

NGWA Public Awareness Snapshot

2006 NGWA public awareness milestones people reached:

- → 115 million* Release of ground water awareness information to news media
- Millions Modern Marvels episode on drilling
- 900,000 Information card distributed through Automotive Oil Change Association
- ▶ 650,000 Tractor Supply Company customer information
- 280,000 Wellowner.org
 - Figures represent the potential number of people reached based on viewers and readers for confirmed and projected

NGWA Public Awareness Snapshot

Coverage of NGWA ground water awareness message: January-May, 2007



Newspapers: 528 articles in 21 states Radio Spot #1: 588 airplays in 37 states Radio Spot #2: 713 airplays in 35 states TV Spot: 38 airplays in 23 states

Equivalent ad value = \$645,089

NGWA Public Awareness Snapshot

NGWA's reach through partnerships:

Farm Bureaus:

50 state and 2,800 local

Ground Water Protection Council:

50 state agencies

Automotive Oil Change Association:

2,500 oil change service centers

National Environmental Health Association:

4,500 environmental health professionals

National Association of Conservation Districts:

3,000 districts

Irrigation Association and National Onsite Wastewater Recycling Association:

Thousands of members

NGWA Public Awareness Snapshot

Wellowner.org Web site use in 2006:

- 273,566 visitors
- 793 daily average visitors
- 35,260 uses of Contractor Lookup



Poland

Russia

Senegal

Sri Lanka

Sudan

Sweden

United States

- 47% increase in Wellowner.org use in 2006 over 2005
- 29% increase in Contractor Lookup use in 2006 over 2005

NGWA Public Awareness Snapshot

Pages most viewed by consumers on Wellowner.org Web site:



- #1 Well Maintenance: water pressure
- #2 Contractor Lookup
- #3 Water Quality: coliform
- #4 Water Well Basics: types of wells
- #5 Well Maintenance: annual well checkup

NGWA Public Awareness Snapshot

Ground Water Adventurers visitors by country www.groundwateradventurers.org

Australia Canada **Philippines** China Germany **Great Britain** Saudi Arabia **Hong Kong** India South Africa Iran Ireland Italy **New Zealand** Switzerland

Norway

Mission:

Dedicated to advancing the expertise of all ground water professionals and to furthering ground water awareness and protection through education and outreach.

Vision:

To be the leading community of ground water professionals that promotes the responsible development, use, and management of ground water resources.

Goals:

- Use advocacy to change conditions in favor of sound science and of our membership.
- Transform practices and procedures for the professions through interdisciplinary professional development.
- 3. Serve members by creating community.

Public Awareness Toolbox: Table of Contents



Setting Goals Identify what you want to accomplish1
News Releases and Advisories Share news with your local news media
Letters to the Editor Make your point quickly in a letter to the editor
Op-Ed Columns (Guest Columns) Stretch out on an issue with a guest newspaper column
News Events Create an event to generate news coverage
Newspaper Ads Guarantee your message in the newspaper
Radio Ads or Public Service Announcements Get your message on the radio
Poster and Flier Grab the public's attention with a poster and flier
"Clip & Copy" Articles Give people news they can use and promote your company
NGWA Web Sites Direct the public to helpful information
Partnerships Find allies to help educate the public
Exhibiting Use displays to reach the public
Presentations Share your expertise with the public

Setting Goals

What are you trying to accomplish? How do you get there?

Set Goals – Identify the specific outcome(s) you want. Is it to teach people about properly sealing unused wells, or determining well capacity or design standards for wells? Is it to encourage young people to pursue ground water-related careers? Is it to motivate well owners to regularly maintain their wells and test their water? Your goals will dictate your audience and message, as well as the tactics you will use to effectively generate results.

Know Your Audience – Defining your audience is vital. If you use the wrong message or method for reaching your audience, you'll miss the mark and your goal.

Define Your Message – You can have the right audience but the wrong message—and the wrong message will not motivate the target audience to action. Test your message with some people you know in the target audience to gauge whether it will be effective.

Establish Tactics – You may have the right audience and the right message, but if the tactic you use to deliver the message is ineffective, you'll still miss the mark. For instance, if you invite the well owners to learn about well maintenance and water testing, but hold the meeting at a time when few of them can attend, it won't be effective.

Set Timelines – In what timeframe do you want to achieve your goals? Some goals are time sensitive. Even if they are not, timelines are important to keep you on task.

Measure Effectiveness – Think about the results you want, then come up with a way to measure whether you're getting them. Or get feedback from your target audience as to whether they're persuaded or motivated by your public awareness efforts.

Sample Public Awareness Communications Plan

Goal

 Motivate the public to act in protecting ground water.

Audience

Private well owners and general public.

Messages

- General public—properly dispose of hazardous household wastes.
- Well owners—get a well inspection and water test.

Tactics

- Join a local public authority in promoting a household hazardous waste drop-off program.
- Partner with a local authority in hosting and promoting a well inspection and water testing demonstration.

Timeline

- Plan hazardous waste disposal program in spring, publicize it in June, and execute drop-off program in July and August.
- Plan well inspection/water testing demonstration in month 1, publicize in month 2, and conduct in month 3.

Effectiveness

- Record turnout to hazardous waste disposal drop-off program and have participants fill out a two or three-question survey about where they heard of the program.
- After the well inspection/water testing demonstration (and on an ongoing basis), ask customers where they heard about you and whether they knew about the well inspection/water testing demonstration.

News Releases and Advisories

A news release is news you provide to local news media, usually in written form. The goal of most news releases is to prompt a news story by a newspaper, radio station, and/or TV station (see example on page 3). Other times, news releases are intended to get an individual's or organization's perspective into a breaking news story.

Often, news releases are used by the media with little or no editing, although reporters/editors often prefer to use them as part of a story that they write.

A news advisory also is a write-up given to news media. But the purpose of a news advisory is to make the news media aware of an event or action that will take place or has taken place. Because news advisories tend to be brief and summarize information, they usually cannot stand alone as a news story and require development by a reporter (see example on page 4).

Sometimes news advisories also are used to suggest feature stories that are not necessarily deadline driven, for instance, stories featuring an interesting person, group, or situation.

Following is a breakdown of how a news release is structured:

FOR IMMEDIATE RELEASE

This tells the reporter/editor that the information in the news release can be used immediately.

Month, day, year

This is the date on which the news release is issued, which may or may not be the same as the date of an event or action described in the news release. Avoid confusion between the two.

Headline

The headline should summarize the key point of the release in one or two lines. Headlines are written in the present tense, i.e., "Man Bites Dog".

Lead paragraph

The lead paragraph should grab the attention of the reader. This generally is accomplished in one of two ways:

- (1) by writing a lead that expresses the "so what" of the story;
- (2) by writing an intriguing lead that makes the reader want to know more. Traditionally, lead paragraphs have been written to highlight key facts—the who, what, when, where, why, and how of the story. If not in the lead paragraph, these questions should be addressed at the beginning of the story to ensure they are not lost on the news media.

Body of story

This is the portion of the news release that provides most of the information or support for the story.

Contact

Name, title, company/organization, phone number, e-mail address. This is where a contact person is listed for reporters who need more information.

End

Always put "End," "###" or "-30-" to indicate the end of the release.

(Note: On the following page, we show you how to put the most important points—who, what, when, where, and why in the very first paragraph.)

FOR IMMEDIATE RELEASE - April 6, 2005

Nation's Ground Water Needs More Study, National Ground Water Association Tells
United States Senate
Why
What

In considering the nation's increasing demand for water, the federal government should support efforts to study the largest source of available fresh water–ground water, said the National Ground Water Association (NGWA) Tuesday in testimony before the U.S. Senate Energy and Natural Resources Committee.

Who When

Although ground water makes up roughly 95 percent of the earth's fresh water supply, "Few states have sufficient information necessary to adequately understand the potential yield of their aquifers," NGWA member David Wunsch told the committee.

NGWA was among 22 groups selected by the Senate committee to present and discuss their proposed solutions to the challenges of meeting the nation's ever-increasing demand for water at a half-day Bipartisan Water Conference. NGWA was chosen to speak on the topic, "Knowledge of Water Resources."

In a survey of 28 states, NGWA identified increased federal funding for cooperative ground water quantity and quality data collection and aquifer mapping as the most useful actions the federal government could take. "NGWA members consistently stated that the most useful and efficient action the federal government could take would be to increase federal funding for cooperative ground water programs and data collection," Wunsch said. The National Cooperative Geological Mapping Program was given as a good example of a successful program.

Specific activities meriting additional discussion include:

- Data gaps There is a need for a national clearinghouse for ground water information and data, including real-time data, to help maximize everyone's data-gathering effort.
- Research priority areas Top priorities for development of long-term ground water sustainability
 plans include research on water reuse and conservation; alternative treatment systems; development
 of brackish ground water supplies; aquifer storage and recovery or artificial recharge; emerging
 contaminants and the development of remediation technologies; and the development of models
 and data standards.
- Education It is important to educate the public nationwide so it will understand the urgent need for exercising responsible water use.

"No study of our nation's water supplies can be complete without a clearer picture of our ground water resources. One key to success is a vigorous federal role in funding cooperative efforts with state and local governments to address data gaps," Wunsch said.

NGWA is a membership organization representing more than 14,000 ground water professionals in the United States and abroad. NGWA provides members, government, and the general public with scientific knowledge and economic guidance necessary to responsibly develop, protect, and manage the world's ground water resources.

Media: For more information, contact Cliff Treyens at ctreyens@ngwa.org or (800) 551-7379, (614) 898-7791, ext. 554. You can visit NGWA's Web site at www.ngwa.org.

-End-

Tuesday Event to Mark World Water Monitoring Day

Tuesday is World Water Monitoring Day, and the Westerville, Ohio-based National Ground Water Association (NGWA) will be marking this event with the unveiling of a new ground water observation well that allows real-time monitoring of ground water levels via the Web.

Interview opportunities

Representatives of the National Ground Water Association and the U.S. Geological Survey (USGS) will be present for interviews.

Video opportunities

- (1) Construction of a well
- (2) Core samples showing a cross section of millions of years of local geology
- (3) Girl Scouts earning their "Water Drop" merit badges

WHO: NGWA, USGS, and Geoprobe Systems®

WHAT: Recognize World Water Monitoring Day and the importance of the world's fresh water resources.

WHEN: Tuesday, October 18, 3:00-4:30 p.m.

WHERE: National Ground Water Association headquarters, 601 Dempsey Road, Westerville, Ohio

WHY: Water is worth protecting; 95 percent of the world's fresh water is in the ground.

NGWA is a membership organization representing more than 14,000 ground water professionals in the United States and abroad. NGWA provides members, government, and the general public with the scientific knowledge and economic guidance necessary to responsibly develop, protect, and manage the world's ground water resources.

Learn more about the observation well at the NGWA headquarters by going to www.ngwa.org.

For more information, contact Cliff Treyens, NGWA, at ctreyens@ngwa.org, (800) 551-7379, or (614) 898-7791, ext. 554.

Letters to the Editor

Most newspapers and magazines feature a "Letters to the Editor" section, which contains letters provided by readers. Usually, letters to the editor are in response to already-published news stories. They are often run on, or next to, the editorial page.

Although a letter to the editor can sometimes be lengthy, it's best to keep it to two or three paragraphs to increase the chances the letter will be used. Therefore, to use a letter to the editor as a public awareness tool, it is important to know exactly what you want to communicate and say it concisely.

Often, letters to the editor are in response to negative news or to clarify a news story that was confusing, misleading, or incorrect. In writing such a letter, avoid repeating the negative that was in the original news story so as not to give it additional exposure. Instead, reference the date and story headline, then proceed to make your point.

Make sure to include your full name, address, and telephone number because most newspapers will reject letters unless they can confirm the sender.

(Example of a letter to TIME Magazine regarding a story on Las Vegas' water woes)

Outside-the-Box Thinking Needed for Water Sources

Las Vegas is not alone in scrambling for water. This scenario is becoming more common—and not just in arid regions. Increasingly, it isn't enough to simply conserve water and tap surface or ground water sources outside the immediate area.

Policymakers need to think outside the box and consider how to maximize all local sources of water as part of proper long-term management. A good example is Orange County, California, where authorities reuse water (including treated waste water), desalinate sea water, and collect and store water by pumping it back into aquifers for future use.

The long-term challenge is to extract, use, and dispose of water locally in order to maintain the hydrologic water balance. That's the kind of innovative thinking necessary to ensure sustainable water supplies.

Stephen Ragone, Ph.D. Science and Technology Director National Ground Water Association

Op-Ed Columns (Guest Columns)

Op-ed columns usually run opposite the editorial page in a newspaper. In addition to columns by syndicated writers, newspapers often will run guest columns from people in the community.

A guest column can be effective in reaching the public about an issue, and many newspapers—particularly medium to small ones—are eager to accept guest columns on subjects of interest and relevance to their readership.

To start, contact the editorial page editor with your column idea. Be prepared to state your qualifications for writing the column and give a

clear, brief description of your idea. Ask the editor for an approximate column length, which is usually expressed in number of words. Then, when you write your column, do a word count to keep the column as close to the designated column length as possible.

As you prepare to write the column, as with all public awareness tools, have a clear outcome in mind for whatever segment of the newspaper readership you are targeting. Let that outcome quide your message.

Regular Water Well Checkups A Good Idea

By Cliff Treyens, National Ground Water Association

What if you never changed your car oil or looked under the hood? How long would your car last? When it comes to water wells, many well owners pay little attention to maintenance and water quality. Yet, it's just as important. Few things are more vital than the water you and your family drink. A water well checkup by a qualified water well system contractor will help ensure a reliable supply of fresh drinking water.

If it's important, you schedule it. That's what we do for dental checkups, pediatric visits, even cars under warranty. Since the water you drink is important, the National Ground Water Association (NGWA) encourages all well owners to mark a date on the calendar each year to call and schedule a well checkup.

For many well owners, that time could be now. NGWA recommends a well maintenance check and water test at least every 12 months. If you haven't done so, now is a good time for a well checkup before a problem occurs.

According to NGWA, a well checkup should include:

- A flow test to determine well output
- A water-level check before and during pumping, if possible
- A pump motor performance check including amp load, grounding, and voltage
- A pressure tank and pressure switch contact check
- A well equipment inspection to assure it is sanitary and meets local codes
- A water test for coliform bacteria, nitrates, and anything else of local concern (additional tests
 may be recommended if water appears cloudy or oily, if bacterial growth is visible on fixtures, or
 if water treatment devices are not working properly)
- A clearly written report that explains the results and recommendations, and includes all laboratory and other test results.

You can arrange a checkup by contacting a local water well contractor who conducts the type of maintenance recommended by NGWA, locating NGWA member or certified nonmember contractors in your area through the "Contractor Lookup" feature at the Web site, www.wellowner.org, and checking the local phone book under "Well Drilling and Service."

Be a responsible well owner and take good care of your water well. It will preserve your time, money, and good health in the long run.

News Events

A news event is any event designed to attract the news media in order to generate coverage on a subject. Examples of news events are news conferences, a staged event such as a well decommissioning, or a presentation such as a public forum.

Typically, news events are used by organizations to attract the news media's attention to a subject. For instance, the California Groundwater Association has held numerous well decommissioning demonstrations in partnership with local environmental health officials to help the public understand the dangers of improperly abandoned wells.

Another example is demonstrating how to properly store or dispose of hazardous wastes, or some techniques for conserving water.

Here are the basic steps in organizing a news event:

Decide on your objective

Once you know your objective (desired outcome), then develop a message and supporting event that drive the point home to your target audience (i.e., household well owners, public officials).

Think through everything you need for the event including

- Participants (ground water contractors, technical experts, public officials)
- A location or facility
- Lighting, electrical, audio-visual needs
- Materials/handouts

- Optimal timing (both for participants and the news media)
- Notification of local news media
- Contact person for follow-up by news media covering event.

Think in terms of visuals

A good picture or video opportunity can be a big incentive for the news media to cover your event. Think about what would be interesting for the news media to photograph or videotape.

Develop a timeline

Plan backward from the day of the event to determine when various preparations must be completed in order to hold the event on schedule.

Plan for contingencies

Consider what could go wrong and plan accordingly. For instance, if you plan an outdoor event and the weather turns bad, either have an alternative indoor location or a weather delay date in mind.

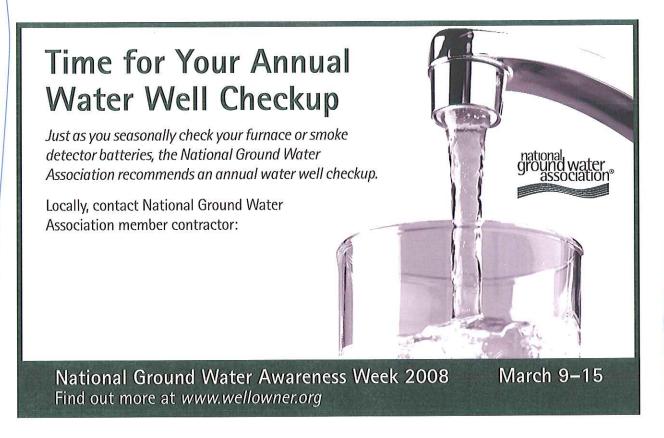
Follow up the news event

Consider following up with news people who attend the event to give them an opportunity to ask clarifying questions. Or, follow up with news people who did not attend by providing a news release or summary of the event and an opportunity to conduct interviews.

Newspaper Ads

NGWA provides to its members a newspaper advertisement that can be submitted to local newspapers. It leaves space for a company name and contact information to be inserted by the newspaper.

The ad pictured below can be downloaded from the Ground Water Awareness Week Web page at www.wellowner.org or you can e-mail Cliff Treyens at ctreyens@ngwa.org for a print-quality copy.



Ads are in black and white, and are updated yearly.

Radio Ads or Public Service Announcements

NGWA provides to its members pre-recorded radio spots that can be used as:

- paid advertisements with a company name and contact information
- free public service announcements with the NGWA name and contact information.
- Version A: 30-second spot requiring station tag (adding NGWA-member contact information)
- Version B: full 30-second spot (includes NGWA contact information)
- Version C: 10-second spot requiring station tag (adding NGWA-member contact information)
- Version D: full 10-second spot (includes NGWA contact information)

The pre-recorded scripts are as follows:

30-second spot

Announcer: If your water comes from a well, now's a good time to schedule your annual water well maintenance check. A qualified National Ground Water Association contractor can make sure that your well is running right so that you and your family continue to enjoy high quality water . . . water that's such an important part of your wellbeing.

Tag 1: For more information, contact your local National Ground Water Association contractor, (name of contractor), at xxx-xxx-xxxx. That's xxx-xxx-xxxx. Tag 2: For more information, contact the National Ground Water Association at 800-551-7379, or visit w-w-w dot well owner dot o-r-g.

10-second spot

Announcer: If your water comes from a well, now's a good time to schedule your annual water well maintenance check.

- Tag 1: Call (name) at xxx-xxx-xxxx for more information.
- Tag 2: Call 800-551-7379 or visit w-w-w dot well owner dot o-r-g.

The pre-recorded spots can be obtained by e-mailing NGWA Director of Public Awareness Cliff Treyens at ctreyens@ngwa.org.

Sample 30-second spot for recording at local radio station

Following is a script for a 30-second radio spot that can be recorded in its entirety at your local radio station.

Announcer: It's easy to take water for granted. Turn on the tap and out it flows. But water is a precious resource that should be protected for you and your family. If you own a well, test your water annually to make sure it's safe. Well owners also should take safeguards to minimize the chances of their ground water being polluted. Learn more about how to keep your water well system safe and protect ground water by going to w-w-w dot well owner dot o-r-g. That's w-w-w dot well owner dot o-r-g.

Poster and Flier

NGWA provides its members with this poster and the flier on the following page for use during National Ground Water Awareness Week. Both can be downloaded from the Ground Water Awareness Week

Web page at www.wellowner.org for printing locally or you can get an electronic copy for printing locally by e-mailing Cliff Treyens at ctreyens@ngwa.org.

National Ground Water Awareness Week March 9-15, 2008

What is ground water?

It's the water that fills cracks, voids, and other openings in soil, sand, and bedrock.

Why is it important?

Most ground water flows directly into streams, rivers, and lakes from beneath. Also, persons with wells use it for drinking water.

How much is there?

About 98 percent of the available fresh water on Earth is ground water.



Protect this precious resource!

- Don't dispose of any hazardous substances by dumping them on the ground, pouring them down the drain, or flushing them down the toilet. Contact local waste authorities about proper disposal of hazardous substances such as:
 - Pesticides/herbicides
 - Antifreeze
 - Fertilizer
 - · Paint/paint thinner
 - · Oil
 - Chemicals
- Don't overapply pesticides, herbicides, and fertilizers. Use them in the recommended amounts.

- When you're handling hazardous substances, do so over cement to avoid ground water infiltration or runoff into surface water from accidental spills.
- If you own a water well, have your water tested yearly. Also test if there is a change in the odor, taste, or smell.
- If you own a septic tank, have it cleaned and serviced every two years to prevent a breakdown that could pollute your ground water.

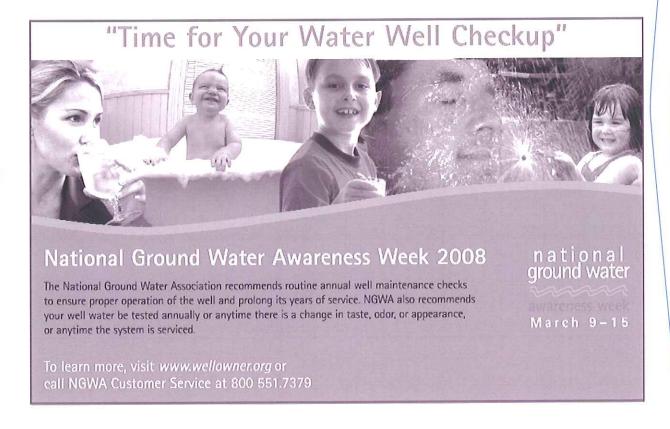
Sponsored by the National Ground Water Association ground water



Supported by:

Actual poster size is 18 inches by 24 inches and is blue with black type.

Try placing this flier, with permission, where people are most likely to see it such as bulletin boards in public places, store windows, and other gathering places. The flier can be reproduced from the PDF file at a quick print establishment or a printer.



Actual flier size is 8.5 inches by 11 inches and is in full color.

"Clip & Copy" Articles

NGWA's "Clip & Copy" articles on the topics below are available in PDF format and are intended for printing. You can download them by going to www.wellowner.org and clicking on the Ground Water Awareness Week page. Check periodically for new topics. After you print the ones you want to use, tape your business card in the appropriate place and make copies.

Water Quality

Arsenic Bacteria in Your Water Ground Water Quality Hydrogen Sulfide Iron Bacteria Is Your Water Safe? MTBE

Nitrates Radionuclides Trihalomethanes

Well Construction and Maintenance

Having a Well Drilled
How to Hire a Water Well Contractor
Pumping Systems
Water Pressure
Water Well Rehabilitation
Well Caps
Well Construction
Well Definitions
Well Logs
Well Systems Materials

Ground Water Protection

Ground Water Protection Sealing Unused Wells Water Security

Other

Bottled Water
Geothermal Heat Pump Systems
Good Water Habits
Hydrologic Cycle
Private Water Wells and Public Water Systems
Septic Systems
Specialty Waters
Water Efficiency

(See an example of a "Clip & Copy" article on the following page.)



Bacteria in Your Water

What You Need to Know

As a private well owner, you are in a unique position: You control your own water supply. With this benefit come some responsibilities. You are responsible for protecting your valuable ground water resource as well as your family's health.

Occassionally, based on a news report or the color or smell of your water, you may wonder about the safety of your water supply. What do you do? Testing your water for the most common well contaminants is the best course of action. Answers to some questions you may have follow.

How common are water problems?

"Pure" water does not exist—all natural water contains some gases and minerals and is likely to contain some microbial organisms. Most water bacteria are harmless and many are actually beneficial.

I've heard about coliform bacteria. What are they?

Coliform bacteria originate as organisms in soil or vegetation and in the intestinal tract of warm-blooded animals (fecal coli). The many sources of facterial pollution include runoff from woodlands, pastures, and feedlots; septic tanks and sewage plants; and animals (wild or domestic).

Will coliform bacteria make us sick?

Maybe, maybe not. Most coliforms are harmless residents of soil and will not make people sick. Some strains of E. coli, the most common fecal coliform bacterium, may be pathogens. Some found in food have been lethal. Their presence should be taken very seriously.

If my water is clear and smells OK, is it safe?

You cannot directly smell unsafe bacteria or protozoa. They can only be detected using tests designed for that purpose. You should check your water quality regularly. Some sources of odors are bacteria or septic, or the presence of chemicals. It is a good idea to take your nose seriously. Have the water tested.

What is the "iron bacteria" problem?

Better described as iron biofouling, the problem popularly known as "iron bacteria" is both complex and widespread. Iron and other biofouling consists of biofilms, which include living and dead bacteria, their sheaths, stalks, secretions and other leavings, and embedded metal hydroxide particles. "Iron bacteria" is one type of biofouling among several, including the characteristic white sulfur slime of sulfur springs. Manganese and even aluminum biofouling is also found in ground water systems. These biofilms are natural and usually harmless. Natural iron biofouling often acts as a preliminary iron filter in wells and therefore can serve a positive function as well. Biofouling can be a nuisance, however. Generally, iron biofouling is the cause of iron buildup in wells and pipes.

If I have bacteria in my well, where do they come from?

Many types of bacteria are native or adapted to saturated sediments and rock, and are present in significant numbers in most water supply aquifers, even deep formations. Given time and a route (soil and rock provide plenty of both), bacteria will migrate into and take up housekeeping in an aquifer. "Non-native" coliform bacteria or "protozoa" of potential health concern, such as Giardia and Cryptosporidium, are most likely introduced from the surface.



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What do we do about this problem?

If possible, do whatever it takes to correct the problem in your existing system. If necessary, install a new well and water inlet system away from the source of contamination.

What's the best way to maintain my good water supply?

You should have your water tested annually for radon, bacteria, and anything else of concern to you, even if you do not perceive a change in your water. Have your water tested by a qualified laboratory. They are listed in your phone book under "Water Testing" or "Laboratories."

The question of whether or not to have your water tested is a serious one that concerns the health of you and your family. If you obtain drinking water from your own well, you alone are responsible for assuring that is safe.

Where can I get more information?

For more information, contact your local ground water contractor, the U.S. EPA Safe Drinking Water Hotline at (800) 426-4791; the National Radon Hotline at (800) 767-7236; or the National Ground Water Association at (800) 551-7379. More information on these topics can be found at the National Well Owners Association's Web site, maintained by the National Ground Water Association, at www.wellowner.org.

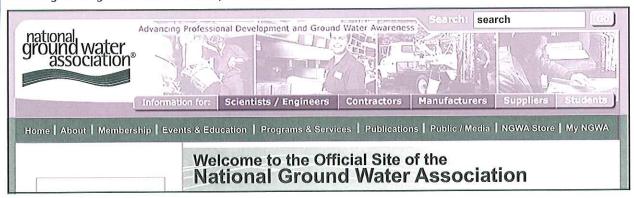
CUT OUT FLYER:
PASTE YOUR BUSINESS CARD HERE;
PHOTOCOPY AND
DISTRIBUTE TO YOUR CUSTOMERS.

NGWA Web Sites

NGWA has three Web sites that may be of interest to public audiences. Include one or all in information you provide to the public.

www.ngwa.org

Find information on topics including consumer buyers guides, educator resources, a low-interest loan program for household water wells, and contact information for NGWA's Affiliate State Associations, as well as general ground water industry information.



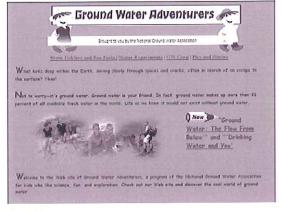
www.wellowner.org

This Web site is a resource for private well owners. It provides information about well construction and maintenance, water testing, ground water protection, National Ground Water Awareness Week, and more. It also includes Contractor Lookup—an online service to help consumers find NGWA-member contractors or NGWA-certified contractors.



www.groundwateradventurers.org

This Web site is for children grades K-12. It explores the world of ground water through a wide variety of games, puzzles, fun facts, a newsletter, and more.



Partnerships

There are many partners right in your own backyard that may want to help you get the word out about ground water. Consider approaching potential partners about working with you to raise public awareness about ground water. You can use some of the resources provided to you in this toolbox and work with a partner to distribute information.

Examples of potential ground water awareness partners include:

- Local real estate agents
- Schools
- County health or environmental health departments
- Farm bureaus
- Soil and water conservation districts
- Local news media
- Rural electric cooperatives (energy suppliers)
- Businesses serving rural areas (i.e., farm and ranch stores)
- Large water users (i.e., golf courses, nurseries, manufacturers)
- Future Farmers of America/4-H
- Local water-related organizations or companies.

Exhibiting

Often an exhibit in the right place at the right time can reach a great number of people. County fairs and other community events can provide contact with potentially thousands of people at comparatively little cost or effort.

Following are some tips from the national Trade Show Exhibitors Association.

- Keep the message simple so as not to overload visitors with information.
- Have a clear goal, and make it specific. Don't try to accomplish too much.
- Use demonstrations for visitor memorability. Be sure they tie in with your message. (For instance, if
 educating people about the ground water resource, use a sand tank model or go to www.groundwater
 adventurers.org for details on how make an edible aquifer.)
- Address the needs of the target audience
- Consider offering a giveaway (such as a brochure) that conveys your message.

Presentations

Speaking to a group can be terrifying for many, but it need not be. With your expertise and some preparation, you are quite capable of giving a good presentation that will be greatly appreciated by audiences who can benefit from your knowledge.



The following article can guide you in delivering an effective talk and/or PowerPoint® presentation. Also, NGWA can provide members with PowerPoint presentations titled *The Future of Ground Water* and *Well Construction*. Copies of these presentations can be downloaded from the Member Exclusives/ Member Services section of NGWA.org. (www.ngwa.org). You also may want to see if there is a Toastmasters Club in your area where you can learn to be a better speaker.

(The following article is reprinted with permission of the author, Susan K. Jacobson, *Communication Skills for Conservation Professionals*. Washington, D.C.: Island Press, 1999.)

Psychologists report that some people are more afraid of speaking in public than dying. Yet, much of daily life revolves around oral communication. You greet people. You ask questions and express opinions. You give and get information. Your ability to articulate your ideas often determines your happiness. Your voice, tone, body language and appearance combine to communicate information to others.

Introduction

The organization of a talk includes an introduction, body, and conclusion. The introduction provides a short, crisp explanation of your presentation and defines the purpose of your talk for the audience. It reveals the theme and why your subject is important. The introduction presents a road map to help your audience follow the talk. The introduction also should present the organization of the talk. Studies have shown that audiences that are given the theme

at the beginning of a talk will have better recall of it later.

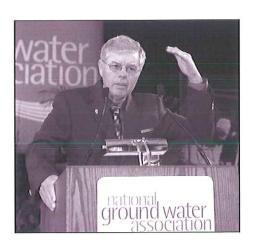
The introduction also creates a supportive atmosphere for learning and captures the audience's attention. Acknowledge your audience and grab their attention with questions, a quotation, an illustration, a story, a picture, or an attention-getting generalization. Why should the audience listen? Tell them something that affects them directly, for example, "We all drink water from the Orange Creek watershed, but do you know where the water's been?" Or give an illustration that relates the subject to your audience. A provocative statement opening your talk may help convince the audience to stay. "Picture yourself in a situation where the only food you can eat is . . ."

Body

The body of the speech presents the factual support for your theme. As the theme is developed, key points are made in a logical sequence and the audience follows along as you elaborate on the theme. Limit your talk to five or fewer main points to illustrate or prove your message. The amount of information you include in the body will depend on the amount of time you have. The use of stories and anecdotes can illustrate your meaning and keep the audience's attention.

Conclusion

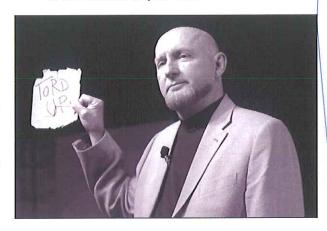
The conclusion of your speech is the climax. Reemphasize your theme or take-home messages and tie the conclusion back to the opening of your talk. You might want to finish the talk in a memorable way with an anecdote, poem, visual image, or quote. Don't fade away. Conclude!



Some tips for giving a successful presentation are summarized below:

- Practice ahead of time. As Mark Twain said,
 "It takes three weeks to prepare a good ad-lib
 speech." Make sure your talk is the proper
 length of time. 20 to 30 minutes is the maxi mum length for an auditorium program. [NGWA
 note: 15 to 20 minutes would be even better.]
 Orientation presentations should be only five to
 15 minutes long.
- Adapt your talk to your audience's background and interests. Simplify things and do not give unneeded detail. Stick to your theme.
- Talk to the audience. Do not hide behind a podium. Stand where the audience can see you and talk directly to them. If you need to write on the board or point at a slide, stop talking while your back is turned. Then continue. Make eye contact with the audience. Some speakers like to pick out a few people in the audience in different areas of the room to focus on during their talk.
- Don't talk too fast, speak clearly, and don't mutter. Vary your voice pitch and tone.
- Use hand gestures and body language to help tell your story, and keep the audience's attention. Put your whole body into your presentation. Facial expressions and body movements can show pleasure, enthusiasm, pain, and sorrow. Gesture with your hands and arms to show shape and location. Emphasize an important point by pounding your fist or pointing your finger. You may want to record or videotape a practice talk to evaluate how you do. Watch politicians as they deliver speeches and see how gestures may work for you.
- Use visual aids to complement your talk.
 Slides, props, overhead projections, chalk-boards, whiteboards, flip charts, and other visual cues can make presentations more interesting and memorable. Make sure charts and graphs are simple and clear if you use them, and make sure the entire audience can see the visual aids you use.
- Do not worry if you are nervous. It is good to be a little nervous. Most people feel a sense of anxiety before a talk. This can make you seem enthusiastic and help you stay focused. Your own interest in and enthusiasm for the subject will be contagious.

- End on time. Leave time for questions or discussion at the end.
- The best way to improve your presentation is to carefully evaluate it. You can make a videotape of your practice talk or ask a colleague to give you critical feedback. Feedback from your audience, using comment forms or other methods, provides even more direct evidence of the success of your talk.



Tips for presenting a slideshow or PowerPoint presentation

Similar to the public talks, a slideshow or PowerPoint presentation should weave a unified story around a theme. The sequence of slide images and accompanying narration should have a cohesive beginning, middle, and end.

It is easy to lull an audience to sleep with a slide show: just turn out the lights, speak in a monotonous tone, and show slides that are hard to see, out of focus, repetitive, or irrelevant to the theme. To ensure a quality slide talk:

- Prior to starting, test the projector and presentation slides.
- Talk to the audience before showing slides in order to establish rapport before plunging the room in darkness.
- Always preview the slides to ensure none are backwards or upside down. Make sure they will show up clearly in the darkened room.
- Link sequences of the slides with transitions to make your presentation flow.
- Use slide sequences to reveal the complex nature of a specific topic, such as adding more details to a diagram or additional items to a



list. Revealing information progressively also adds an air of mystery and interest to your talk.

- Use high quality slides: clear subject, in focus, with good composition and color.
- Show close-up slides so the audience can see the details.
- Include people in some of your slides. People like to look at other people.
- For text slides, use symbols and bullets to minimize the number of words. Use simple fonts and large lettering. Avoid crowding too much information on a slide. Graphs and pie charts are easier to read than tables.
- Vary the length of time you leave each slide illuminated, from a few seconds to a minute or more. On average, show slides at a rate of one slide per 15 seconds, with a maximum up to a minute, depending on the text or image. Once the slide no longer pertains to your narration, change the slide. Don't let the audience contemplate the image for longer than is necessary to illustrate your particular point.
- Do not introduce each slide, for example, "This is a Florida panther." Instead, make your point: "Less than a hundred Florida panthers are left in the wild." The slide should enhance your narration.
- Change your voice inflection to keep the audience's attention. They cannot see your enthusiastic hand gestures in the dark.
- Your narration should anticipate the next slide and smoothly transition to it in advance of flashing it on the screen.
- Always face your audience, not the slide!
 Stand to the side of the screen and don't block it.

- Additional equipment to add sounds to your narration or animation to your PowerPoint presentation can make your presentation more interesting and entertaining.
- Practice your talk. Again!

NGWA closing note on presentations

- Have a "hook" that grabs the attention of your audience. This could be an angle that you know they're interested in or concerned about.
- Keep your presentation short and punchy.
 Have one or two take-home points. If possible, give them a handout with the take-home points or actions you want them to take.
- More is less. The more time you invest in your preparation, the less likely you are to miss the mark.
- Less is more. The less verbal fat you throw at your audience, the more successful you'll be in getting your points across.

Getting Started

After you develop your own public awareness goals (see page 1), you'll probably want to use more than one of the tools described in this booklet. Think about different ways you can reach the same audience to reinforce your message or to reach more people.

You can e-mail Cliff Treyens, NGWA's public awareness director at ctreyens@ngwa.org for a workbook on how to prepare a public awareness plan. This very simple approach to preparing a basic public awareness plan can be used by groups or individuals.

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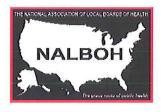
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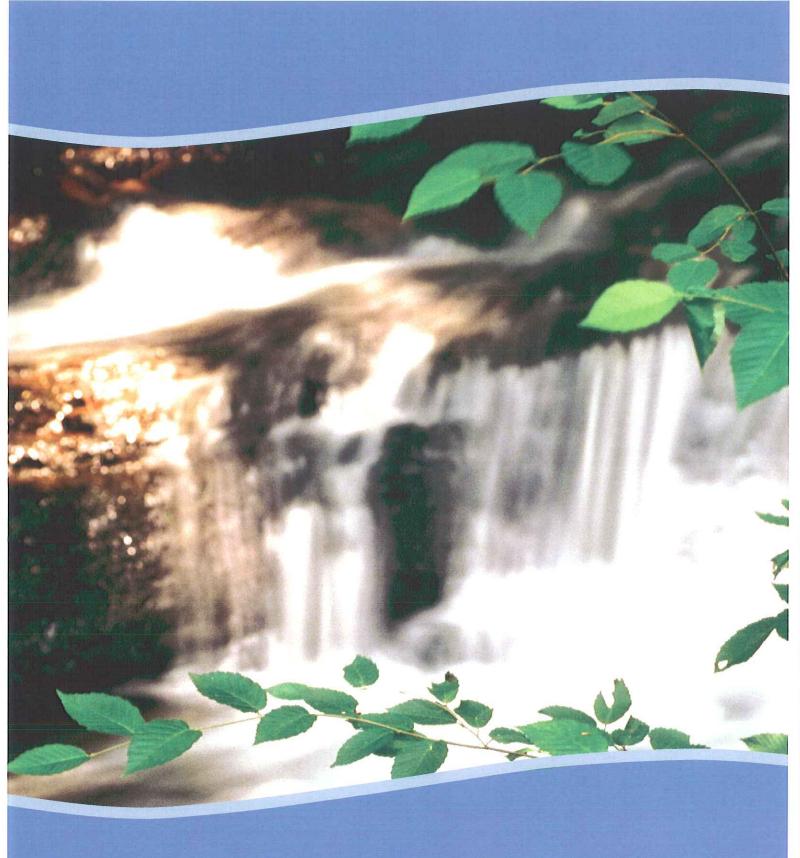
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