Science Fair Project!!

Hawaii Water for Kids State Science Fair

49th STATE SCIENCE FAIR AWARDS FOR GROUNDWATER/DRINKING WATER

In our continuing effort to promote groundwater and drinking water in the Hawaii Education System, the Department of Health, Safe Drinking Water Branch participated in the 2006 Hawaii State Science Fair. One of the key elements to a successful groundwater and drinking water program is the education and awareness of the public. One of the best ways to educate the public is by educating students about our water resources. By funding activities such as providing awards to the State Science Fair, we hope to further student interest in science and the utilization and protection of our water resources.

Meimei Nakahara Hawaii Preparatory Academy "<u>Does Fluorided Water Affect the Growth of Plants</u>" Selected for: Outstanding Individual Junior Research Project in any subject category related to groundwater/drinking water.

Received Certificate of Achievement, \$100 Cash Award.

Natasha Leonard
Kealakehe Intermediate School
"Tap & Bottled Water: How Pure is Pure?"
Selected for: Outstanding Individual Junior Research
Project in any subject category related to
groundwater/drinking water.

Received Certificate of Achievement, \$100 Cash Award.

Kristin Inouye
Pearl City High School
"<u>Water Purification</u>"
Selected for: Outstanding Individual Senior Research
Project in any subject category related to
groundwater/drinking water.

Received Certificate of Achievement, \$200 Cash Award.

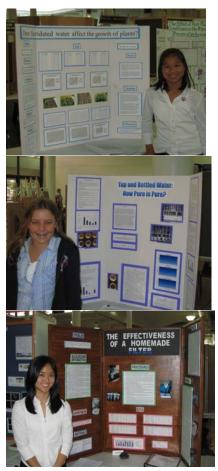
Kimberly Flores and Delsy Acio
Waipahu High School
"Is It Safe to Drink? Investigating the Cleanliness of
School Water Fountains"
Selected for: Outstanding Team Project in any
subject category related to groundwater/drinking water.

Received Certificate of Achievement, \$100 Cash Award.

Jester Galiza
James Campbell High
"Got Clean Water"
Selected for: Individual Project in any subject category related to water quality.

Received Certificate of Achievement, \$50 Cash Award.

The Safe Drinking Water Branch will continue to work with the Hawaii Academy of Science, School Science Fair.







SCIENCE FAIR CALENDAR 2005-2006

August - October

Science Fair **workshops** for teachers and district science fair personnel/ Workshops are strongly recommended for new teachers or first time participants. Call 956-7930 or e-mail acadsci@hawaii.edu to request a workshop.

The website has a list of **mentors** for science fair students. Please encourage your students to take advantage of this service. http://www.hawaii.edu/acadsci/mentors/html

October - December

Request **certificates** for school and district fair participants. Certificates will only be provided to schools that plan to enter the district and state fair.

January - February

School and District Science Fairs (Contact your District Fair Coordinator for Fair Dates)

District Fair Coordinators Contact Information:

East Hawaii	Jamie Nekoba	974-4888 (Fair Dates: TBA)
West Hawaii	Kathy Ishii	327-4781 (Fair Dates: TBA)
Kauai	Barbara Baker	274-3185 (Fair Dates: TBA)
Maui	Ron Okamura	984-8020
HAIS	Dan Nelson	532-2431/440-7423 (Fair Dates: TBA)
Leeward	Stephen Nakano	677-6638 (Fair Dates: TBA)
	Fred Nakaguma	487-3098
Windward	Amy Watanabe	271-3908 (cell) (Fair Dates: TBA)
	Donna Therrien	233-5720

- School Science Fairs must be completed before the District Science Fair entry deadline. Contact the coordinator to find out the entry deadline and district science fair dates.
- Schools with no district science fair must schedule their fairs so they meet the State Science Fair entry deadline.

February

Entry deadline for the **Hawaii State Science & Engineering Fair 2007** is in February 2007. Contact your coordinator for entry deadline.

April, 2007

Hawaii State Science and Engineering Fair (Fair Dates: TBA)

MondayRegistration/Exhibit Set-up12noon - 6 pmTuesdayHAS Judging (Round 1 & 2)8:15 am - 3:30 pmWednesdaySchool Visitation8 am - 2 pmPublic Viewing8 am - 7 pmAwards Ceremony4:30 pm

Exhibit Take Down (mandatory) After Awards Ceremony - until 8:30 pm

ISEF Delegation Meeting 7:45 pm - Science Fair Office

POTENTIAL STATE SCIENCE FAIR PROJECTS INVOLVING DRINKING WATER/GROUNDWATER

Water Quality

Water Taste and Quality (2004 and 2005 winner)

Analyses of Five Different Test on Our Drinking Water (2004 winner)

What Are You Drinking (2005 winner)

Tap & Bottled Water: "How Pure is Pure?" (2006 winner)

Investigating Hawaii's Drinking Water/Groundwater Quality

Private Well Water Quality

Chlorine Levels in Drinking Water

The Amount of Dissolved Salt in Drinking Water

Bacteriological Examination of Water?

Is It Safe to Drink? Investigating the Cleanliness of School Water Fountains (2006 winner)

Chemical Composition of School Water: Is The Drinking Water up to EPA Standards



Plants: A productive Alternative for Removing Contaminants from Soils.

Electrokinetic Remediation vs. Phytoextraction: Which process is more effective in the removal of metals contamination from soil?



Binchotan - A Unique Charcoal (2004 winner)

Water Purification (2006 winner)

Nitrate Removal from Drinking Water

The Use of Biofiltration for the Decontamination of Water

Non-Chemical Water Disinfection

What is the Best Way to Purify Water? Water Purification

Producing Drinking Water from Final Effluent for Tomorrow's Needs

Water Conservation

Irrigation Scheduling: Efficiency in Water Use

Which Mulch is Best for Conserving Water While Growing Plants?

What is the Best Irrigation System?

Hydrology/Geology

Water Retention of Difference Soils: Do Different Types of Soil Hold Different Amounts of Water?

What Type of Soil Filters Water Best?

The Effects of Different Soil Substrates on Water Percolation and Drainage

Others

Movement of Nitrates in the Soil Profile (2005 winner)

Does Fluorided Water Affect the Growth of Plants (2006 winner)

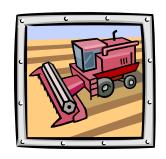
Creating a Computer Program to Teach Water Education

Is Recycled Water Really Safe?

This is just a fraction of the many drinking water/groundwater topics and ideas that may be explored. Other topics, issues, and project exist and can be found in the many sources of information that are available to you.









SOME SOURCES OF INFORMATION ON SCIENCE FAIR PROJECTS INVOLVING GROUNDWATER and DRINKING WATER



The following sources of information may provide you with ideas for developing your drinking water/groundwater-related science fair projects.

U.S. Environmental Protection Agency website: www.epa.gov/kids, www.epa.gov/kids, www.epa.gov/students, and

www.epa.gov/highschool/water.htm

U.S. Geological Survey website: <u>www.usgs.gov/education</u>

Hawaii Academy of Science website: www.hawaii.edu/acadsci/hssef/hssef.html

www.hawaii.edu/acadsci/hssef/resource.htm

OTHER WEB SITES WITH WATER SCIENCE EDUCATION INFORMATION

American Water Works Association: www.waterdata.com/youthed.htm

Educating Young People About Water: <u>www.uwex.edu/erc/eypaw</u>

Give Water a Hand: www.uwex.edu/erc/gwah

Project Wet: <a href="https://www.montana.edu/

Water Education Foundation: <u>www.water-ed.org</u>

Watercourse: www.montana.edu/wwwwater

WET in the City: www.wetcity.org

GOOD LUCK and WE'LL SEE YOU AT THE 2007 (50th) HAWAII STATE SCIENCE FAIR!

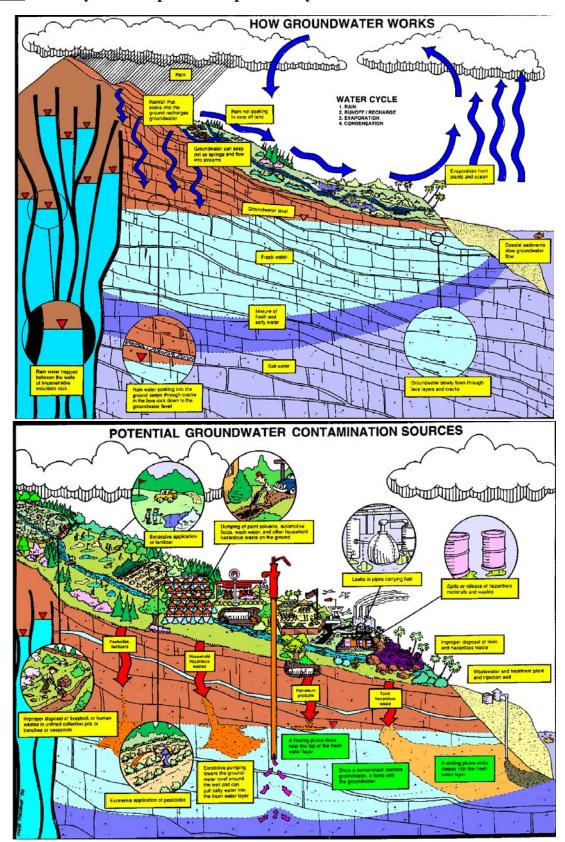
2007 STATE SCIENCE FAIR AWARDS FOR GROUNDWATER/DRINKING WATER TO BE AWARDED BY THE SAFE DRINKING WATER BRANCH

For the 2007 (50th) Hawaii State Science Fair, the Safe Drinking Water Branch will present awards for Groundwater/Drinking Water projects in the following categories:

<u>No.</u>	Division	Description of Award & Special Conditions	<u>Categories</u>
1 2	SR SR	Certificate, \$200 Cash Award. Certificate, \$100 Cash Award. First and second place awards for outstanding individual projects in any subject category related to drinking water/groundwater and/or groundwater protection.	1-14
3 4	JR JR	Certificate, \$100 Cash Award. Certificate, \$50 Cash Award. First and second place awards for outstanding individual projects in any subject category related to drinking water/groundwater and/or groundwater protection.	1-14
5	JD	Certificate, \$50 Cash Award Outstanding individual project in any subject category related to drinking water/groundwater and/or groundwater protection.	1-14
6	OD	Certificate, \$100 Cash Award Outstanding team project in any subject category related to drinking water/groundwater and/or groundwater protection.	00
7	TA	Certificate, \$200 Savings Bond or Cash Award. Outstanding teacher who promotes learning of environmental science (especially as it relates to drinking water/groundwater and/or groundwater protection.) Teachers considered for this award should be nominated by the school or students. Final award will be based on nomination information.	

The Safe Drinking Water Branch reserves the right to not provide awards in Divisions/Categories in which there are no qualifying projects. We further reserve the right to provide multiple awards in Divisions/ Categories where there are multiple outstanding projects.

TEACHERS: Would you like copies of this poster for your classroom.



To obtain copies, contact: Safe Drinking Water Branch, Department of Health

919 Ala Moana Blvd., #308

Honolulu, HI 96814

Attention: Science Fair Project

or call (808) 586-4258.

The Safe Drinking Water Branch is committed to and will continue to work with the Hawaii Academy of Science, District Science Fair Coordinators, and teachers to increase interest in the Environmental Sciences as it relates to drinking water/groundwater quality and protection, as part of the Science Fair Program.

Please send your suggestions/ideas, questions or comments to:

STATE SCIENCE FAIR 2007 Safe Drinking Water Branch State Department of Health 919 Ala Moana Blvd., Room 308 Honolulu, Hawaii 96814

Fax us at (808) 586-4351, Attn: "STATE SCIENCE FAIR 2007- Safe Water"

SDWB WEB SITE:

www.hawaii.gov/health/environmental/water/sdwb.html



LINDA LINGLE Governor of Hawaii CHIYOME LEINAALA FUKINO, M.D. Director of Health

LAURENCE K. LAU
Deputy Director for
Environmental Health



We provide access to our activities without regard to race, color, national origin (including language), age, sex, religion, or disability. Write or call our Affirmative Action Officer at Box 3378, Honolulu, HI 96801-3378 or at (808) 586-4616 (voice) within 180 days of a problem.

Hawaii Water for Kids
State Science Fair (2006-2007 School Year)
Safe Drinking Water Branch
Environmental Management Division
Hawai`i Department of Health
919 Ala Moana Boulevard, Room 308
Honolulu HI 96814

SCIENCE FAIR COORDINATORS: Please announce and post.

If we have mistakenly sent you this newsletter, please forward it to the appropriate staff.