The 2009 International Health Committee Health Project

COMPLETION OF THE WATER SYSTEM AND LATRINES IN LOS RODRIGUEZ, NICARAGUA

Written By Frank Meriwether, Dec. 25, 2009

On November 26, 2009 I visited the small remote village of Los Rodriguez to meet the people there and review the completed water system and latrines funded in 2009 by the WSPHA and the WSEHA International Health Committee. The organization Agua Para La Vida (APLV) designed the water system, and directed the villagers in construction of latrines and in the manual labor required for installation of the water system. Further information on APLV is located on their web site www.aplv.org, which includes a 15-minute video explaining the history and operation of this non-profit organization in the central area of Nicaragua.

Los Rodriguez is located in a remote area called the Autonomous South Atlantic Region of Nicaragua. Roads are generally few and in poor condition in this area. Numerous streams cross such roads during most months of the year. During this visit I travelled initially by four wheel drive, then by mule, then by dugout canoe, then again by mule to reach the village. The river we crossed by dugout is the Rio Tuma, which isolates this village from others. In order to provide a drinking water system to Los Rodriguez, a separate source of water was required, since building a bridge for a waterline over the river from the adjacent village was not feasible. The villagers are very hard workers, living off the land as best they can with chickens, some cattle, some fish, and a few crops.

The source(s) of water for their water system is two springs located close to (and upgradient) from this community. Since there is no electrical power to this (and many other APLV project villages), the water system consists of gravity flow through PVC pipe from springs to a reservoir tank, and then by gravity from the reservoir tank to faucets located near the houses. APLV requires that villagers complete their latrines prior to initiation of water system construction, to help ensure that a more complete health environment is provided to the villagers. APLV health promoters spend time in each village before, during and after water system construction to help ensure that hygiene practices are in place and understood.

(Continued on page 6)

Upcoming Educational Opportunities:

- Washington State Swimming Pool and Spa Conferences
- Compost Regulator Training Workshop
- Surveying Seminars

See pages 4 and 5 for more details!

Check out our updated website!

www.wseha.org
The Washington State Environmental Health Association Newsletter is the official publication of WSEHA. Membership in WSEHA includes a subscription to the newsletter. Manuscripts for publication must be type-written and submitted via e-mail to kerri@wseha.org, or on a computer disk mailed to WSEHA at the address above. Membership in WSEHA is not required for acceptance of articles in the newsletter.

Opinions expressed in articles published in the WSEHA newsletter should not be accepted necessarily as statements of policy or opinions of WSEHA.
President's Message

Geoffrey Crofoot
WSEHA President

But what can I do? Have you ever heard this: Perhaps from folks who speak at meetings, citizens who come into the counter or maybe your children? I know I hear it, and it gets me thinking. Indeed, what can I do? This question tends to lead me to silver bullet ideas. By silver bullet ideas I mean little things people can actually do that resonate through the fabric of our society to bring about positive change or improved social/environmental conditions.

One such idea is: Do not litter, and be a responsible force in your neighborhood and pick up litter.

On the subject, I recently wrote a letter to the editor of the Everett Herald with my observations about my perception of an uptick in littering. [Editor's Note: It never was published in the Herald] I have included this letter here in the WSEHA newsletter for your amusement. Seriously, littering is one of those social ills that really lack any redeeming value. It is truly something that detracts from our living experience on basic pleasure levels as well as more complex societal value levels. I wrote the letter to people who litter, whomever they are, as a reminder to, Just Don’t Do It.

I’ve noticed a litter resurgence as of late. A quick refresher, litter: it’s irresponsible, inconsiderate and wasteful. It’s dirty, degrading and demeaning for hard working folks who have to clean up after you. It’s pure laziness. Littering is simply un-American.

Confidential to parents: Neighborhood streets, parking lots and dark movie theaters are not appropriate places to dump junior’s loaded diaper. I’m sure others will agree with me when I say, if you don’t want it in your car or contaminating your bag, we don’t want it at the doorstep of our homes, offices or under foot at the next $20.00 movie.

On a similar subject, I’m reminded from time to time of another source of litter as I walk my dog along the streets of Everett. So do what I do. Do use a little blue bag (color can vary) and pick that s!@t up!

For those folks who have that secret, secluded dumping spot out in the county, stop complaining that government is too expensive. Just because it’s cheap for you to purge your waste all over the countryside, does not mean there is no cost for cleaning it up.

Finally, to borrow from Johnny Paycheck’s famous song, take your cigarette butts, your spent malt liquor containers and your jumbo-sized, fast food detritus and shove it… right into the closest, publicly subsidized and maintained garbage receptacle. Better yet, take it home and start paying for your own garbage disposal.

I present this opinion letter and my additional thoughts to you as the other half of the silver bullet. I know people litter. I know your municipalities are struggling to keep up with lots of services and litter pick-up is often pretty low on that list of stuff to do. So, I encourage folks to do the right thing and get out there to pick up some trash in your neighborhood. My suggestion is to Keep It Small And Simple Smarty (KISASS.) With this in mind, I take two (for double bagging purposes) plastic shopping bags, some gloves and walk around my block with the dog once a month. I pick up all the typical stuff and throw it away in my own garbage; nothing earth shattering.

What is moving, though, is that the simple act of local litter-picking serves to strengthen and build community rather than tearing it down. You are simply reversing something we all know to be damaging. In world of professional experts who pontificate on how the world works, I particularly appreciate the basic, responsible nature of the act. I know the simple act of litter pick-up is something we can all do, without special training, without organization, right now, that has immediate impacts to our world. What could be better? I can think of one thing; not having to pick up after people in the first place.

“I encourage folks to do the right thing and get out there and pick up some trash in your neighborhood.”

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The Washington State Environmental Health Association, in cooperation with your local health jurisdiction, is pleased to announce the 33rd Annual Swimming Pool and Spa Conference. We encourage everyone who operates a pool or spa to participate in this informative conference.

Conference Sessions 8:30 a.m. – 4:00 p.m.
Registration 7:45 a.m. - 8:25 a.m.

Agenda:

Swimming Pool and Spa Chemistry
Come to our most popular session! It covers pH, disinfection, alkalinity, hardness, TDS and corrosion control with a brief section on pool testing.

Illnesses Associated with Water Recreation
Provides brief discussion of some microorganisms associated with water recreation facilities and their relative resistance to treatment.

Spas, Wading Pools and Recirculating Spray Features:
Discussing ways these facilities differ from swimming pools and some critical health and safety features

Pool Water Testing:
Overview of some basic pool water testing requirements.

Pool Equipment Operation: Pumps, Motors, and Filters
Explore the operation and maintenance of your mechanical room equipment and pool components. Training provides general overview including its operation & maintenance of basic equipment.

Pool Rules and General Health and Safety
Provide an overview of the rules and discussion of the proposed changes DOH is making to Federal Pool and Spa Safety Act, some general safety and health conditions to remember to address.

Registration Fee: $50.00 per person. This fee includes a Pool Operator’s Manual
Special Note to WSEHA members: $40.00 (This is not advertised to the general public because by far most of the conference attendees are not WSEHA members. Membership is verified during the registration process.)

To Register:
Complete the registration form found on our website at www.wseha.org/workshops/2010peregform.pdf and send with payment to WSEHA, 103 Sea Pines Lane, Bellingham, WA 98229 OR Fax the form with complete billing information to (360) 738-8949.

Course Content Questions:
Gary Fraser Olympia (360) 236-3073
Rick Dawson Kennewick (509) 460-4205
Dave DeLong Tacoma (253) 798-6499

Registration Questions:
Kerri Wagner (360) 738-8946
Washington State Environmental Health Association  
and  
Washington Organic Recycling Council  
Will Present  

Compost Regulator Training Workshop  

Date: Wednesday, April 7, 2010  

Location: Snohomish Health District Auditorium  

Course Content: Developed with compost facility inspectors, the course seeks to develop a common understanding of composting basics and develop a shared methodology on conducting a facility inspection.  

Who should attend? The course is designed to meet the needs of Environmental Health Professional involved in composting and inspection work.  

More information is coming and will be posted on our website when it becomes available. Check back at www.wseha.org/workshops.htm for further information. WSEHA will send an e-mail out to members announcing the workshop once all the details are confirmed. Stay tuned...  

Surveying Seminars are Coming This Spring.  

These events are still in the planning phase at the time of this publication. Once the details are finalized, WSEHA members will receive an e-mail notification of the event. The information will also be posted on our website. Go to www.wseha.org/workshops.htm  

Hey WSEHA Folks and Friends!  
Check us out on Twitter @ http://twitter.com/WSEHA or search for us with the Twitter username WSEHA Matters. We’ll be using this tool more as one method to get info out about what is happening at WSEHA, when the hot trainings are planned and what’s going on in the wide wide world of Environmental Health.
Two springs are used for the community’s water supply. Flows from springs are measured during the dry season months (similar to our summer months) during the design process to establish the minimum expected spring flows, to ensure an adequate supply to the community. A 20-year growth factor and 10% leakage factor is used in these calculations, since APLV water systems are built with durable materials and a long time of service. In the case of Los Rodriguez, a future design population of 70 people is assumed. If spring flows are sufficient, APLV requires the area surrounding each spring source to be owned by the community, so that any private property owner cannot interfere with the village water supply. This area of protection around each spring is generally about two acres and is fenced to keep out cattle and people. In addition, an APLV specialist helps the community plant appropriate trees and bushes in the protection area, to protect the spring area and provide nutrition and income to the community. In the case of Los Rodriguez, guava, cocoa and pear trees were planted around the springs.

APLV staff uses a computer program to model the flow of water from spring sources to the reservoir in each system, to determine minimum pipe diameters and to eliminate any air pockets that could limit or stop the gravity flow of water. In addition, a second computer model program is used to design the distribution system (from the reservoir to the faucets) to minimize material costs while ensuring reliable flows from faucets. The community is responsible for digging all the trenches (one meter deep) and all the manual labor in construction of the system.

During my visit I visited the concrete spring boxes constructed by APLV staff and the community at the two springs used for the Los Rodriguez water supply. Lockable access hatches allow the villagers to access and maintain the entrance and discharge pipes leading towards the reservoir. Both spring boxes were completed and in satisfactory operation. The system’s reservoir is a black plastic tank in a locked reservoir house, which was also in satisfactory condition and operation. Water flows from the faucets outside of the houses were about three gallons per minute during this visit. The latrines are ventilated improved pit latrines, and were well maintained.

The community members are delighted with their water system and latrines. They report that the water is clear and clean and has a much better taste and is much easier on their stomachs than their previous supply of water, which was taken from a dug hole. This water system was completed in the summer of 2009, so it is a bit early to try to determine the health benefits of this new water system.

The community expresses great thankfulness to the WSPHA and the WSEHA International Health Committee for funding this project, and bringing them a new healthy future. The total cost for the project was $2338. The silent auction proceeds for this project were $1338, and an anonymous donor subsequently contributed $1000 to fully pay for this worthwhile project. Thank you WSPHA and WSEHA!
University of Washington's SEHA

Submitted by Kelsi Thorsness

The University of Washington's SEHA really took off at the start of this year. We are working on building community within our major and also exploring environmental health outside of the classroom. We are trying to get our website together, and you can check us out at http://depts.washington.edu/ehug/cur_students/seha.html. Hopefully we will have updates soon. Students volunteered together as a group on MLK Day with Friends of the Cedar River Watershed. By the end of the day we had planted 150 native plant species and helped remove invasive blackberries. Our department is also hosting a career panel on February 10th so our students can learn more about different careers in environmental health. Speakers will be from the EPA, a local health department, and an occupational health and safety company.

We also have quite a few fun activities planned. To help build community and also as a fundraiser, we are holding an environmental health t-shirt design contest! Designs must be related to environmental or public health and be made for the public, not just UW students. Our president Andy Leung, at andy638@uw.edu, will take submissions up until February 19th. If we pick your design then you will get a free shirt! With the funds from the shirt sales we will be able to go on more field trips and have snacks at our meetings. We are also going to have a game night and an ice cream social this quarter. The game night will be for students in our major and students interested in environmental health. The ice cream social will include our advisers and give everyone a chance to meet each other. We have had a lot of fun so far this year and hope to continue building community within our major, with other students, and within the environmental health field.

Pool Operator’s Manual
A Guide for Safe and Healthy Operation of Swimming and Spa Pools

Manuals are available for $25 or $20 when purchasing a quantity of 10 or more. WSEHA members rate is $20 per manual.

Please make check payable to WSEHA and mail to:

WSEHA
103 Sea Pines Lane
Bellingham, WA 98229-9363
THANK-YOU DICK PEDLAR!

Dick has been WSEHA’s webmaster for many years. He recently trained Kerri Wagner, our Executive Secretary, on maintaining/updating our website. He resigned as webmaster on 1/31/2010.

Thank-you so much for your many years of great service and all that you’ve done for WSEHA! You are greatly appreciated!

Interested in Being on the WSEHA Board?

Positions are open for the following:

President Elect. The Office of President Elect is a three year commitment – one year is served as President Elect, one as President, and one as Past President. The President Elect assists the President in the implementation of the goals, objectives, and activities of the Association and learns the roles of President in preparation to assume that office. The President is chairperson of the Board of Directors. As President, he/she is responsible for planning and developing goals and objectives; and organizing, coordinating, and reviewing the Association’s activities. The President also represents WSEHA at the NEHA (National Environmental Health Association) Annual Educational Conference.

Central Regional Vice President. Each Regional Vice President represents the WSEHA Board to their region and also represents regional members to the WSEHA Board. This position organizes and conducts regular regional social and educational meetings and is a voting member of the Board.

Membership & Benefits Committee Chair. The Membership and Benefits Committee is responsible for conducting an annual membership drive to attract new members to the Association. It is also responsible for devising and implementing ways and means of increasing and sustaining the membership of the Association. This committee develops or revises the membership brochure for the Association.

Interested individuals: Please contact WSEHA President, Geoffrey Crofoot, at (425) 339-5250 or e-mail: gcrofoot@shd.snohomish.wa.gov.

Thank-you.
Washington State Environmental Health Association (WSEHA)  
Membership Application

WSEHA is a nonprofit professional and educational organization. It was established in 1946 to provide a forum for dialogue and a vehicle for advanced training opportunities. WSEHA enhances individual and collective expertise, promotes professional growth, and revitalizes Environmental Health endeavors. The Association is enriched by the diversity of ideas and orientations of its members, who represent both the public and private sectors.

**Categories of Membership** (please mark next to the category that applies)

_____ **Regular Membership ($50.00)** - Persons who are active in the field of environmental health or related educational activities, who have a bachelors degree from an accredited college or university.

_____ **Associated Membership ($50.00)** - Persons who are active in the field of environmental health or related educational activities, but who do not meet the requirements of regular membership.

_____ **Student Membership ($5.00)** - Persons who are working towards a bachelor or higher degree in sanitary science, public health, environmental health, or related academic field.

_____ **Subscribing Membership ($20.00)** - Persons residing outside of the state of Washington whose principal membership benefit is receiving the WSEHA Newsletter and other generally distributed information.

_____ **Affiliate Membership ($75.00)** - Professional or civic organizations which share the goals and objectives of WSEHA and wish to improve communications and coordination of mutual programs.

_____ **Sustaining Membership ($75.00)** - Persons or organizations that are interested in supporting WSEHA and its goals and objectives.

_____ **Emeritus Membership** - May be awarded by the WSEHA Board of Directors to persons who have been active in the field of environmental health for at least 25 years, including at least 6 years as a member of WSEHA, and who have retired because of age or disability.

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Use as my primary mailing address: ( ) Work ( ) Home

**Alternative E-mail**

I have read and will abide by the WSEHA Code of Ethics found at [http://www.wseha.org/CodeofEthics.pdf](http://www.wseha.org/CodeofEthics.pdf).

Signature: ___________________________  
Date: ____________________

Please make check payable to WSEHA and mail to: WSEHA, 103 Sea Pines Lane, Bellingham, WA 98229-9363. Memberships expire one year from the date issued and are non-transferable.