



# Greywater and other non-potable waters in San Francisco

June M. Weintraub, Sc.D.  
Senior Epidemiologist  
San Francisco Department of Public Health  
Environmental Health  
Greywater Alliance Roundtable  
September 30, 2010



# Outline

- Health Department Concerns
  - Cross Connections
  - Vector Control
  - Maintenance
- Health benefits of greywater use





## Concerns

- Improper installations may lead to cross connection to drinking water
- Pooled water may lead to vector breeding
- How to insure continued maintenance after property transfers ownership





# Cross Connection



- Opportunity for non-potable water to enter the drinking water distribution system
- Typical culprit is a submerged garden hose from an unprotected hose bib
- Greywater installations may pose risk of cross connection if they are improperly drained





# Best Practices to avoid Cross Connections

- Laundry to landscape systems pose a very low risk of cross connection as long as they are properly installed and the landscape has proper soil types and appropriate vegetation
- More complex systems should be assessed (therefore permitted)



# Example Bathroom Sink System

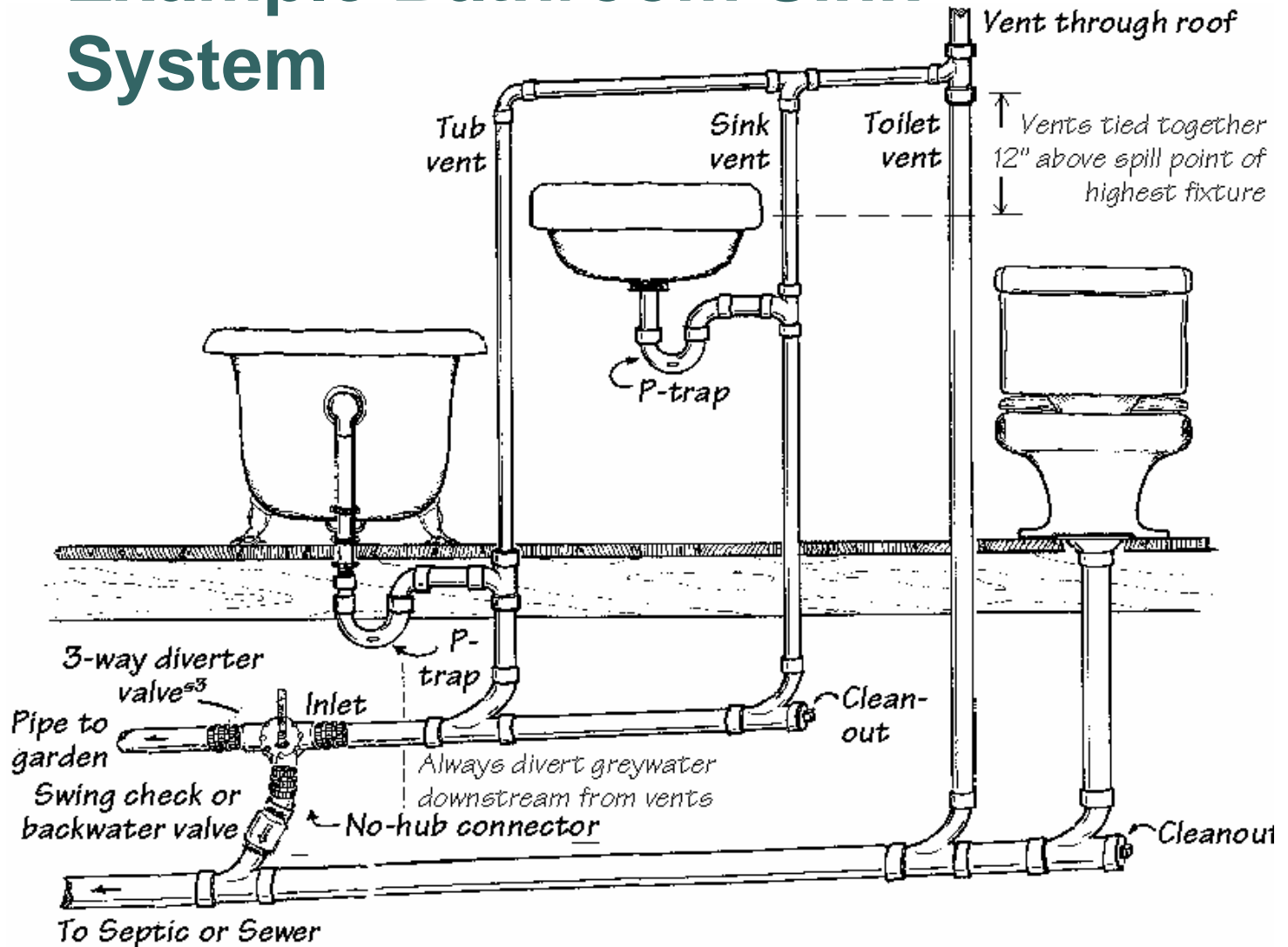


Figure credit: Oasis Design





# Vector Control



- Mosquitoes transmit diseases such as West Nile Virus
- Mosquitoes breed in pooled or stored water
- Water may pool because of:
  - Improper drainage
  - Uncovered storage (e.g. rainwater barrel)





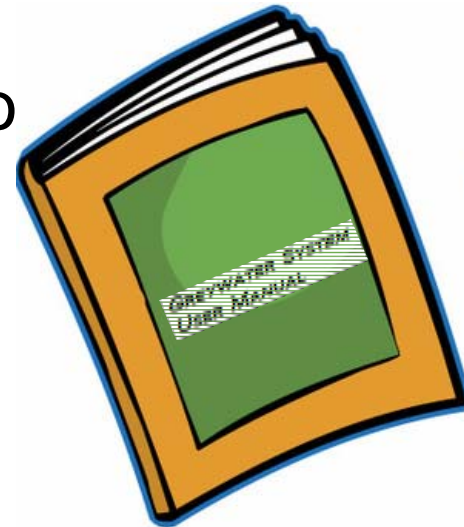
# Best Practices for Vector Control

- Avoid pooling of water
  - Ensure proper draining soil (grade and type)
  - Appropriate quantity and types of plants
  - Valve to switch to sewer
- Cover and screen rain barrels
- Inspect installations regularly



# Transfer of Ownership

- New owner may not be familiar or motivated to maintain a system
- Label valves, pipes, and other components
- Provide User Manual to be maintained with property





# Benefits to Public and Environmental Health

- Reduce household water bill improves economic well-being
- Connect people to their water source and their environment
- Water conservation means water is available for other uses





## More information

June Weintraub

[june.weintraub@sfdph.org](mailto:june.weintraub@sfdph.org)

SFPUC Rainwater Harvesting

<http://tinyurl.com/SFPUC-Rainwater>

SFDPH Program on Health, Equity, and Sustainability

<http://www.sfpbes.org>

