

# The Lake Merritt Institute

And CENTER FOR URBAN RUNOFF AND WATERSHED RESEARCH

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**VOLUME X**

**"TIDINGS" - DECEMBER, 2005**

**ISSUE XII**

**INSTITUTE BROADENS SCOPE:** As shown above, we have added “Center for Urban Runoff and Watershed Research” to our name. We are expanding our responsibility because *you can't improve water quality without managing the watershed*. Lake Merritt and its watershed are inextricably connected, and must be considered as a whole if we are to make progress in improving our urban tidal lagoon. What happens in Piedmont, on Broadway Auto Row and Downtown all impact the Lake, and it is in these places that we must focus our attention. Snowy egrets, a kayaker with her paddle, the height of the next flood and your property values, all depend upon the watershed, and on the urban runoff that it creates.

With this change we are beginning our efforts to improve watershed awareness, measure, reduce & improve runoff volume, and document the watershed with a Geographical Information System (GIS). In the paragraphs below and in succeeding newsletters we will provide information about new ways to limit runoff, to re-establish natural processes, and to have fun at the same time.

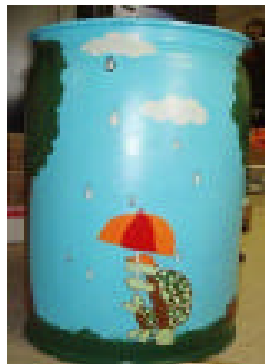
Large Gray Funnels Have Replaced Big Green Filters: Our watersheds no longer function effectively in cleaning our water. Instead of filtering into the soil, rainfall now hurries off from concrete, asphalt and roof tops directly into storm drains. From there it goes on to public waters where the artificially increased volume causes erosion, property damage, degraded water quality and sedimentation. But *YOU* can do something about it. Read on:

## **RAIN BARRELS - VOLUNTEERS NEEDED:**

In Central Kentucky, members of “Bluegrass Pride” came up with a great idea. Artists donated their time and talent to turn rain barrels into functional yard art. Functional because:

- They retard rain water, slowing runoff to streams and lakes
- They provide water for irrigation during a drought
- They save water for emergencies, such as after an earthquake.

It was a resounding success. The barrels were auctioned off and the program is being repeated again.



For details of the program and to see other barrels, go to [www.kentuckypride.com](http://www.kentuckypride.com).

The Lake Merritt Institute would like to start a rain barrel project in California, the land of earthquakes and seasonal droughts. We are looking for:

- Artists willing to donate their time in return for recognition. The Institute will pay for materials.
- Sponsors to provide seed money to purchase a supply of barrels.
- Volunteers to organize and run the project.
- Businesses, public agencies, galleries and private citizens to display the finished barrels.

If you are any of the above, please contact the Institute at [lmi@netwiz.net](mailto:lmi@netwiz.net) or 238-2290. If we have enough response, a meeting will be held in January to kick off the project.

**RAIN GARDENS:** Infiltration rain gardens are bio-retention facilities designed to have aesthetic appeal as well as a stormwater function. They can be built for various levels of infiltration and literature suggests that they be about 10-20 percent as large as the upstream impervious area. They should be built at least 10 feet from foundations and not above steep slopes. Included in the design can be overflow pipes, catch basins, flow restrictors, perforated drain pipes, soils with a minimum infiltration rate of 13 mm/hr and geotextile fabric. They are typically built by creating a shallow excavation and filling it with the right ingredients. But that's all underground. What you see above is just the attractive garden, one that improves water quality by filtration, cooling and retention.



*And of course there is a website called <[www.raingardens.org](http://www.raingardens.org)> from which this photo is taken.*

*There are many other rain garden websites, from Michigan, Minnesota, Wisconsin and elsewhere.*

So, how about a rain garden in Glen Echo park to filter some of the street runoff before it gets to the creek? Native species including trees, shrubs and groundcover can be selected to be attractive as well as functional. Can you think of other places in Oakland where rain gardens would be useful?

Kudos to the Greater Vancouver Regional District <[www.gvrd.bc.ca](http://www.gvrd.bc.ca)> for this information and their design guidelines. For a copy of the design guidelines, contact the Institute.

**ROOF GARDENS:** In Stuttgart, Germany, about 10 – 15 % of the roofs have gardens on them. In Dearborn, Michigan the Ford Motor Company has built a roof garden the size of 8 football fields and some employees have been seen consulting bird field guides to determine which species are nesting up there. And in San Francisco, a Gap Store now has a roof garden.

The time has come for Oakland to have one. How about the at the Boating Center building, scheduled to be renovated as part of the Lake Merritt Master Plan and funded by Measure DD? A green roof here would cool and filter all the seagull poop that now runs off directly into the Lake. It would also save the city money in heating bills and keep the facility cooler in the summer.

Green roofs last longer due to their lower temperature. In Chicago, a section of roof adjacent to a green roof was 170 °F while temperature above the green area was 90°. The typical life span for an ecoroof is about 40 years. The roof does not have to be completely flat; some slope is OK and costs vary from about \$12 - \$25 per square foot. They also improve air quality and provide wildlife habitat in areas where there isn't much.

Portland, Oregon has an ecoroof program, a cooperative effort between the City's bureau of Environmental Services and the Office of sustainable Development. Increases in floor area for proposed buildings in the central city area are allowed if the developer commits to a ecoroof. Tours of existing roofs are available. A lists of contractors, consultants, nurseries and soil providers is included.

If anyone wants to install a roof garden on their property and needs further information, call or email the Institute. They can be built on large commercial buildings, residential homes, garages or even tool sheds and kiosks. For details, go to [www.Greenroofs.com](http://www.Greenroofs.com) or [www.Greenroofs.ca](http://www.Greenroofs.ca) or [www.ecoroofseverywhere.org](http://www.ecoroofseverywhere.org). You may also contact [brucedvorak@livinghabitats.com](mailto:brucedvorak@livinghabitats.com) for more information. Bruce is a member of the American Society of Landscape Architects national Green Roof Task Force.

*New pontoon tour boat arrives at the Boating Center. Shown here decked out in Halloween regalia, the craft was used to escort trick or treaters to haunted parts of the Lake.*

*Center staff served as pirates on the cruise.*



**A HISTORY OF SAUSAL CREEK:** We recently got a copy of “Sink or Swim – A History of Sausal Creek.” It’s a delightful little book by Cleo Erskine & Annie Danger; published in 2004 by water / under / ground publications in Oakland. Well illustrated with original drawings, this 47 page book traces the history of Sausal Creek (and its land) from the days of the Indians through the Spanish era and on into today. It documents the transformation of the watershed from natural to un-natural, the burying of the creek, the loss of the salmon and the animals that still attempt to call it home. But it ends on a hopeful note, providing encouragement to Friends of the Creek that have taken action to restore the Creek where ever they can. Part of the Watershed Guides program and funded in part by the Fund for Wild Nature and the San Francisco Estuary Project, it is a book you will enjoy reading.

School, educator and bulk discounts are available by contacting the publisher directly at P.O. Box 3831, Oakland, CA 94609 or [info@urbanwilds.org](mailto:info@urbanwilds.org) or [www.urbanwilds.org](http://www.urbanwilds.org).

**IF YOU FEED THEM – THEY WILL COME:** And they will stay, and overeat, and overpopulate, and perhaps obtain bird diseases such as avian cholera, salmonella, schistosomes, chlamydiosis, coccidiosis or even the bird flu that some people are worried about. At Lake Merritt people feed the

birds, and some flocks have become overpopulated. Pigeons and summer geese have been the most difficult to deal with, but that may be about to change. We have heard that daily 3:30 feedings at the Nature Center have been canceled, and that efforts to discourage others from tossing out bread, pretzels, doughnuts, left over lunches, jelly beans and (we even saw half of a key lime pie once) other junk food may soon start. Lake Merritt thus begins to join other wildlife refuges where wild animals are encouraged to eat wild food, on their own, and not be treated like semi-pets. People food is not healthy for animals because when General Mills or Kraft decide how much sugar, fat and preservatives to add to their products, they do not do it based on the size of a duck or pigeon. They decide based on the size of a human, and the result is too much of these ingredients for a small wild animal.

City launches bird management efforts: Due to concerns regarding fecal matter, reduced water quality, impacts to native birds and damage to buildings & benches, the Oakland City Council has approved a request for proposals to develop a bird management plan for Lake Merritt. The City seeks services from biologists, environmental specialists and related professionals who, as a team, will seek public input, incorporate existing studies and pertinent data, perform certain studies (if needed) and create a plan for the management of species (Canada Geese and pigeons) of Lake Merritt.



**HAPPY HOLIDAYS:** 'Tis the Season, and we will soon be launching the barge with its Christmas decorations to float on the Lake. This is a tradition started by the Chamber of Commerce (they had three artificial, lighted trees at one time) continued by the City and now performed by the Institute. Watch for it at the end of Glen Echo Cove, by Grand & Harrison.

And, for those of you that sing, the Boating Center is once again offering Caroling On The Lake. For \$5 your water sleigh will carry you on a voyage around Lake Merritt, cookies and hot cider included. Reservations are a must. Tour dates and times are: 12/16 & 12/23 – 6 and 7 pm; 12/10 & 12/17 – 4, 5 and 6 pm; 12/11 & 12/18 – 4, 5 and 6 pm. Call 238-2196 to reserve.

To make your new year joyous, bright and organized, the Calendars Are Coming. In early December those of you that are paid up members will receive our traditional pocket calendar in the mail.

Give the Lake A Present: If you know someone who loves the Lake but is not a member, why not give them (and the Lake) a present? Institute memberships start at \$35 and can be obtained by sending in the form on our brochure available at [www.lakemerrittinstitute.org](http://www.lakemerrittinstitute.org). These funds are an important source of revenue for the Institute, and since we are a non-profit, charitable organization, your donations are deductible to the extent provided by law.

**MAY THE SPIRIT OF CHRISTMAS INSTILL YOU WITH PEACE. BUT IF IT DOESN'T, COME ON DOWN TO THE LAKE: ITS PEACEFUL HERE.**

This edition of "Tidings" was published entirely with private funding donated to the Lake Merritt Institute. To contribute to the Lake Merritt Institute, contact us at 510-238-2290 or 568 Bellevue Avenue, Oakland, CA 94610.