

**Survival Guide:  
Public Communications for  
Water Professionals**

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**Illustrated by Jon Hanley**

**2002**

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**Water Environment Federation**

Founded in 1928, the Water Environment Federation (WEF) is a not-for-profit technical and educational organization with members from varied disciplines who work toward the WEF vision of preservation and enhancement of the global water environment. The WEF network includes more than 100,000 water quality professionals from 79 Member Associations in 32 countries.

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# Preface\*

(Revised April 2010)

Are the public and the media paying more attention to you these days? Most communities are increasingly interested in water-related issues. People need more information and reassurance about their water environment. As a water professional, you can help shape public perceptions about the water/wastewater field, biosolids, reuse, and other important community issues. All you need to do is communicate effectively with the public.

The “no news is good news” era is long gone for wastewater professionals. When the public understands your efforts to protect the public health and the environment, it will support your work. As limited resources are stretched to meet the demands of growing communities and regulations are tightened to ensure clean and safe water, your role in the well-being of the community grows.

Do your customers understand the breadth of expertise it takes to collect, clean, and recycle wastewater efficiently and affordably? Do they have any idea what you do to protect them? If not, it's time to tell them—now!

You have been entrusted to protect the public health and the environment. To do that, you need to understand the needs and concerns of the community. Your customers have a right to know what they're getting for their money, and you should be recognized for meeting vital needs in the community. All you need to do is communicate!

Chances are, writing and public speaking were not your favorite subjects in school. So who's going to be your spokesperson? You, because you're the expert, the one who knows!

This book will help you learn how to communicate effectively with your community and customers. With a little help, you can learn the basics of public communication because it's not rocket science—it's not even water science. Public communication is an art, with a few rules and a lot of room for individual expression.

Effective public communication will make your job easier. If you don't believe it, think of the last time a problem arose and was resolved in your community, family, church, school, team, or other group of people. Communication was the key.

Here's a little exercise to determine your mindset. Which statements sound like something you or your colleagues would say?

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***“IF THE PUBLIC DOES not know about the community infrastructure, they won't support it, protect it, or even understand the need for maintenance and repair. The days of our business being the silent service ended with the Clean Water Act. Our communications approach has been evolving ever since.”***

Joe Haworth, Chief  
Public Information  
Officer, Sanitation  
Districts of LA County,  
California.

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- The only time we talk with ratepayers is when they have a complaint.
- Reporters never call unless there has been a complaint about the facility.
- Citizens oppose facility expansions and rate increases.
- We're technical professionals and shouldn't have to be communicators too.
- Every time the media mentions us, they get the facts wrong.
- Our customers know what happens after they flush the toilet.
- Our community knows they have an awardwinning wastewater treatment facility.
- Our civic leaders and local and regional media have toured our treatment facility.
- Our facility has been the subject of a positive newspaper story.
- Local educators view our staff and facility as resources for students.

If you chose the last five statements, you probably don't need to read this book. In the likely event you chose the first five, you're ready to learn the art of public communications. Please read on.

The Water Environment Federation (WEF) has revamped *The Popular Plant Manager—How to Win Public Support* (Manual of Practice No. SM-6) into this survival guide. We invite you to use the guide to overcome challenges and seize opportunities for developing positive relations with your customers, community leaders, interest groups, the media, and other individuals and organizations.

The WEF Public Education Committee contributed to the survival guide and gave input and direction to the final product. The WEF Utility Management Committee, representing the target audience for the publication,

reviewed it and suggested enhancements. Their contributions were invaluable. In addition to Sheri Wantland, primary contributors to the publication include

Robert Adamski  
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***\*Publisher's Note: The basic communications information, tips, and strategies described in this 2002 publication are still relevant and useful today. As you create your own programs, don't forget to consider the huge impact and potential that social media bring to the communications table. Blogs, Twitter, Facebook, webcasts, and other online opportunities should all be reviewed as part of a communications program mix, evaluated for effectiveness and reach just like other tools. You can also find additional, new communications resources for water quality professionals at [www.wef.org](http://www.wef.org).***





## About the Primary Contributors

**Sheri Wantland** has more than 20 years of experience in public involvement and information, specializing in educating people about new regulations aimed at health and safety and protecting the environment. Currently, she is Association Manager for the Pacific Northwest Clean Water Association. For seven years, she was the public involvement coordinator for Clean Water Services, Washington County, Oregon, and led the award-winning Tualatin Watershed "Partners for Clean Water" nonpoint source pollution awareness campaign. She was chair of the Cascade Chapter of the International Association for Public Participation (IAP2) and developed the Teams Improving Public Participation Strategies (TIPPS), a low-cost, rapid assessment of public involvement programs. In 1986, she created Oregon's mandatory Alcohol Server Education Program, the first of a kind training that has reduced drunk driving and alcohol abuse. Sheri has bachelor's degrees from Arizona State University in journalism and sociology.

**Robert Adamski** of Gannett Fleming Engineers, New York City, has more than 30 years experience as a water quality expert, with 5 years as Deputy Commissioner for New York City Department of Environmental Protection. He has been involved in a wide spectrum of public outreach to businesses and citizens—everything from beach and water cleanups to planning new infrastructures and facilities. His engineering degree is from New York City College. Robert is the current Chair of the New York Water Environment Association Public Education Committee and Vice-Chair of WEF's Public Education Committee.

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**Steve Frank** brings 30 years of professional communications experience to this project. He has been Public Information Officer for Denver, Colorado's, Metro Wastewater Reclamation District since 1992, where he manages relationships with the news media, ratepayers, educators, employees, environmental and agricultural groups, and affected parties downstream. Steve holds a B.S. in industrial management from Georgia Tech and a master's of communication from Georgia State University and is accredited in public relations by the Public Relations Society of America.

**Joe Haworth** has overseen the Public Information Office for the Sanitation Districts of Los Angeles County, California, since 1972. Public relations and public involvement in all forms are his life's work. He was primary editor of the first WEF public education manual of practice in the mid-1970s. Joe graduated from Stanford University with a master's degree in environmental engineering.

**Linda Kelly** is the Public and Employee Services Division Manager for Clean Water Services (CWS) of Washington County, Oregon. Since joining CWS 13 years ago, she has received international, national, and state awards for water quality educational and citizen involvement programs, including WEF's Public Education Award for the Tualatin River Rangers. She has a master's degree in journalism from Texas Tech University.

## CHAPTER 1

# **Public Communications Equals Public Relations, Information, and Involvement— *You Can Have It All, Even Respect!***



### **SURVIVAL OVERVIEW**

This chapter sets the foundation for appreciating the importance of effective communication with the public. It builds from understanding of your personal communication strengths to making distinctions between public relations, information, and involvement. It concludes with a comparison of two different approaches to public communications.

### **DOES THE COMMUNITY KNOW THAT YOU EXIST?**

The work of wastewater professionals is vital to the community, but do members of the community even know that you exist? You need the support of the community to accomplish your mission. Of course it

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**ONCE YOU HAVE established good communications, it will be easier to respond to an emergency, introduce a rate increase, site a facility, announce new technologies, and manage controversial projects and programs.**

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already supports you, literally, because it pays the bills. You would be nowhere without it. But why not have the support of community members' hearts and minds too? With a strong public communication program you can have it all, even respect.

## **WHAT'S IN IT FOR YOU?**

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Some of the best reasons to communicate with the public are to

- Build community support and diminish opposition;
- Help people understand the value of what you do for them;
- Prepare them for innovations, regulatory changes, rate increases, and so forth; and
- Strengthen your positive image as a good neighbor providing a vital service.

You probably know a few more reasons, too. At some time, every facility has unique circumstances that should be communicated to neighbors, ratepayers, the community at large, legislators, the media, and others. If you only communicate with them after a process upset or chemical spill, you just might be a sucker for punishment.

It's difficult to make your best impression when dealing with an emergency (unless people already know and trust you!). Better to have established lines of communication, developed a rapport, and built trust.

This book will show you a variety of ways to plan and implement a winning communications strategy. But before you get into the details, you need to get into the spirit. A common stereotype of operators, technical professionals, engineers, chemists, and other utility personnel is that they are poor communicators. Does that mean you aren't and never will be a good public communicator? No! It's a stereotype that probably says more about other people's poor listening skills than your ability to communicate.

## **WHY YOU'RE PERFECT FOR THE JOB**

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All people are qualified to be expert communicators, especially in the fields in which they have trained and educated themselves. If any of the following traits fit you, consider them communication strengths of yours.

***Freshness***

You're new and haven't learned everything about the facility or its staff. The strength here is that you and the neighbor, customer, reporter, or elected official are probably wondering about the same things. As you learn, try to remember how amazed you were to see a cloud of flocculant and understand how it fit into the process!

***Technical Expertise***

You're among the best in your field and could run the facility with your eyes closed. You have a depth and breadth of knowledge that no one else has and can answer any questions that would be asked. In fact, you'll throw in fun facts to help people visualize each point. "Every day, we recycle 20 dump-truck-sized loads of biosolids!"

***Institutional Knowledge***

You've lived and worked here your entire career. You're active in the community; know everyone; and understand the politics, budget issues, fears, and concerns related to your organization. You know your organization inside and out, and no one disputes that you know the history. You speak with unique authority as a long-term employee and member of the community you serve.

***Passion***

You love and believe in what you do. You might even feel guilty for taking a paycheck for doing what comes so naturally. You know that your work and organization are making the world a better place. You can't hide your enthusiasm, and you seek opportunities to help people understand how your work fits into the big picture.

***Teacher, People Lover, and Leader***

Anyone who is a "born" teacher or leader or who genuinely likes people is probably a great communicator. You definitely have the basics for public communication. With a little coaching, you'll become an expert.

Be aware of and use your strengths to spark communication. Your mastery of the subject, enthusiasm,

experience, commitment to the community, friendly nature, or fresh perspective can help communicate your message.

Use this guide to become comfortable in your role as a spokesperson for your agency, facility, project, or program. Public communication strategies and tools will help you respond to an emergency, introduce a rate increase, site a facility, announce new technologies, and manage controversial projects and programs.

## **SO MANY PUBLICS**

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Before you learn how to develop a communications strategy, you should know some terms of art in the field of communications. The continuum of public communication functions includes public awareness, education, information, involvement, outreach, participation, and relations. Some of these terms are virtually interchangeable, but public communication activities fall into four general categories.

### ***Public Relations***

Any interaction with the public is public relations. Public relations (PR) activities promote a positive image or recognition of an organization, project, or issue. This can be as simple as a logo or as sophisticated as a multimedia campaign.

### ***Public Information***

Public information is shared without the expectation of feedback from the public. It builds awareness and can stimulate interest in water quality issues. Examples are newsletters, brochures, fact sheets, annual reports, and newspaper advertisements.

### ***Public Education***

Public education teaches citizens how they can conserve water and protect and enhance water quality. Tours, presentations, exhibits, teacher's workshops, demonstration gardens, and participation in community events are examples of public education.

## **Public Involvement**

The public is involved in or participates in making a decision. Authentic public involvement begins long before a decision is made. "Too little, too late" fails because people will feel their input was not really incorporated to the decision.

A good public communication strategy uses the entire spectrum. One communication tool might encompass all four. For example, a newsletter may highlight your facility's perfect compliance record (promotes), answer frequently asked questions (informs), offer water conservation tips (educates), and include a survey of preferences (involves) for a new sewer alignment.

## **TWO APPROACHES TO PUBLIC COMMUNICATION**

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Public communication is often underused, underrated, and underfunded. Too often, leaders of an organization communicate with the public as an afterthought or in response to a crisis. The following are examples of two different strategies; study them and see which you prefer.

### **Scenario 1**

Ajax is a community of 250,000 people who are served by an award-winning wastewater treatment facility that operates quietly and efficiently. The buildings and structures blend in with the scenery and neighbors use the grounds as a park. Maintenance vehicles have small logos that say Ajax Wastewater Facility and are indistinguishable from other service vehicles. Management's top three priorities are to meet permit requirements, continue installation of new technologies, and keep rates low. The local newspaper only mentions the facility when a rate increase is proposed and passed.

One day, a contractor working on an expansion of one of the tanks breaks a chlorine line. Several employees are injured slightly as they clean up the site. Ambulances are called, and a local television reporter picks up the story. She calls the facility and is told a chlorine line has broken and people are injured. It's a slow newsday, so she is assigned to conduct a live broadcast with video footage from the news helicopter.



Within an hour of the mishap, the local television station is broadcasting a live interview with the plant superintendent, who explains that the spill is contained and cleaned up. The reporter says, "Chlorine is a deadly chemical. Is there a risk to the community?" The superintendent answers, "This is not chlorine gas. It is contained on-site and is not a danger to the community." The reporter persists, "But what if the wind picks it up? There's a school just a block from here. What about the children?" The superintendent reassures her the risk is minimal, and the reporter abruptly ends the story by saying, "Your news station will continue to investigate this story in the evening news."

Frightened parents call the school and arrive to take their children home. During the afternoon, the reporter interviews teachers, parents, and a few children. Her main question is, "Now that you know chlorine is used at the wastewater facility, how do you feel about it being next to your school?" The lead story on the evening news is "Investigation: Chlorine Threatens School" although the spill is contained and cleaned up, the line repaired, and the two employees are fine. Now the story is about fear.

The next day, local newspaper editorials ask whether a facility that stores tons of chemicals should be sited next to a school. This question becomes the topic of local talk radio programs. People are frightened, and they feel betrayed.



How could their community subject them to such risk? The plant superintendent, board of directors, and employees are inundated with questions and accusations.

The third day after the incident, the board issues a two-page news release that outlines the facility's award-winning safety record and technological excellence. The newspaper publishes the news release the next day, and an in-depth article two days later. Employees are asked to restate the facts in every conversation. It is several weeks until the community's concerns die down.

Two months later, the television reporter calls the plant superintendent and asks for a tour of the facility. She is thinking about doing a story about wastewater treatment now that she's seen the facility and thinks it is important to the community. The superintendent arranges a tour and interviews with key employees.

## **Scenario 2**

Zenith is a community of 250,000 served by an award-winning wastewater treatment facility next to a high school. A large sign at the entrance to the facility is visible to all who pass.

Facility staff frequently host tours for students, elected officials, citizen activists, and the media. They are sought out for their expertise and opinions on growth management, water resources, and environmental issues. Several employees are regular presenters at the community college's environmental sciences classes. Their booths are popular features at the community's Earth Day celebration, Pioneer Days, and other annual events. Employees staff the booth and hand out bookmarks, magnets, and pencils bearing the facility's logo and pollution prevention messages. They also provide brochures, the annual report, and more technical information about the facility and environmental issues in the community.

Several employees serve on advisory committees for the community's nature preserve and parks. A representative regularly attends neighborhood association meetings and circulates a monthly fact sheet to elected officials and citizen leaders to inform them of facility operations, rates, construction projects, and other news.

One day, a truck carrying a caustic chemical is traveling near the facility. Suddenly, the driver swerves to avoid a collision, shifting the load and causing a container to fall off and break open, releasing the chemical into the air and the nearby

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**WELCOME TO  
Zenith's  
Advanced  
Wastewater  
Treatment  
Facility Serving  
Your Community  
Protecting Public  
Health and the  
Environment**

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creek. An emergency response team is called to the scene and begins the cleanup process. They call the plant superintendent, who dispatches a source-control crew to help with the cleanup and protect the creek.

A local television reporter has picked up the story and races to the scene. On the way, she calls the plant superintendent who she interviewed at last year's Earth Day celebration. He assures her the chemical will dissipate with little risk to anyone although a few fish might die in the first few minutes. He mentions that the chemical is very caustic on contact and might damage the paint on any cars that passed through the intersection right after the accident.

The reporter goes on the air, reassures people that the creek will be fine, and cautions them about damage to cars. She mentions the superintendent, referring to him as a knowledgeable source for information about the chemical and the creek, and publicly thanks the facility personnel for their quick response and expertise.

### **Which Scenario is Better and Why?**

Surely, you see the advantages of the Zenith approach. It didn't happen overnight, and it took planning and a commitment of staff, resources, and funding. Some of the factors differentiating Ajax and Zenith are listed below. A quick comparison of factors at each facility before the emergencies shows why one fared better than the other.

|   | <b>Ajax</b> | <b>Zenith</b> |
|---|-------------|---------------|
| Award-winning facility                                      | X           | X             |
| Facility is near a school                                   | X           | X             |
| Buildings and vehicles well-marked                          |             | X             |
| Community is informed of facility's safety record           |             | X             |
| Fact sheets regularly distributed to civic leaders          |             | X             |
| Community understands wastewater treatment                  |             | X             |
| Local media understand wastewater treatment                 |             | X             |
| Facility tours for students, elected officials, and media   |             | X             |
| Staff makes presentations to students                       |             | X             |
| Exhibits at community events and gives away information     |             | X             |
| Staff serves on community advisory committees               |             | X             |
| Reporters know the facility superintendent                  |             | X             |
| Superintendent is a trusted resource for the media          |             | X             |
| Superintendent offers context and more information          |             | X             |
| Superintendent able to prevent media scare                  |             | X             |
| Facility and staff are known for protecting the environment |             | X             |
| Management focus on permits, technology, and rates          | X           | X             |
| Management focus on public communication                    |             | X             |

### Survival Tips

- Reasons to communicate with the public
  - ✓ Build community support and diminish opposition;
  - ✓ Help people understand the value of what you do for them;
  - ✓ Prepare the community for innovations, regulatory changes, rate increases and so on; and
  - ✓ Strengthen your positive image as a good neighbor providing a vital service.
- Communication strengths include freshness, technical expertise, institutional knowledge, passion, and being a born teacher/people lover/leader.
- Effective communication makes it easier to respond to an emergency, introduce a rate increase, site a facility, announce new technologies, and manage controversial projects and programs.
- Any interaction with the public is public relations.
- Public information is one-way communication to inform.
- Public education teaches people how to conserve water and protect water quality.
- Public involvement includes people in decision making.
- Public communication requires planning, staff, resources, and funding.
- Many factors contribute to an effective public communication program, including
  - ✓ The community and local media understand wastewater treatment;
  - ✓ Students, community leaders, and reporters have toured the facility;
  - ✓ The superintendent and staff are trusted sources of information;
  - ✓ The facility and staff are known for protecting the environment; and
  - ✓ Management values effective public communication.



## CHAPTER 2

# **Your Communications Strategy— Where You Need to Go and How to Get There!**

### **SURVIVAL OVERVIEW**

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This chapter explains how to develop an effective communications strategy or plan. It encourages you to set objectives and clarify the issues you need to communicate to your audiences. It explores potential partners that can help maximize your communications resources and discusses how to set realistic timelines and budgets. Finally, it discusses the importance of management support.

### **YOUR OBJECTIVES**

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An effective communications strategy requires clear objectives. If you know where you need to go, you can focus your efforts to get there. The first step is to identify the problems or issues you wish to communicate. These might include public and internal communication issues, such as complaints, lack of public image, or low staff morale. Many facilities have these issues and will have other problems that would benefit from effective public communications. The Bay Creek example shows how one issue relates to another.

The Bay Creek example demonstrates how key messages are developed after the issues have been identified and objectives set. Your communications plan will include steps to set objectives, identify issues, and develop messages. Over time, as needs and priorities change, the plan will need revision.

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***AN EFFECTIVE  
communications  
strategy  
requires clear  
objectives***

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## **YOUR AUDIENCE**

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Even in the smallest community, there will be several distinct audiences to whom you are communicating. At the very least, you will communicate with customers, elected officials, and staff. Other audiences might include environmental groups, neighborhood associations, industry representatives, partner agencies, municipalities, other public and private organizations, schools, and the media. Your message and audiences will be defined by the issue or communication need.

## **LOGO AND THEME**

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A logo is a symbol that represents your organization. If you don't have a logo, get one that is simple, easy to understand, and easy to reproduce. Involve employees in developing the logo; they'll appreciate being asked and also have good insights to how the organization is viewed. Before choosing a logo, test it with many audiences to make sure it is clear and related to your organization from the customer's perspective. Ideally, you should seek graphic design expertise when designing a logo. Experience is needed to create and design an effective logo.

The logo may include initials, geometric shapes, or water symbols. Add a theme or catch phrase, focusing on the benefit you provide to the community, for example, "Clean Streams for the Future" or "Protecting Your Water". Choose words that will not become outdated quickly, but also expect to update the theme about every ten years or as needed to keep current with your organization's image.

## **PLANNING YOUR STRATEGY**

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Your communications strategy or plan helps ensure that you get the right message to the right audience. Once you have identified your objectives, the messages, and audiences, you can begin to consider which media or communication tool would be most effective. Some messages will be good topics for newspaper articles and trade publications. Others will be lively topics for



radio and television. Local radio stations and weekly community newspapers might be particularly interested and give in-depth coverage to your stories.

It's a good idea to have one designated spokesperson for your facility to ensure consistency and accountability. Still, you want to maximize your resources to launch an effective communication campaign. If you have a staff of one, prioritizing will be key because you won't be able to hold a press conference, host an open house, distribute a newsletter, and staff a booth at the county fair at the same time.

## **WHO CAN HELP?**

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Your staff may be limited, but there are many people who might contribute to your public communication activities.

### **Employees**

All employees are potential spokespersons and ambassadors within their own communities. Many are eager to participate in communication programs and enjoy contributing skills such as speaking, writing, illustrating, or taking photographs.

### **Partner Agencies**

Many public agencies have at least one communications specialist on staff. You probably work closely with city, county, public works, utilities, parks, schools, libraries, police, fire, and other officials who are used to being in the public eye. Find out who they are, ask about their communication programs, and explore potential partnerships. Like any other professional, communications experts like to share their knowledge.

### **Consultants**

Many engineering consulting firms have marketing, public participation, and communications specialists who might be able to offer some advice and assistance. Public relations expertise can boost your efforts and help define the organization's strategy.

### **Suppliers and Vendors**

Marketing materials from suppliers and vendors might be useful in your communications program. Review manufacturers' Web sites, CDs, videos, photographs, fact sheets, brochures, and other materials to determine their appropriateness, cost, and availability.

### **Water Environment Federation**

In addition to this book, the Water Environment Federation produces a variety of excellent communication materials that can be viewed on the Federation's Web site at [www.wef.org](http://www.wef.org).

### **Interns**

Students majoring in communications or journalism might provide valuable assistance at little or no cost. Writing, editing, video production, graphic design, and Web site development are all skills that you might find for free at the local college or high school. Establish a relationship with the journalism, communications, or business departments of your local colleges. Once they know your requirements, you may be able to secure high-caliber interns on an ongoing basis.



### ***Community Access Cable Television***

Many communities have public access cable television that is available free of charge for production and broadcast of programs of interest to the community. Trained volunteers produce the programs. Check with your local cable access provider to see if any programs would be suitable for your message.

### ***Local Nonprofit Organizations***

Many local organizations are dedicated to improving the community's social, economic, and environmental conditions through public education and involvement. They are experienced in organizing volunteers and disseminating information and are natural partners for your public communication efforts. They include service organizations, chambers of commerce, environmental groups, town hall groups, and neighborhood associations. You can amplify your message at a very low cost by collaborating with them.

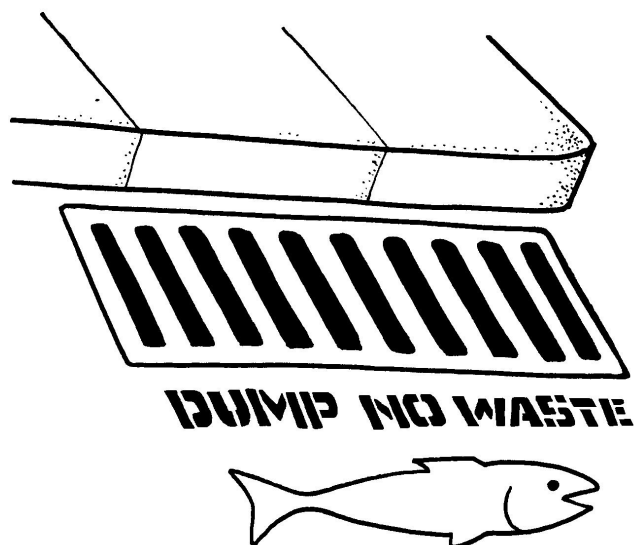
### ***Neighborhood High Schools***

A growing trend in school districts is to require community service hours for high school graduation. Consider enlisting these energetic teenagers to distribute door hangers, help in a watershed cleanup, or to stencil storm drains.

## **BUDGET TIME, MONEY, AND RESOURCES**

Your plan must have a realistic timeframe, cost, and staffing. Plan for more time and money than you think you'll need, and count on having less help than you want.

Estimate the timeframe in work hours and duration for each activity. It will take a few days to develop and distribute a news release, a couple of weeks to develop and print a fact sheet, and months to produce a community event. The hours per item will vary depending on the number of contributors and the levels of review.



## COST EFFICIENCY

For every activity or tool you plan to use, chart cost of staffing and materials (graphic design, printing, mailing, etc.). Estimate the number of individuals to be reached and their strategic priority. Divide the cost of the activity by the number to be reached to see if this activity is cost effective.

| <b>Activity Tool</b> | <b>Total Cost</b> | <b>Audience Reached</b> | <b>Cost Per Person</b> |
|----------------------|-------------------|-------------------------|------------------------|
| Billing Insert       | \$3,000           | 56,000                  | \$0.053                |
| Public Meeting       | \$ 250            | 50                      | \$5.000                |
| News Article         | \$ 60             | 60,000                  | \$0.001                |

If the billing insert advertised the public meeting and the newspaper article covered the public meeting, then all three activities were cost effective.

## THE BOTTOM LINE

Estimating the cost of a communications activity can be daunting, but do your best. At the very least, the true cost of an effort will include the following:

- Staff time, for example, hours x hourly wage;
- Materials, for example, brochures, PowerPoint slides, and signs;

- Services, for example, design, printing, mailing services, and postage; and
- Operating costs, for example, computers, telephones, and postage.

Remember, the true cost of a project might also include lost time on other projects.

## GETTING THE GO AHEAD

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Even the best plans need an approved budget. Because it's difficult to put a dollar value on good will or the lack of bad publicity, communication campaigns are often seen as "fluff" undeserving of a budget. Getting approval for your communications plan may take a strategy of its own. A good strategy is to roll public communications into project budgets that have tangible value and benefit to the organization. For example, include the cost of an informational mailer in the budget for an odor control upgrade project.

When pitching the communications budget to decision-makers, clearly state the benefits to be gained.

### **Scenario: Bay Creek Wastewater Treatment Plant**

The neighbors complain about odor and noise. The infrastructure is aging and needs upgrades and expansion to serve the growing community. The community does not support funding requests. Because of permit violations, staff morale is low. How can these issues be resolved through communication?

#### **Issues**

1. The community needs to know how the facility protects public health and the environment.
2. The community needs to understand that wastewater treatment plant upgrades and expansion are a necessary part of a growing community, just like those for any other infrastructure or utility.
3. Neighbors need to know the odor and noise problems can only be resolved with technological improvements that will cost money.
4. Ratepayers need to understand the services they are receiving for their dollars.
5. Personnel need to be promoted as professionals and their efforts should be recognized. They need

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***RECOGNITION AND awareness of your mission, increased good will, understanding of the value you bring to the community, project acceptance and completion, lack of bad publicity, and other factors are real benefits that will be gained through public communication.***

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to be well informed about planned upgrades that will end the risk of permit violations.

**Key Messages**

Now that you have identified your issues and are getting a sense of the communications objectives, begin thinking about the messages and audiences. In this scenario, the key messages would be

1. The facility is a vital part of the community, protecting public health and the environment.
2. As the community grows, the facility needs to be upgraded and expanded.
3. Without the upgrades and expansions, odors and noise will persist.
4. Upgrades and expansion cost money.
5. Employees are educated public servants who receive ongoing training and are doing an excellent job of protecting the public health and the environment.

A sound strategy builds the foundation for communicating your message. By taking the time to outline the steps and evaluate needs and resources, you can determine which programs will be the best investment of your time and money.

### Survival Tips

- An effective communications strategy requires clear objectives
  - ✓ Set objectives,
  - ✓ Clarify issues,
  - ✓ Identify audiences, and
  - ✓ Develop key messages.
- Over time, as needs and priorities change, the plan will need revision.
- Your communications strategy or plan helps ensure that you control the message.
- Investigate potential partnerships and joint communication efforts
  - ✓ Employees,
  - ✓ Partner agencies,
  - ✓ Consultants,
  - ✓ Suppliers and vendors,
  - ✓ Water Environment Federation,
  - ✓ Local nonprofit organizations, and
  - ✓ Others.
- Know the resources you have and what you need.
- Set timelines that you can meet.
- Develop realistic budgets and stick to them.
- Educate decision-makers about the benefits and how they justify the expenses.



## CHAPTER 3

# **Create Your Communications Tools— *Use the Tools That Work for Your Audience!***

### **SURVIVAL OVERVIEW**

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This chapter discusses the multitude of communications tools from which to choose and build an effective program. It discusses the importance of training and educating employees as the foundation of a successful communication program. It explores a variety of tools for internal and public communications and points out things to consider when choosing tools, techniques, and media.

All communications should be accurate, up to date, and user friendly. Learn to communicate key messages in a phrase, a sentence, a paragraph, and a report. Target communications to specific audiences and choose tools and media to which they respond best.

Consider multimedia approaches that repeat messages through varied means. Repeating the same message over time also reinforces the message and increases the likelihood it will be remembered.

Practice consistency—there should be common themes and messages at public meetings, on your Web site, and in fliers and newsletters. The customer service department needs to have the same information as the engineering and maintenance departments so that customers see and hear the same information regardless of the source.

### **INTERNAL COMMUNICATIONS**

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Your communications plan will focus on internal and external audiences. Employees are the internal audience that, with proper information, training, and support, will become ambassadors to the community.

## ***From the Inside Out***

A strong public communications program begins at home. Employees are the backbone of your organization and the heart of a successful communications program. On the job and off duty, they interact with each other, customers, and the community at large. Employees who are well informed about their workplace and feel appreciated for their accomplishments will project a positive image of the organization. Give them information to be effective ambassadors.

## ***Effective Internal Communications***

Employees need to know what's happening within the organization. Those who feel left out of the information loop tend to fill the void with misinformation. Worse yet, uninformed employees may believe they are deliberately being kept in the dark. This can generate anger or negativity, and angry employees are not good ambassadors. Provide employees at all levels with a regular stream of accurate and timely information.

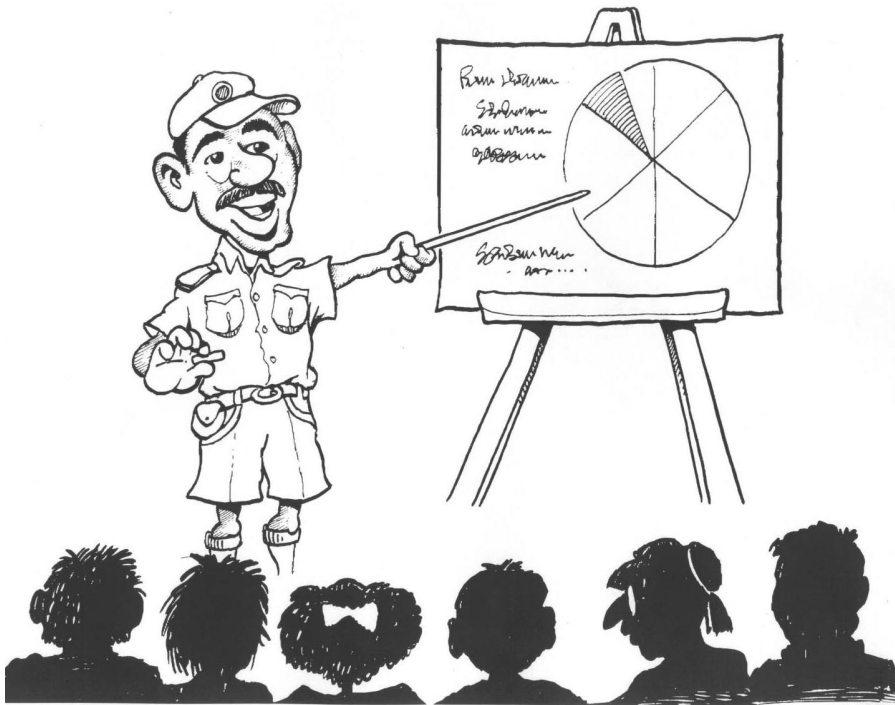
Employees should be the first to hear any news that will become public. Be ahead of the grapevine in communicating all matters of concern, especially

- Personnel changes,
- Potential problems,
- Rate increases,
- Funding,
- Wage settlements,
- Major construction and improvements,
- Policy decisions,
- Expansion of the service area,
- Litigation related to the facility,
- Awards, and
- Community involvement.

## ***The Management Connection***

Supervisors and managers need to be well informed so they can share facts and context with their staff. Their support is critical to an effective internal communications program. Training in the importance of strong internal communications and communications skills can help them be more effective links in the process. For





example, supervisors can help their employees make the connection between community support, budget approval, and pay increases.

### ***Training Employees to be Educators***

Responding to questions and complaints with courtesy and confidence takes training and practice. Employees who are in a position to deal with customers need support and guidance. Courses on customer service, dealing with difficult people, and other communication skills will help employees develop professionalism. Training in public speaking and creating presentation materials will strengthen your communications network.

### ***Community Involvement and Networking***

Encourage employees to engage in community activities, volunteer events, and service organizations on company time if possible. Networking at meetings, breakfasts, luncheons, and volunteer events helps build relationships with community leaders. These groups are often in need of speakers, so it might provide an oppor-

tunity for an employee to make a presentation or give a tour of the facility.

### **Tools for Internal Communications**

**Employee meetings.** Regular and frequent staff meetings are the best way to keep employees informed. No other setting provides the two-way flow of information that will keep you well informed too. It is important for people to have the opportunity to talk about their concerns and brag about successes in the workplace.

**Employee newsletters.** Newsletters are excellent tools if they are well written, interesting, and timely. Online newsletters are best for disseminating news immediately. Because some employees do not use e-mail or check it regularly, prominently post the newsletter at each worksite. Conventional print newsletters take more time, but even smaller organizations might be able to publish a monthly or quarterly newsletter with in-depth coverage on items of interest to employees.

**All-employee memos.** Use a memo to all employees to communicate complex information immediately, perhaps in conjunction with an e-mail message to everyone.

**Bulletin boards.** Every employee break room should have a bulletin board where notices and information are posted during all work shifts. Keep posted information current and remove outdated materials. Never use them to avoid face-to-face communication.

**Web sites and intranets.** Employees will use a good Web site. Use e-mail and other tools to remind them to visit the Web site and notify them of new features. Like all other communications tools, the Web site or intranet must be concise, easy to read, accurate, timely, and interesting.

**Electronic signs in well-seen locations.** Consider a lighted sign or scrolling sign (ticker-tape type) for short messages, recognitions, and so forth.

## **PUBLIC COMMUNICATIONS TOOLS**

### ***Things to Consider***

There are a multitude of communication tools, from a business card to a multimedia interactive tradeshow exhibit, mass media to one-on-one interaction. Being aware of the menu of choices can help you decide which tools to include in your communications plan now and in the future.

**Cost.** How much staff or consultant time will go into writing, layout design, printing, postage, developing mailing lists, and other tasks necessary to produce and distribute the item? For example, door hangers are inexpensive to produce but very labor-intensive to distribute. Billing inserts reach a large number of customers but can add postage and handling fees to your billing costs.

**Message control.** You will have total control over the message when you pay for printing or production and distribution. If you rely on mass media or other organizations, your message might be edited or taken out of context. Direct mail and paid advertising give you the most control, and you can mail brochures, fact sheets, annual reports, and so on.

**Timing.** If your message is time sensitive, the public communications tool you choose must have a precise delivery schedule. Again, if you pay for printing or production and distribution, you generally have full control of when the audience will receive the message. Ensure that meeting notices are distributed well in advance of meetings.

**Audience.** When you control a mailing list, you know exactly who received your information. Newspapers, magazines, radio, and television stations can provide numbers and demographics about their audiences.

**One- or two-way communication.** If you need feedback, choose a communication tool that makes it easy for people to comment and respond. Even a direct mail brochure can be a tool for public input if it has a

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***CONSIDER THE message, target audience, your ability or skills needed to produce the tool, cost, your control over the message, when and how it will be delivered, and the opportunity for feedback.***

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response form or contact information. Face-to-face conversations at a community event are productive, especially if you record the comments to share with decision-makers.

**Fun factor.** People are drawn to novelties and innovation, so don't forget to make public communications fun when it's appropriate. A community festival featured a living stream constructed indoors, complete with flowing water and native plants. A walking, talking toilet was a hit at another event. A game show format is how one program engaged adolescent students in water resources education.

### ***So Many Choices***

Your budget and resources will dictate your communication tools. Be sure to use a "free" tool, a well-crafted news release, when you have news. Work your way up from inexpensive fact sheets to direct mail and display ads in the local newspaper. The following table is an indicator of the choices you have in developing a communications plan.


### ***Tool Tips***

**Publications and print media.** Publications are the backbone of your public communications plan. They're cheaper, easier, and faster to produce and reproduce than other communication tools and can be revised and updated. Written materials that explain the treatment process and its importance to a clean environment are important to your communications strategy. With desktop publishing and color printers, you can produce quality publications in-house. Treatment plant schematics and public information bill stuffers are also available from the Water Environment Federation ([www.wef.org](http://www.wef.org)). The best materials are only as good as the distribution they receive, so before you get the brochures have a plan for putting them into peoples' hands.

**Field trips and facility tours.** There is no better way to explain something than to show it. A tour of the facility is the best way to explain wastewater treatment. People of all ages and interest levels enjoy the tours, and you can arrange them easily and at minimal cost. Field trips


| <b>Choices of communication tools.</b>  |  |   |  |   |
|---|--|---|--|---|
| <b>Publications and Print Media</b>   | <b>Broadcast, Screen, and Electronic Media</b>   | <b>Meetings and Face-To-Face Interaction</b>  | <b>Outdoor Advertising</b>   | <b>Promotional Exhibits, Costumes, and Giveaways</b>  |
| Business cards<br>Billing inserts/bill stuffers<br>Door hangers<br>Brochures<br>Fact sheets<br>Newsletters<br>• Employee, in-house<br>• Community (city or county), mailed<br>• Your organization, mailed<br>• Trade association, mailed<br>• E-mail<br>Annual reports<br>Technical reports<br>White papers<br>Newspapers, magazines, and trade journals<br>• News articles<br>• Feature articles<br>• Inserts<br>• Advertising<br>News releases (mail, fax, or e-mail)<br>Legal notices<br>Direct mail | Radio news, talk shows, and advertising<br>Television news, talk shows, and advertising<br>Community access cable television<br>Movie theater advertising<br>Your Web site<br>Web site links<br>Interactive Web sites<br>Information hotline<br>Slide shows, PowerPoint presentations, and overhead presentations<br>Commission a ballet—think outside of the box and draw community media attention to a new facility | Field trips<br>Facility tours<br>Public hearings<br>Open houses<br>Advisory groups<br>Focus groups<br>Large public meetings<br>Surveys (mail, telephone, personal, Internet)<br>Expert panels<br>Field Trips<br>News conference<br>Speakers bureau<br>Door-to-door canvassing<br>Community events, festivals<br>Educational entertainment, audience<br>Educational activities, hands on<br>Classroom presentations<br>Workshops<br>Training, seminars<br>Professional conferences | Mass transit advertising<br>Signs on public or private property<br>Signage or murals on vehicles<br>Signage on buildings<br>Billboards<br>Reader boards (schools, malls) | Interpretive exhibits, permanent and mobile<br>Trailers or vans equipped with information, tools, and resources<br>Grocery bags, milk cartons, etc.<br>Advertising specialties (key chains, pencils, bookmarks, balloons, etc.)<br>Costumes, mascots, walk-arounds<br>Inflatables |

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are another fun way to show people what you do. Always provide a knowledgeable, friendly guide. Advise the attendees on appropriate clothing and footwear, and plan for restroom breaks and refreshments.

**Broadcast and screen media.** Broadcast and screen media can be cost effective, especially in large metropolitan areas with large audiences. You can get free radio and television coverage if you have a newsworthy event. Community access cable television is free and volunteer producers are always looking for program material, but check into audience demographics to make sure you'll hit your audience before putting a lot of time into a production. Even Web sites can be fairly inexpensive, and links from other sites are free.

**Information and response hotlines.** Promote open, two-way communication between the community and the



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CATS AND DOGS**

Their waste\* pollutes our streams. Scoop up after your pet. Protect our water!

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Our commitment is clear.  
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**\*18 tons a day in  
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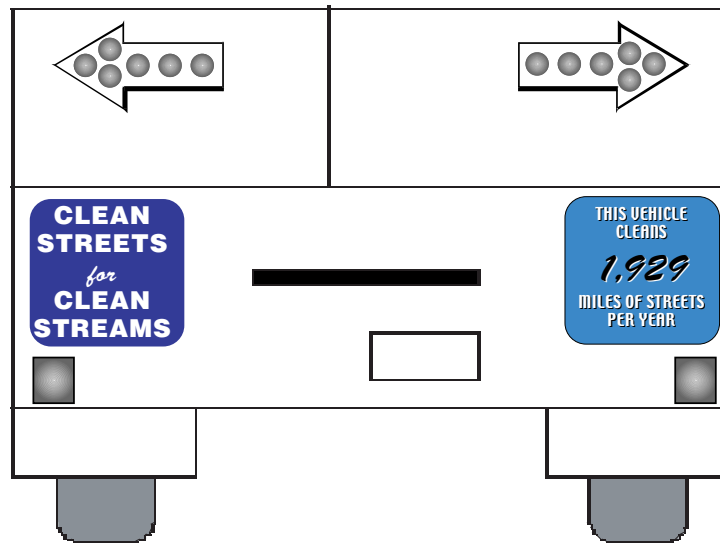


facility with an information and response hotline. The hotline can be a telephone number or e-mail address. Designate a person or persons to check the hotline daily and respond to inquiries within 24 hours. Keep a log of questions and complaints to identify trends and information needs. Publicize the phone number or e-mail address in billing statements, newsletters, local newspapers, and other information outlets.

**Information kiosks.** Most communities have places where brochures can be distributed to the public. Look for shopping centers, libraries, public buildings, and other gathering places where you might leave brochures. Generally, there is a contact person and guidelines, so get permission and follow the rules to ensure that your materials are kept stocked and prominently displayed.

**Speakers bureaus.** Water professionals are often asked to be speakers to student and community groups. This is an excellent opportunity to establish positive relationships with professional associations, schools, churches, elected officials, environmental groups, service organizations, and other community leaders.

Employees who are trained to give interesting and informative presentations that emphasize your key



messages in every presentation will be sought after in the community, especially if their availability to speak for free is publicized.

**Slides, PowerPoint presentations, and overhead presentations.** These staples of the lecture circuit can turn your speech into a multimedia event with powerful visual images and photographs. Avoid the temptation to go overboard and keep your presentation simple and brief. Make copies of your presentation and let people know that they are available.

**Outdoor advertising.** Your organization's buildings and vehicles are communication opportunities. Attractive, informative signs and murals on field operations vehicles will be seen by the entire community. Mass transit and billboard campaigns are costly but reach large audiences; to reduce costs, consider partnering with other agencies in your region for these campaigns. Schools and malls may let you post clean water messages on their reader boards for free.

**Permanent and mobile exhibits.** The time and resources required to produce exhibits makes them long-term investments. Think about how often you need to update a message before investing in a costly exhibit. A flexible, low-cost exhibit can begin with the purchase of a portable trade show kit, a folding frame with a fabric surface. Produce signs and photographs on a color



printer, mount them on foam core, and use Velcro tabs to arrange them on the exhibit. For a more professional look, work with a sign- or exhibit-manufacturing firm.

**Public Meetings.** Operations and management personnel may be required to attend public meetings or hearings to inform the community about a project, policy, or issue. Public hearings are mandated by a jurisdiction and have rules and requirements that must be followed precisely to be lawful. Other types of public meetings have more flexibility in terms of notification, format, and documentation. All public meetings are opportunities to demonstrate professionalism and commitment to the community.

### ***Paid Advertising Versus Free Time And Space***

Paid advertising can be well worth the cost because you choose the message, format, schedule, and audience. Newspaper, magazine, radio, television, Internet, billboard, direct mail, bus stop, mall kiosk, movie theater, and many other advertising media are available. To compare costs, calculate the cost per person and the number of times the message will be aired. Always consider the effectiveness of a particular delivery method for its audience when evaluating costs.

The federal requirement for radio and television stations to provide free air time for public service announcements has changed, but there are still opportunities for free advertising: billboards, buses, grocery bags, milk cartons, mall reader boards, and so on. If you look into these options, be sure to ask about the cost of producing your advertisement. The art for billboards and buses is expensive, but the layout for a grocery bag can be done on a computer.

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#### ***KEEP IT SIMPLE***

Wastewater treatment and the construction, chemicals, infrastructure, public finance, rate structures, regulations, and other things related to wastewater treatment are not easy to understand. Break your message into bite-sized pieces that are just right for the particular audience. Different audiences have different needs, but expert communicators aim for an audience with a seventh-grade vocabulary. You can use your computer to check the vocabulary level of a written piece. For example, Microsoft Word has a readability function that will tell you the reading ease and grade level of the document. Here's an example

*In the secondary clarifiers, heavier solids such as dead microorganisms and indigestible material settle out and accumulate at the bottom of the tanks as sludge.*

Flesch Reading Ease 19.0;  
Flesch-Kincaid  
Grade Level 12.0

*In the second step, solids sink to the bottom of the tank as sludge.*

Flesch Reading Ease 89.8;  
Flesch-Kincaid  
Grade Level 4.1

The two sentences describe the same process, but at the fourth-grade level the second sentence is easier to understand.

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### Survival Tips

- All communications should be accurate, up to date, and user-friendly.
- Trained and educated staff will strengthen your communications network.
- Employees should be the first to hear any news that will become public
- Things to consider before choosing your communication tool
  - ✓ Cost,
  - ✓ Message control,
  - ✓ Timing,
  - ✓ Audience,
  - ✓ One- or two-way communication, and
  - ✓ Fun factor.
- There is a multitude of communication tools—think outside of the box!
  - ✓ Publications and print media,
  - ✓ Broadcast, screen, and electronic media,
  - ✓ Meetings and face-to-face interaction,
  - ✓ Outdoor advertising, and
  - ✓ Promotional exhibits, costumes, and giveaways.
- Tips on publications, hotlines, exhibits, and other tools and techniques.
- Paid versus unpaid advertising.
- Keep it simple.

## CHAPTER 4

# **Face-to-Face Interaction— Be Convenient, Accessible, and Nonthreatening!**

### **SURVIVAL OVERVIEW**

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This chapter describes how to communicate effectively with the public—in person. It tells how to hold effective public meetings and to look for other opportunities to interact personally with your stakeholders. It offers approaches for building trust and credibility. It describes meetings logistics to encourage and welcome participation. Finally, it tells how to record public comments and what to do with the input you receive.

### **PUBLIC COMMUNICATIONS INCLUDES PUBLIC INVOLVEMENT**

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Your organization depends on the understanding and support of the public. Ideally, your stakeholders should have the opportunity to be involved in planning and public policy decisions. So you need to develop your skills for communicating with the public, in groups and on committees. Use the fundamentals of public involvement described below and build on them to ensure an effective program that meets your objectives.

#### ***Provide Opportunities That Include All Stakeholders***

Include all of the individuals and groups that will be affected or want to have a say in the decision-making process—ratepayers, neighbors, elected officials, citizen activists, advisory committees, industry associations, employees, and so forth.

### **Start Early and Continue**

Begin the public involvement process early and continue throughout the decision-making process. Send progress reports to all participants.

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**A "TRANSPARENT" public process is crystal clear. Anyone who is interested can see what is happening, when, where, how, why, and by whom.**

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### **Provide Information About the Decision-Making Process**

People need to understand the decision-making process to participate effectively. Provide clear and concise information about the decision-making process, the public's role, timelines, and how input will be used. Provide background and technical and contextual information. Use a variety of formats, from fact sheets to master plans, to allow participants to choose how well informed they wish to become.

### **HAVE A TRANSPARENT PROCESS**

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Make sure that your public involvement program is transparent. Give people complete, accurate, and timely information about your organization and project goals. Give the public access to all documents related to the project. You can use your organization's Web site creatively by ensuring that all documents are available electronically. Let the public know the schedule and decision points and advise stakeholders of changes as they occur. Make sure the role and authority of participants is clearly stated and communicated. Tell people how they can give input and how it will be used.

State early in the process that written opinions from any group or individual will be attached to reports submitted for formal decision-making. Reassure participants that their voices will be heard. Encourage them to attend and participate in advisory committee discussions. Remind them of how public input is shaping the process and the project. Never speculate about the outcome of studies or other ongoing activities. Emphasize that all participants will have an opportunity to comment on the results when they are available.

Encourage the participation of credible people from various backgrounds, including business, environmental interests, and known opponents. Include an expert with strong credentials to answer technical questions and

report on common practices in other places. Seek out the media and offer to brief them on what is planned and why. Encourage them to stay informed throughout the process.

Treat all participants with respect. Welcome the participation of special interest groups, consultants, or their attorneys, but do not give them special treatment. Avoid being drawn into debates of issues outside of the project at hand. Refer these questions to an appropriate forum. Maintain a businesslike, arms-length relationship with all participants, including your allies. Allow time for participants to digest information about which they are being asked to comment; don't rush the process. Remain friendly and calm in all interactions.

## **ARE YOU LISTENING?**

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You can become a more effective communicator by showing that you are listening and understanding the facts and feelings that others convey. This is especially important when you are dealing with people who don't know you and have no reason to trust or believe you. The basic conversational skills of active listening are outlined below, with sample comments. Active listeners encourage the speaker, restate what is said, reflect on the feelings, and summarize.

### ***Encourage the Speaker***

Convey interest and keep the person talking. Don't agree or disagree. Use noncommittal words with a positive tone of voice. *I see. Uh-huh. That's interesting.*

### ***Restate What Has Been Said***

Show that you are listening and understand. Restate the other's basic ideas; emphasize the facts. *If I understand, your idea is...In other words, your preference is....*

### ***Reflect on the Feelings Expressed***

Show that you are listening and understand the other's feelings. Restate the other's feelings. *You feel that...You were upset by....*

## **Summarize What Was Said**

List important ideas and facts; review the progress; establish a basis for further discussion. Restate, reflect, and summarize significant ideas and feelings. *The key ideas that you expressed are... If I understand, you feel this way about....*

## **WHEN PEOPLE FEEL THAT THEY AREN'T BEING HEARD**

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In any public process, some people are likely to accuse you of not listening or taking them seriously. How can you let them know their input is being heard and will be included in the decision-making process? Some suggestions for opening the process and reassuring them are outlined here.

- Let them talk,
- Acknowledge their concerns,
- Acknowledge the controversial nature of the issue or project,
- Ask them to suggest solutions,
- Ask others to comment on the concerns being expressed,
- Restate the project purpose,
- Continue to focus the discussion on the issue at hand,
- Pick out something in the complaint to which you can respond,
- Review the public process and other measures in place to address the concerns,
- If you have no authority to address a problem, suggest who might, and
- Invite them to put their concern in writing to be included in the project documentation.

## **PUBLIC MEETINGS**

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Operations and management personnel may be required to attend public meetings or hearings to inform the community about a project, policy, or issue. Public hearings may be mandated and they may have specific rules and requirements that must be followed

precisely to be lawful. Check the requirements and follow them.

Other types of public meetings have more flexibility in terms of notification, format, and documentation. Every public meeting is an excellent opportunity to demonstrate your professionalism and commitment to the community. Work with the community to set the format, agenda, location, and other details that will meet the community's needs. Ask local organizations or leaders who "know the turf" for their advice on how best to meet the needs of the community.

Regardless of whether a meeting is mandatory, you want it to be as productive and informative as possible. Make it convenient and easy for people to attend. Give ample notification, provide easy-to-read and visually appealing information, and make sure that staff members are well prepared to answer questions. A Web site can be useful in providing information in advance.

### ***Choose an Appropriate Location***

Choose a convenient location for members of the community. Public buildings such as schools, libraries, community centers, and city halls are good meeting places. They're easy to find, accessible to the disabled, and do not intimidate most people.

In selecting a location, consider

- Distance of travel—How far will attendees need to drive or ride?
- Parking—Is there ample free parking?
- Mass transit—Is it near a bus or train stop?
- Handicap access—Does it meet Americans with Disabilities Act standards?
- Room—Is it the right size? Are there chairs or tables? Is there wall space for exhibits?
- Comfort—Is the lighting good? Is there heating or air conditioning?
- Refreshments—If appropriate, are food and drink available?
- Fee—How much will it cost?
- Availability—Who gives approval for use of the room? How far in advance must the reservation be made?

You might be surprised how far in advance you need to reserve a room for a public meeting, and at the fees

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***THE LOCATION FOR  
your public  
meeting should  
be welcoming***

***Convenient***

+

***Accessible***

+

***Nonthreatening***

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charged. Secure written permission to use the room before distributing any notice of the meeting.

### ***Point the Way to the Meeting***

Your meeting notices were clear and concise, perhaps even with maps. You visited the meeting room weeks in advance to make sure it would be appropriate. On meeting day, here's what you do

- Arrive at least 30 minutes early;
- Post signs directing people to the room;
- Set up the room by arranging chairs, tables, flip charts, exhibits, etc.;
- Place sign-in sheets and handouts at a table near the entry;
- Check the lighting and heat and adjust as necessary; and
- Locate the restrooms.

### ***Welcome Your Guests***

Expect people to begin arriving up to 15 minutes early for the meeting. Stand at the door and greet them. Thank them for taking the time to come, ask them to sign in, and take handouts. If you have exhibits they can begin viewing, invite them to do so until the meeting begins.



### ***Start on Time***

Begin the meeting on time, but expect late arrivers and be prepared to follow up with them later. Introduce yourself and any other staff or presenters. Explain who was invited and how the meeting was publicized. In very small groups, you might invite the attendees to introduce themselves. Thank them again for taking the time to attend. Give an overview of the purpose of the meeting, review the agenda, and go over the ground rules for the meeting.

### ***Establish Ground Rules***

An effective way to ensure a productive meeting is to state simple ground rules for the meeting that let everyone know the expectations. The ground rules need to fit the group, being as general or detailed as needed. For a small group, you might encourage them to ask questions throughout the presentation. A larger group needs a little structure—raising a hand to ask a question, holding questions until after the presentation, and limiting the length of comments. A hostile group will require stricter ground rules to keep people from dominating the meeting; reassure them that a decision will not be made until after careful consideration of their concerns, ask them not to interrupt, set time limits on comments, and so on. Introduce the ground rules as a courtesy to all, and go easy or the rules might seem like a defense strategy.

### ***Keep a Record***

If possible, have another person at the meeting take notes. It's difficult to facilitate a meeting and take notes but, if you must, consider using flip charts to record key points.

Skilled facilitators use many tools to focus discussions and have the participants write down their comments. Consider using note cards, comment sheets, e-mail, interactive Web sites, and other methods that allow people to make their comments in writing.

Public meetings and committee work need to be well documented to be effective and credible. How you record what takes place at meetings and how you share that information with decision-makers depends on

staff resources. At the very least, you need complete and accurate notes in a format that can be reviewed by participants, decision-makers, and the media. A project or committee notebook is a simple, easy-to-maintain record. It should contain the following items and be readily available for review upon request:

- Project plan—statement of purpose, objectives, and overview of the plan;
- Roster or contact list—committee members, staff, stakeholders, media, etc.;
- Meeting notices, hard copy, e-mail, newsletters, newspaper notices, etc.;
- Meeting agendas, original and amended;
- Meeting notes, detailed but concise summary of what was said at meetings;
- Information packets, any written materials provided to participants;
- Handouts, any materials distributed at meetings;
- Related reports and research brought to the project by staff or participants;
- List of meetings, a chronological listing of all formal and informal meetings;
- Sign-in sheets for all meetings;
- Mailing list, database of mailing labels, e-mail messages, and telephone numbers;
- News releases, all news releases generated for or related to the project;
- News clippings, all newspaper articles, radio or television clips related to the project;
- Correspondence letters, e-mail messages, notes from telephone conversations; and
- Miscellaneous.

### **Consider Tape-Recording the Meeting**

The three reasons for tape-recording a meeting are to meet legal requirements, be transcribed for formal meeting minutes, or verify what was said in the event of a dispute. Participants may be less likely to dispute what was said or insist that something was promised if they know the meeting was taped. Transcribing tape recordings is very labor-intensive and time-consuming work. Don't rely on a tape as your meeting documentation, even if it's a legal requirement. Take good notes or assign someone to take notes and type them up. If you



choose to tape-record the meeting, let people know up front that the meeting will be recorded.

### ***Develop Relationships***

Time invested in developing positive relationships with community activists, special interest groups, partner agencies, schools, volunteers, and the media is well spent. Each of these groups and their leaders are potential spokespersons for your organization. If you want the community to know that you protect water quality, others can help spread the word and add credibility.

### ***Educate Elected Officials and Civic Leaders***

Significant decisions regarding your organization are made by elected officials and civic leaders and don't assume that they know anything about your organization. Take the time to educate them. Give them easy-to-read fact sheets and a packet of information if they

wish to learn more. Offer to take them on a tour of the facility. Sometimes, elected officials will appear in public if the media might be there, so plan events with this in mind.

The governing body of your organization needs an orientation too. When a new member is elected or appointed, reach out and let them know you are the person to bring them up to speed. In addition to a formal orientation, consider inviting them to a staff meeting, field trip, picnic, or community event where you have a booth or exhibit.

### ***Participate in Community Events***

Fairs, festivals, and other community events are a good opportunity to interact with the public. An attractive exhibit with friendly staff handing out information and inexpensive giveaways (balloons, pens, keychains, etc.) is one way you can engage the public. Although your primary objective is to distribute information, you can learn a lot from the people who visit your booth. They'll comment on rates, environmental concerns, and strengths and weaknesses you might not have noticed before. For more information, you can even do a brief, informal survey or questionnaire.

### ***Know the Opposing Viewpoints***

Your organization, project, or even your mission, may have detractors. You may have stakeholder groups that might be perceived as adversaries and outspoken opponents. Spend as much time getting to know them as you do cultivating professional alliances. As opponents begin to understand each other's interests and motivation, they may be able to see issues differently and more respectfully.

**Survival Tips**

- Follow the fundamentals of public involvement
  - ✓ Include everyone,
  - ✓ Start early and continue throughout the process, and
  - ✓ Provide information about the decision-making process.
- Make it easy for people to attend and participate in meetings.
- Use ground rules for a productive meeting.
- A project or committee notebook is a simple, easy-to-maintain record.
- Use active listening skills
  - ✓ Encourage,
  - ✓ Restate,
  - ✓ Reflect, and
  - ✓ Summarize.
- Develop relationships with elected officials and civic leaders.
- Get to know your opponents and you might become allies.
- Community events are a good place to learn what people think of your organization.



## CHAPTER 5

# **Advisory Committees—Take the Group From Storming to Performing!**



### **SURVIVAL OVERVIEW**

This chapter is about working with advisory committees to involve the public in decision-making processes. It explains how to form and work with committees. Membership, rules, roles, and skills are discussed, as well as political considerations and things to avoid. Finally, it summarizes the decision-making process and popular techniques for developing group consensus.

### **CITIZEN ADVISORY COMMITTEES**

Citizen advisory committees are usually formed to address a specific problem or to guide the development of public policy. They can review and advise on

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***THE COMMITTEE should work together for at least several months to learn to function as a group; become informed about the issue or problem; explore options and alternatives; and develop a plan, recommendation, or decision.***

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your program, help determine the best site for a new facility, or suggest solutions to problems. These committees involve two-way communication, helping to ensure that policies reflect the values of the community.

An advisory committee can help

- Make a decision,
- Recommend solutions,
- Direct public policy,
- Communicate with the public, and
- Build your credibility.

Advisory committees have many roles, but there are two rules you must never violate

- (1) *Know the objective of the committee before it is formed.* Avoid the mistake of thinking you can build positive relationships simply by forming a committee. No one wants to waste precious time serving on a committee with an unclear purpose.
- (2) *Don't ask the committee to rubber-stamp your plan.* Committee members will feel used. Instead of building credibility with the public, you will destroy it by using a committee to endorse a decision that has already been made.

### **Committee Guidelines**

Some advisory committees are defined by a jurisdictional mandate, and many are less formally organized. If you are forming or working with a committee that is directed by law, be sure to know and follow the mandatory requirements.

Before forming a committee, give careful consideration to its purpose, membership, and its duration of work. Citizen advisory committees are to advise decision-makers about community issues, serve as liaisons to the community or constituents, and develop a recommendation on a plan of action. Be sure to clarify expectations and desired outcomes of the committee at the beginning of the project. Members are officially designated and represent a balance of stakeholder interests. The size of the committee should be limited to no more than 12 members.

A well-chosen committee can bring the knowledge, perspectives, and opinions of key stakeholder groups to the decision-making process. The committee creates a forum for open discussion of problems, issues, and



potential solutions with the public and decision-makers. Committee members can supplement staff work to gather and review information and prepare draft documents.

Remember, success is not the absence of disagreement. It is a public process that ensures people have input to the public decisions that affect their lives.

## **Membership**

An advisory committee should be composed of representatives of the geographic area and interests to be affected by the issue the committee has been formed to address.

**Identify stakeholders.** Stakeholders include anyone with the responsibility of implementing a proposed program or policy, anyone who will be affected, or anyone who has the ability to block implementation.

**Get commitment.** Ensure that stakeholders are motivated and willing to work together and open to listening to other viewpoints.

## **Operating Rules**

Advisory committee members need rules about membership, attendance, decision-making procedures, and other specifics about how they will function. If you are responsible for helping to establish an advisory committee, one of the most productive things you can do is guide it to adopting practical rules. Mandatory advisory committees required by statute, administrative rules, or other regulatory action may have bylaws and rules. If not, consider the committee's duration and magnitude before deciding whether formal bylaws and complex rules are necessary. If you need to adopt bylaws, avoid using a lot of committee time and energy. The bylaws of other advisory committees can be adapted and tailored to the specific needs of your committee.

In the early 1900s, General Henry M. Robert developed his Rules of Order to help control how individuals participate in a group. The rules involve the formal use of motions. If your committee will be using Robert's Rules of Order, provide all members with a summary of how to make motions and follow the rules. Modified

Robert's Rules of Order, which simplify the process, are also available.

## **Roles**

For any group to function productively, members need to have clearly defined roles and expectations of how to fulfill their role. The staff that supports the committee will have logistical duties that include room reservations, refreshments, word processing, mailing, writing minutes, timekeeping, and maintaining records. Committee members' roles are generally as shown in the following table.

## **Checklist for Success**

Committee work can be very intensive, requiring a significant commitment from staff and committee members. Here is a checklist to help ensure a productive group process

- ✓ Sufficient staff and resources are allocated to support the committee's work;
- ✓ Application and selection process for committee members is open and fair;
- ✓ Goals, objectives, and timelines are set before committee members are appointed;
- ✓ Members know that their roles are to advise, not preempt decision-makers;
- ✓ Group leader or facilitator is selected;
- ✓ Membership, attendance, and participation rules are in place;
- ✓ Consensus-building or decision-making process is agreed upon;
- ✓ Expectations are set for communications within and outside the group; and
- ✓ Terminology and potential ambiguities are defined.

The facilitator or meeting leader can help the meeting get off to a good start and work productively by using the following checklist:

- ✓ Identify the purpose or expected outcome of the meeting,
- ✓ Make sure the right people attend,
- ✓ Develop the agenda,

| <b>Roles and duties of committee participants.</b>   |   |  |
|--|---|--|
| <b>Chair or Leader</b>   | <b>Facilitator</b>  | <b>Members</b>   |
| <p>Sets the agenda;<br/>                     Sets the tone and pace of the group;<br/>                     May help prepare for the meeting;<br/>                     Represents the group to the community;<br/>                     Serves as facilitator, if necessary;<br/>                     Provides a supportive environment for both process and content;<br/>                     Supports and encourages all members to participate; and<br/>                     Coordinates activities of subcommittees.</p> | <p>Guides the group through the agenda,<br/>                     Remains neutral,<br/>                     Encourages each member to participate fully,<br/>                     Keeps group energy positive and focused,<br/>                     Suggests methods to help the group solve problems, and<br/>                     Works with chair and staff on meeting logistics.</p> | <p>Commit sufficient time to committee work and research,<br/>                     Come to meetings prepared,<br/>                     Follow group rules,<br/>                     Listen to other members,<br/>                     Participate in discussion and decision-making,<br/>                     Take responsibility for helping develop positive results,<br/>                     Help remain neutral and on track, and<br/>                     Serve on subcommittees as necessary.</p> |



- ✓ Prepare the necessary materials,
- ✓ Double check the room setup,
- ✓ Facilitate the meeting,
- ✓ Agree on the ground rules,
- ✓ Use consensus-building, decision-making techniques,
- ✓ Be prepared to handle conflict,
- ✓ Clarify "next steps" and assignments, and
- ✓ Reflect on the effectiveness of the meeting.

## **GROUP PROCESS**

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It's human nature for a group of people to go through a process of evolution from the first meeting to the last. The process can be disconcerting, especially for individuals who are not experienced working as a committee. Group dynamics experts describe it as

- Forming—members become acquainted and begin to form alliances,
- Storming—they trust each other enough to disagree,

- “Norming”—they are beginning to work in harmony, and
- Performing—their efforts are producing results,

### ***Politics of Advisory Committees***

It may be tempting to choose committee members who support your organization, but authentic discussion of issues will benefit from including known adversaries. Because the group must be limited in size, some constituencies might feel left out of the process. To ease their alienation, allow them to attend meetings as observers and put them on the mailing list for meeting notices, notes, and reports.

The committee has work to do and can't spend a lot of time arguing. For the sake of productivity, it's legitimate to screen potential applicants to avoid individuals who don't work well with others. Nothing is more defeating to a committee than relentless infighting.

Sometimes a trained, neutral facilitator is needed to guide the group to productivity. If you know that a committee will be contentious, bring a facilitator on board from the beginning. If a facilitator is brought in later to mediate, the group may feel that it has failed. Of course, if the group is not functioning, a mediator might be the only one who can pull it back together again.

### ***Turning Problems into Progress***

Advisory committees have all of the traits of any group, except exaggerated because the members may feel that they are on a mission. With skillful facilitation, certain types of problematic behavior can be turned into positive behaviors that help the group achieve their goals. Here are some of the types of individuals that you might encounter in an advisory committee and suggestions for addressing counter or nonproductive members.

**Know-it-all.** Avoid arguing. Ask if others agree or need more information to feel comfortable with the facts. Take them aside and ask them to let others have input. Recognize genuine expertise and use it.

**Whisperer.** Establish ground rules against side conversations. Ask them to share comments with the whole group.

**Excessive talker.** Follow the agenda with set times. Establish ground rules with time limits on discussions. Appoint a timekeeper. While avoiding eye contact with the excessive talker, tactfully interrupt and ask for other opinions.

**Arguer or whiner.** Turn negative comments into positive statements. Establish ground rules for making positive contributions to the group. Ask what is bothering someone who is argumentative and move on without focusing on the arguer's negative energy.

**Latecomer.** Start without them. Avoid rewarding the behavior; don't start over. During a break, summarize what they have missed.

**Detailer.** Give them committee work and extra research. Thank them for the extra attention to detail.

**Backstabber.** Confront one on one. Ask what is causing the behavior. Remind them of the ground rules for positive contributions.

**Agenda hider.** Poll the group to clarify the objectives of the meeting. Review the agenda and ask for additional items at the beginning of each meeting.

## **DECISION-MAKING PROCESS**

Decisions are made after a series of thought and communication processes occur. The following is a brief outline of the decision-making process in the order that it occurs:

- (1) Gather and analyze relevant information,
- (2) Frame the question to be answered,
- (3) Discuss values and criteria,
- (4) Envision various scenarios,
- (5) Evaluate the consequences of these scenarios,
- (6) Make the decision,
- (7) Refine specific aspects of the decision, and
- (8) Ensure implementation.

## ***Making Decisions Collaboratively***

A variety of decision-making techniques have been developed to help frame issues, evaluate data, accommodate unknowns, and weigh competing alternatives. Some are very complex and offer substantial statistical validity, while others are simpler and more conducive to generating group consensus. Three popular techniques are described here as an introduction to engaging groups in decision-making processes.

### ***Delphi Technique***

In this process, recognized experts give input on a decision to lend credibility and objectivity. A survey, generally an open-ended questionnaire, is mailed to the experts. Their responses are tabulated and returned to them, and they are asked to comment on why their responses differ from the norm. They may revise their initial response if they have learned from the others. This technique is often used for market research for new product development. In public policy, objective experts can increase credibility and provide new information to the process that can help in developing and weighting criteria for alternatives. The survey process conducted by mail is fairly inexpensive. The primary disadvantage is that the opinions of experts often differ considerably from the general public. The Delphi technique can be used to gather information to augment, not replace, public involvement.

### ***Nominal Group Technique***

This technique uses a group of individuals, often some type of advisory group to participate in a series of facilitated discussions. The participants discuss issues as a group, assign numerical preferences or "weights" and evaluate and discuss the results. A computer performs the statistical analysis. The group may continue to discuss and refine responses until they are comfortable with the results and the statistical analysis shows stability. This technique is used to rank goals, activities, or criteria. It is particularly helpful when there are competing objectives, such as cost versus environmental impacts. This technique allows for ample discussion and interaction on the issues, focusses on the important points, and

fosters group problem solving. The communication that occurs during the process is often as valuable as the recommendation itself. This is especially useful when decision-makers must show exactly how a particular interest group or criteria affected a decision. It is likely to produce a final decision.

### **Public Value Assessment**

This technique is similar to the nominal group technique but works better when advisory committee work is impractical because of logistical or political considerations. Instead of group discussion and ranking of goals, activities, criteria, or project alternatives, the ranking is conducted by separate interest groups. The scores of the alternatives are arranged on a matrix, which allows the decision-maker to identify where particular groups may have a consensus opinion on a particular option. A ranking of project alternatives by opposing interest groups might reveal some areas of consensus. The disadvantage is that this technique does not provide the dialogue among differing interest groups. It also may not produce a clear choice or final decision.

#### **Survival Tips**

- Advisory committees can help
  - ✓ Make a decision,
  - ✓ Recommend solutions,
  - ✓ Direct public policy,
  - ✓ Communicate with the public, and
  - ✓ Build your credibility.
- Citizen advisory committees help ensure that policies reflect the values of the community.
- Two absolute rules: (1) know the objectives and (2) don't ask the committee to rubber-stamp a decision that has already been made.
- Members should represent the geographic area and interests to be affected.
- Committee work requires a significant commitment from staff and committee members.
- Members need clearly defined roles and expectations of how to fulfill them.
- Skillful facilitation can turn problematic behavior into positive contributions to the group.



## CHAPTER 6

# **Working With the Media— *You Need Them and They Need You!***

### **SURVIVAL OVERVIEW**

This chapter describes the partnership between your organization and the media. It encourages you to get to know the media reporters in your area, learn their needs and deadlines, and work cooperatively with them. It describes how to write a news release and how to prepare for and remain in control of an interview. Finally, it offers suggestions for what to do when you don't feel that you get fair coverage.

### **PARTNER WITH THE MEDIA**

You need the media and the media need you. They are the eyes and ears of the public. You are a potential source of news articles, human-interest stories, in-depth interviews, technical essays, and editorial columns. They are your partners in telling your story to your community.

The wastewater system in your community needs a champion, a spokesperson. Learn how to talk about it and you will become a valuable resource to the media.

### ***How Do You Relate to the Media?***

Before you can relate to the media, you need to know who they are in your community. If you don't have a media contact list, get one and keep it current. Most public agencies keep a media contact list and are willing to share it. If you don't borrow a media list, start your own list of media outlets and reporters who write about utilities, government, or environmental issues. A complete list has the names of contact people, tele-

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**YOU'RE THE expert. It's up to you to educate the reporter about your organization's responsibilities, mandate, and initiatives.**

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phone numbers, fax numbers, and e-mail addresses for every newspaper, radio station, and television station directed to your service area. Keep your media contact list up to date, as reporters are often moved or reassigned.

Develop a relationship with reporters and editors in your area. Study the local newspapers and radio and television stations and make a list of the reporters who cover government, environment, science, and education topics. There will be many reporters in larger metropolitan areas and just a few in small communities. Contact the reporters who seem most likely to write or report on your type of news. Call them from time to time to chat about what's going on. Establish yourself and your organization as a valuable news source.

### **Are You Helpful and Responsive?**

Reporters are always rushing to meet a deadline. Return their calls immediately. Even if you need time to gather information, call and let the reporter know you're working on it. When you've sent a news release or been contacted by a reporter, check voicemail and e-mail frequently to make sure that you're responding as quickly as possible.

Do what you can to help reporters and save them time. Provide easy access to information and interesting subjects, do the background research, provide summary fact sheets, explain the processes, problems, and solutions in lay terms. The reporter will learn to trust you and rely on your information.

Almost every story about the wastewater industry has a potential downside because of perceived or real impacts on water and air quality and livability. Help educate the reporter and talk openly about the good, the bad, and the alternatives. Admit it—wastewater smells! Most people don't want to talk about it or they don't know where to begin.

You can turn a negative story into a positive public education piece by helping the reporter understand your commitment to public health and safety and your role in protecting the environment.

### **Do You Know What the Media Need?**

All newspapers, magazines, and radio and television stations need material for their publications and broad-

casts. Print and broadcast media have different priorities, strengths, and needs. Your media outreach will be more productive if you accommodate those differences. Give them what they need in a form they can use.

## **CHOOSE THE RIGHT MEDIA**

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Newspapers and magazines provide more in-depth coverage. Their reporters have more time and space to spend on a story. Provide as much background as possible in your news release and media kit, including quotes and contact information for additional interview subjects.

Television and radio stations are certainly your first choice in times of public health threats or emergencies. Radio is the most immediate of all the media. If your news is hot, the reporter might call and put you right on the air. Listeners won't see your facial cues and gestures, so try to boost your voice inflection to convey enthusiasm and energy. Talk shows and call-in programs are longer formats that require very careful preparation.

Television is pictures with words. Action, color, and visual excitement get television coverage. If you're lucky enough to be granted a television interview, be prepared to use it wisely. Practice saying your key messages in interesting and concise sound bites of 10 to 15 seconds. Choose a visually interesting location and provide options for television crews to film activity, if possible.

### **News Conference**

A news conference is when you call together reporters, photographers, and video crews for a news story that is too big and too important for a news release. Few events warrant a news conference but, if you have news that involves several organizations, it might be appropriate. A news conference allows organizational leaders to tell their sides of the story and respond to reporters' questions.

Reporters need approximately one to two days' notice to set up a news conference. Provide a comfortable space with places for reporters to sit and take notes. Television news crews may need power for lighting and sound equipment. Provide refreshments and make the event worth the reporters' time.

## **Media Kits**

Always have media kits prepared for planned events and unplanned opportunities. Typically, a media packet will include the organization's fact sheet, a news release, and a facility brochure or other relevant publication. More elaborate kits will have photographs and biographies of key staff or decision-makers. Use a nice folder with pockets to hold the materials and your business card.

## **News Release**

This is your formal announcement that you have news for the media to print or broadcast. News releases announce meetings, speeches and presentations, personnel changes, capital improvement projects, planning meetings, construction status reports, open houses, and other events and milestones. If you swamp editors with fluff, they might ignore your real news so make sure your release has real news. You only have five seconds to catch their attention as they sort through a pile of news releases. Make yours interesting and state your goal in one sentence.

**News release guidelines.** Use a catchy headline in boldface type. Lead off with the most important information. Try to keep the first sentence to fewer than 25 words. Be sure the first paragraph says who, what, where, when, why, and how. Follow with more explanation and detail, progressing from most important to least important. End with your organization's boilerplate (brief description of who you are and what you do). This inverted pyramid style, from most important to least, works well because the editor will start cutting from the bottom if the story is too long to fit the page.

Develop a simple news release template that includes your organization's name and slots for the date, contact person's name, phone number and e-mail address, and "FOR IMMEDIATE RELEASE" or "FOR RELEASE OCTOBER 12, 2003" heading and a bold headline.

Make text double-spaced. If the news release is more than one page, type "more" at the bottom of each partial page. At the end, type ##### or "end" so the editor will know that is all of your information.

Keep paragraphs short, one or two sentences if possible. Two pages is typically enough to get your point across and arouse interest. If the subject is extremely complex, state that fact sheets, tours, and so forth, are available upon request.

Pictures may help get your story placed. Check with your media to see what type of format they prefer for photographs. Digital photographs and other newer technologies are becoming more readily used. Emphasize photographic opportunities by including information for photographers, such as directions and a specific time to arrive. A subheading that says "Photo Opportunity" will tip them off, too.

**Mail, hand deliver, fax, or e-mail?** Many reporters and assignment editors prefer to receive news releases by fax and e-mail but, for special events, you might mail or hand-deliver a packet of information. Ask your media contacts what they prefer. Distribute your release at the same time to all of the media that you are targeting.

Find out the deadlines that reporters must meet. Distribute your news release enough in advance to give them time to develop a story. One week is generally sufficient notice for a daily newspaper, radio, or television.

**Who else gets the news release?** Circulate copies of the news release to key staff, including the receptionist who might need to track down the spokesperson for the reporter. Your organization's leaders shouldn't have to read the news for the first time in the local newspaper.

Prepare appropriate staff to be interviewed. For example, if your news is about a technological innovation, the reporter might want to talk with the people who are most knowledgeable about it. A team approach is good, with management or public affairs staff talking about the organization's big picture, strategic initiatives, and place in the community.

## **Media Interview**

A media interview is your opportunity to provide information to the public, to deliver a story to an audience. The reporter's job is to get the story, and yours is to give your message. It's a partnership, and the following tips will help you do your part:

- *5 Ws and H.* Every reporter will ask who, what, where, when, why, and how. Have your answers ready.
- *Your message.* Know your key messages and deliver them. Don't wait for the reporter to ask the right questions. Point out important and interesting information that the reporter won't know to ask.
- *Practice.* Before the interview, run through what you want to say. Think about the hard questions you can expect, especially negative ones, and prepare responses to them. Ask colleagues what they would say and use their good ideas. Practice positive responses to negative questions to convey your main message.
- *Delivery.* Be concise, clear, and to the point. Speak simply and use examples that average people can relate to. Relax and take your time. Be confident knowing that you're the expert on the topic.
- *Identity.* Every interview should give you a chance to state the name of your organization, your name, and your title. Slip in a few sentences about your agency's mission and your role in it, if you can.

**Helping the reporter tell the story accurately.** Reporters probably don't know much about your industry and might not have had time to research it. (Remember, few people know much about your industry.) Find out what they know and build upon that. Make sure that they leave the interview with a good understanding of what you want them to write about. After they leave, they'll probably think of more questions to ask. Give them your home telephone number so they can follow up and get the facts right.

Be open and honest. Reporters seek all sides of a story. If they turn up anything that you tried to hide, they'll become suspicious and go looking for controversy. Become an ally in their search for the truth. Never be evasive. Needless to say, you must be truthful. Your credibility is everything.

Everything you say to a reporter is on the record. Anything you're tempted to say "off the record" probably shouldn't be said. Never say anything you do not want to see in a story.

**Broadcast interview tips.** Radio and television interviews can be so fast that you feel they're over before they

began. Because there is so little time to pause and reflect, be especially prepared.

- Ask in advance about the interview format. Is it live or taped? How much time will be allotted? Is anyone else being interviewed? Can you bring visuals? Is the reporter or host out to get you for some reason?
- Role-play the tough questions. Ask a colleague to play investigative reporter and pepper you with difficult questions so that you can practice responding.
- Deliver your key messages at the beginning or you might miss the opportunity.
- Sound enthusiastic, as if you just called a friend with good news and are saying, "Hey, guess what"?
- Ignore the camera and look the reporter in the eye. To appear relaxed and credible, pretend you are having a conversation at home.
- Listen thoughtfully to the questions and pay attention to where the reporter is heading. Think before answering, and turn negatives into positives.
- Answer a provocative question briefly, then say something like, "I think your audience would like to know the beneficial effects we are having on water quality". Then elaborate with your message.

**Staying in control of the interview.** You are not at the mercy of the reporter. You can even remain silent, but why give up an opportunity to help shape the story? Be prepared to stay in control of the interview by using these techniques to deliver your message.

If you misspeak, restate your comment as you meant it to be said. If you are on tape or video, just ask them to start over so you can say it better. The better "take" will probably be aired.

**Getting the third degree.** Some interviews may feel more like an interrogation. Whether it's the reporter's style or an attempt to pump you for information, you need to stay calm and respond positively. Here are some strategies you can use to counteract aggressive interview tactics.

If you're hit with a series of questions, choose to answer the one that allows you to seize control and deliver your message. If you're interrupted, politely

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***EMPHASIZE YOUR  
message with  
comments such as***

**The one thing we need  
to remember is...**

**The most important  
thing is...**

**The best part about...**

***Keep from being  
interrogated by using  
transitional phrases  
such as***

**Let me give you some  
background  
information...**

**Before we get off that  
subject, let me add  
What it means is...**

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continue with a comment such as, "I'll be happy to get to that, but as I was saying..."

If the reporter tries to put words in your mouth, say, "Perhaps I didn't make myself clear. Let me put it a different way..." and restate your message in your words. If you're asked to speculate about bad things that might happen, explain that it's inappropriate to speculate and continue to emphasize your positive message. Reporters sometimes remain silent after you answer, hoping you'll fill the void with more information. Remain silent, too, or fill in with your positive messages.

**Remembering to say thanks.** Get the reporter's business card for future reference and in case you find more information to add to the interview. Send a "thank you" note immediately after the interview. If a story results, send another thank you to let the reporter know how much you appreciate his or her effort.

**Getting what you wanted.** You might spend a lot of time with a reporter and be disappointed when no story comes of it. If your story doesn't make it this time, keep developing your relationship and eventually you might get excellent coverage.

When your story appears, be ready to explain it to your colleagues. They might have unrealistic expecta-





tions that will make the tiniest inaccuracy seem like a glaring error. You can do a reality check by asking others outside your organization what they thought of the story. You might want to remind your colleagues that the media's job is to tell interesting stories, not to make you look good.

Inevitably, some inaccuracy or misleading statement about your organization will make it into an article or news report. As a professional courtesy, call the reporter directly and explain what was wrong. Ask that the mistake be corrected in future stories. Perhaps a letter to the editor will remedy the problem. You can request but not demand a correction in the next edition or broadcast. Even if you don't get a correction, you've gone on record as trying to establish the facts.

If the story is unfair or slanted, the newspaper or station might have an editorial position on the issues. If that's the case, don't expect them to change it for you. Continue to be open and responsive, and eventually the information you provide might move their position.

If a reporter repeatedly slants the story against you or distorts the facts, talk to the news desk or editor. Be careful not to alienate the reporter. Continue to educate and help them gain insight and understanding.

### Survival Tips

- Get to know your media representatives before an emergency occurs.
- Be honest; tell the good, the bad, and the alternatives.
- Be available and responsive to reporters; know their deadlines and meet them.
- Give reporters background information, context, and depth of understanding.
- Write interesting, concise, and accurate news releases with the following:

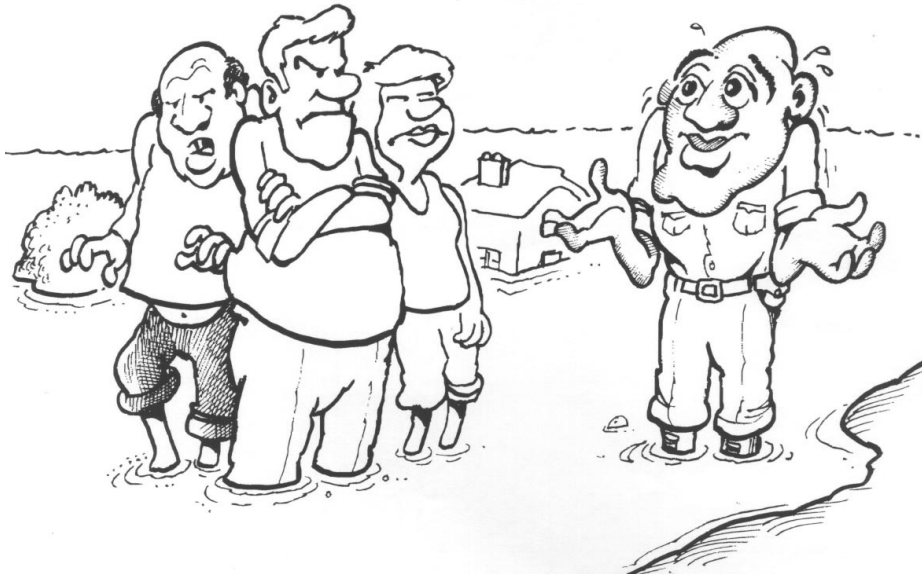
- ✓ Catchy headline,
- ✓ Contact information,
- ✓ Inverted pyramid style (most important to least important information), and
- ✓ Double-spaced.

Don't forget to distribute news releases per reporters' and editors' instructions.

- Prepare for interviews and practice
  - ✓ 5 Ws and H: who, what, where, when, why, and how;
  - ✓ Deliver your message; and
  - ✓ Identify your organization and its benefit to the community.
- It's your job to help the reporter tell the story accurately and put it into context.
- You're the expert, not the reporter.

## CHAPTER 7

# **Conflict, Complaints and Crisis— Avoid Trouble by Being Fast and Friendly!**



### **SURVIVAL OVERVIEW**

This chapter discusses how to avoid conflict and crisis by managing issues. It encourages open communication about projects, programs, or policies before they affect the public. It describes how to respond to complaints and handle conflict. It explores the science of crisis management and risk communication because every organization may face an unexpected crisis.

### **COMMIT TO OPEN COMMUNICATIONS**

Good relations between you and the community depend on your commitment to establish and maintain open communications. At the most basic level, you give tours to students, mail information to neighbors about facility operations, and provide information

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***TO MANAGE  
issues, identify  
present and  
future issues that  
may anger or  
frighten people.***

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during an emergency. When you are planning expansions or changes that will affect the community, more communication is needed.

Alert the neighbors before the odor, noise, and dust flies! Avoid crises by being the first to respond, the fastest, and the friendliest. Become a complaint response expert.

## **ISSUES MANAGEMENT**

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Anger and opposition arise when people feel that they have been or might be adversely affected by something you have done, are fearful of being adversely affected by something you propose to do, or disagree in principle with something you stand for. By managing issues before they become problems, you will be in control.

Develop a sense of what might upset people by following your intuition, asking friends and family members how they feel about issues, and researching how similar issues have affected other communities. Avoid the temptation to dismiss concerns simply because people lack understanding or knowledge.

Make a plan for dealing with each issue, focusing on communication. Evaluate the level of public information and involvement that will be necessary to help reduce conflict and concern. Good issue management puts you in control, instead of always reacting to situations.

If you know there's going to be a problem, tell the people who will be affected beforehand. You know there will be odor problems, noise, dust, and traffic disruptions during plant expansion. Instead of waiting for the neighbors to call and complain, tell them well in advance. Be sure to say what's happening, why, when, how it will affect them, and who they can talk to if they have a question or concern.

Consider sending out a notice to neighbors explaining what will be happening long before it affects them. The notice should include key information to help the neighbors feel that they have been fully notified

- Who is doing what, where, when, and why;
- How it will affect them;
- What you're doing to minimize effects;
- Who to contact by telephone or e-mail; and
- Date notice was sent.

August 15, 2003

To Neighbors of the Elk Meadow Wastewater Treatment Facility,

This fall, construction will begin at the Elk Meadow Wastewater Treatment Facility to meet the needs of our growing community through increased capacity. The construction will take about two years and will be entirely within the existing site. During construction, you might notice noise, dust, odor, and heavy traffic at times. We are committed to being good neighbors and doing our best to minimize any inconveniences by taking the following steps and more:

- Limit construction activity to weekdays, between 7:00 a.m. and 4:00 p.m.;
- Employ traffic flaggers during heavy truck traffic; and
- Keep treatment process interruptions brief to control odor.

We apologize in advance for these inconveniences and ask for your patience. If you experience any problems or have questions or concerns, please feel free to call or e-mail me.

Sincerely,

Name and title of best contact person  
Phone numbers and e-mail address

This type of general notification would be sent at least two weeks before any construction activities begin and up to six weeks in advance. If sent out too far in advance, people may forget or lose the notice. Plan how you will respond to any calls that result from the notice, and be sure to update the neighbors periodically.

### ***It Begins When You Answer the Telephone***

Think about how much of your contact with customers and the public is by telephone. Each conversation is a precious opportunity to demonstrate that you are here to serve. An easy way to build community relations is to make sure that all employees answer the phone in a positive, friendly, and helpful manner. Voicemail messages are also a great way to show your professionalism.

### ***Handle Complaints Like an Expert***

One of the best ways to build positive relationships is to be responsive to the community. True professionals have a reputation for resolving complaints quickly,

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**CONSIDER SENDING  
out a notice to  
neighbors  
explaining what  
will be happening  
long before it  
affects them.**

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***“Bob Smith is unavailable at this time. Please leave your name and number.”***

***“Hello. This is Bob Smith. Sorry I missed your call. If you leave your name and number and information about how I can help you, I’ll get back to you as soon as possible.”***

***“Hi! This is Bob Smith. I check my messages regularly and will call you by the end of the day if possible. Please leave your name, number, and the reason for your call. If you need immediate assistance, please dial (instructions for alternate assistance) now. Thank you for calling.”***

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answering questions accurately, and offering help before it is requested. Often, the only time you hear from a customer or neighbor is when they have a problem or complaint. The key to handling complaints well is to expect and prepare for them. Every complaint call is an opportunity to share information and develop a positive relationship. Project the confidence that you can handle the problem well.

Follow these steps during a complaint call:

- Ask for their name, address, and telephone number of the complainant.
- Be polite, calm, and patient.
- Ask how you can help.
- Listen carefully without interrupting.
- Clarify the details of the problem. Ask the complainant to describe the problem fully. Repeat what you have heard to make sure your understanding is accurate.
- Take detailed notes of the conversation. If this is a serious complaint, you may need to document the entire incident. Begin with the first call, and keep a file of any related complaints. Date all of your notes, conversations, and so on.
- Ask if there are other individuals that you may talk to about the complaint; if so, ask for their names, addresses, and telephone numbers.
- Verify the contact information that they gave you and ask about the best time for you to call back.
- Assure the caller you will investigate the complaint and call them when you have information.
- Consider your options. If you can resolve the issue immediately, tell them that you will do that. If you need to investigate the complaint further, tell the caller that you will do so and get back to them within a specified period of time. Be sure to call when you said you would, if only to report the status of your investigation.
- Act on the complaint. If you can resolve the issue, do so. If you cannot, find out who might. If you cannot resolve the problem, be prepared to explain why.
- Call back. Call the complainant and tell them the outcome of your investigation. Thank them for bringing the problem to your attention.

**Dealing with extremes**

Some callers are so upset that they shout, cry, or swear. They'll need to vent before you can begin to help them. Here are some suggestions for calming them down enough to begin problem solving.

**Shouting:** "You sound really mad. I'd sure like to hear what happened, although I might not be able to make everything okay".

**Crying:** "I'm sorry you're upset. Can you tell me more and we'll see if there's something I can do to help".

**Swearing:** "I can tell you're very upset, but the swearing is inappropriate. Please tell me what happened".

**Offensive language after a warning:** "I'd like to help you, but you'll have to call back when you can use appropriate language. I'm sorry, but I'm hanging up now".

## MANAGE CONFLICT BY LISTENING

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Your communication program will include public meetings. When you meet with the public, expect conflict and be prepared to manage it. If you don't manage conflict well, it will reflect badly on the organization.

It is important to set the tone when you hold a meeting. Your behavior leads the group. If your words and body language convey respect, patience, and confidence, people will respond positively. Many public meetings go very smoothly, often better than expected. Still, there are times when conflict arises. Some of the tactics for dealing with conflict in a group are described here.

The best response to conflict is to remain calm, patient, and attentive. No one likes to lose an argument in public. If someone has worked up the courage to speak out against the group, you can help preserve his or her dignity. Listen, ask questions; practice active listening. If your body language and words remain open and nondefensive, the person will soften. If you pause quietly, you will give others in the room an opportunity to speak. As necessary, gently bring the discussion back to the agenda.

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***SOME CALLERS ARE  
so upset that  
they shout, cry,  
or swear.  
They'll need to  
vent before you  
can begin to  
help them.***

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**Rule #1**  
***Avoid a crisis;***  
**Rule #2**  
***If crisis hits,***  
***address and***  
***resolve issues***  
***before they***  
***escalate; and***  
**Rule #3**  
***Use a crisis to***  
***communicate***  
***good news.***

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If an outbreak occurs among participants, maintain order and let each participant have a turn to speak. Ask each one to restate their perception of what the other said. This exchange takes time but can be very productive unless individuals keep repeating the same statements. In that case, firmly state that the group has heard that point and needs to move on to consider other viewpoints.

Be patient with the person who asks a lot of questions. He or she may agree with you but needs more information and reassurance. Despite the adage "There are no stupid questions", group settings seem to inspire stupid questions as well as repeats of the same question or comment. Answer briefly without berating the person, and return to the agenda.

If one person tries to dominate the meeting, emphasize that the entire group is working on solving a problem together. Each person has something to contribute, and it's not fair to let one person prevent others from expressing their views. Say, "We appreciate your commitment, but we need to allow others to state their views". You can offer to stay after the meeting as long as necessary to listen to their ideas.

In some rare instances, issues are so contentious that organized aggressive protesters can be expected. If you expect an unmanageable number of opponents, arrange for police protection. Security personnel should be unobtrusive, subtly projecting a sense of calm and



**Potential crises that might happen on any given work day.**

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|   |   |
|---|---|
| Adverse regulatory action               | Computer tampering                      |
| Anonymous accusations                   | Damaging rumors                         |
| Competitive misinformation              | Discrimination accusations              |
| Confidential information disclosed      | Equipment, product, or service sabotage |
| Misuse of chemical products             | Industrial espionage                    |
| Disgruntled employee threats            | Investigative reporter contact          |
| Employee death or serious injury        | Judicial action                         |
| Employee involved in a scandal          | Labor problems                          |
| Licensing disputes with local officials | Lawsuit likely to be publicized         |
| Extortion threat                        | Security leak or problems               |
| False accusations                       | Severe weather impact on business       |
| Grand jury indictment                   | Sexual harassment allegation            |
| Grass roots demonstrations              | Special interest group attack           |
| Illegal actions by an employee          | Strike, job action, or work stoppage    |
| Indictment of an employee               | Terrorism threat or action              |
| Incorrect installation of equipment     | Unethical employee behavior             |
| Major equipment malfunction             | Union organizing actions                |
| Nearby neighbor, business protest       | Whistleblower threat or actions         |

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order. If you overreact, it will frighten people and provoke dissenters to a higher level of protest.

**CRISIS MANAGEMENT**

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If you have public communications responsibilities, you need to be prepared for communicating about serious problems.

***Why Prepare for What You Hope Never Happens?***

There are proven strategies and effective responses to crisis management. Your response to a crisis can have more influence on the outcome than the event that created the crisis. By planning ahead, you can assess your vulnerability and avoid crises. For some crises, much of your response can and should be prepared in advance.

Is it a problem or a crisis? A problem becomes a crisis when the media says so. Even when a natural disaster or tragedy occurs, the media treatment determines whether you have a problem or a crisis.

## **Crisis Management Checklist**

- ✓ Assign responsibility;
- ✓ Never rely on just one person;
- ✓ Define the problem (real or perceived);
- ✓ Contain the problem;
- ✓ Set clear objectives;
- ✓ Centralize the flow of information;
- ✓ Fill the information vacuum with key messages and visuals;
- ✓ Provide action, not just words;
- ✓ Assume a worst-case planning position;
- ✓ Resist the instinct to be combative; and
- ✓ Understand the media's purpose.

## **Dealing with the Media**

In a crisis, the only constant is the media and they will always want to know

- What happened?
- Why did it happen?
- What will you do to make sure it never happens again?

Prepare to answer those questions before any interview or statement to the media or your hesitancy will come across as confusion, incompetence, or lack of concern.

One way to respond to "why did it happen" and "who's to blame" is to say early in the crisis that an investigation will be conducted. When the investigation is completed, release the information.

The following is a media response checklist:

- ✓ Always have a spokesperson ready and available,
- ✓ Address all audiences,
- ✓ Broaden the issue to include your allies,
- ✓ Bring perspective and provide evidence,
- ✓ Consider striving for an appropriate overreaction,
- ✓ Respond in the public interest, and
- ✓ Keep communications open after the crisis.

**Survival Tips**

- Prepare for conflict and crises and plan for how to respond.
- Reduce conflict by managing issues.
- Anger and opposition arise when people
  - ✓ Feel that they have been adversely affected by something you have done,
  - ✓ Fear being adversely affected by something that you propose to do, or
  - ✓ Disagree in principle with something for which you stand.
- Alert the neighbors *before* the odor, noise, and dust flies!
- Avoid crises by being first, fastest, and friendliest.
- Become a complaint response expert.
- Crisis response plans must be prepared and practiced in advance.
- Conflict and crises can be opportunities to communicate.



## APPENDICES

### Excellent Web Sites

#### **PUBLIC PARTICIPATION**

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Federal Highway Administration; *Public Involvement Techniques for Transportation Decision Making*  
([www.fhwa.dot.gov/reports/pittd](http://www.fhwa.dot.gov/reports/pittd))

International Association for Public Participation  
([www.iap2.org](http://www.iap2.org))

Public Relations Society of America ([www.prsa.org](http://www.prsa.org))

#### **MEETING FACILITATION SKILLS AND TOOLS**

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The National Endowment for the Arts Web site has excellent information about planning and decision-making processes, meeting facilitation, conflict management, and tools for successful meetings  
([www.arts.gov/pub/lessons](http://www.arts.gov/pub/lessons))

#### **RISK COMMUNICATION AND CRISIS MANAGEMENT**

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[www.bernsteincom.com/articles](http://www.bernsteincom.com/articles)

[www.crisisexperts.com](http://www.crisisexperts.com)

[www.psandman.com](http://www.psandman.com)

Or, search the Internet for "crisis management"

#### **WASTEWATER AND BIOSOLIDS**

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American Society of Civil Engineers ([www.asce.org](http://www.asce.org))

National Biosolids Partnership ([www.biosolids.policy.net](http://www.biosolids.policy.net))

National Small Flows Clearinghouse

([www.nesc.wvu.edu/nsfc](http://www.nesc.wvu.edu/nsfc))

United States Environmental Protection Agency

([www.epa.gov](http://www.epa.gov))

Water Environment Federation ([www.wef.org](http://www.wef.org))





# SPEAK UP

A techno's guide to making effective, memorable presentations  
*David J. Reardon and Joseph G. Haworth*

ou're having a busy day your desk when your boss calls to congratulate you.

She's just heard from the mayor that the project is a "go."

That must have been a fine presentation to the city council," she continues. "It took them only a day to decide to go ahead with the project."

No matter what aspect of the water environment field you're involved in — engineering, management, monitoring, operations, regulatory, research — you must be able to make presentations to ensure that your projects will be accepted and/or funded by peers, stakeholders, potential clients, the public, or elected officials. But presentations scare you. Every time you think of having to make one, your heart races, your mouth dries, and your knees quake.

Figure 1 - Keep text visuals simple.

**“Bullet” Visuals Produce Loser Presentations**

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- Forgettable
- May encourage speaker to read
- Boring, especially if you have 30 of them
- Insulting if over-used
- Pictures, graphs, or charts needed to burn an image into audience brains

In fact, public speaking is one of the most dreaded experiences in life. The story goes that when a survey asked people what they fear most, public speaking ranked seventh, after six ways of dying — like falling from buildings and boiling in oil. Scary!

For those of you scared of public speaking, we have good news and bad news. The good news is, you can get past being “too” scared. The bad news is, to do it you have to give speeches.

Following are some very simple rules for giving successful presentations. These rules at first might seem quizzical, or even funny, but are actually just common sense.

Now here’s our class motto: *You’ll be in the top 10% of your profession in the first 10 years of your career if you learn to give a good presentation.* Why? Because more often than not, technical people are not good presenters and being a good presenter is a very valued commodity. We all know that good speakers automatically are thought of as management material (not a bad place to be, professionally). Leaders lead, followers follow. *Guess which ones give speeches?*

### Speech, Speech!

We all have been to conferences where hardly one talk in ten was high quality. So, what makes a presentation good?

**Organize your speech, be prepared, and practice.** In public speaking, there is no substitute for organization, preparation, and practice. You may not think a technical talk is public speaking, but it is. Your audience is watching your body language, your enunciation, and even your clothes. (Have we

Figure 2 - Wordy and graphically inept text visuals will enhance your reputation as a loser.

~~**“BULLET” VISUALS ARE REALLY NOT EFFECTIVE FOR A PRESENTATION MEDIUM**~~

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- Because there are no pictures, graphs, or charts, there is nothing to burn the image into the audience’s brains.
- For this reason, text or bullet visuals are inherently forgettable.
- This type of visual is boring, especially if you have 30 of them.
- Text type visuals are insulting if overused. As a result, you should use them sparingly.
- Wordy text visuals will cause the speaker to read the information - with disastrous effects on the audience.
- Text type visuals can be especially boring and ineffective if more than 4 or 5 points or bullets are listed on the visual.

made you nervous, yet?)

A good talk must be organized according to a reasonable pattern — chronological, thematic, or otherwise — involve good notes and graphics, and have been practiced repeatedly. Yes, you heard us, PRACTICED! Many people don’t practice their speeches enough because every time they practice, it reminds them that they have to give a speech and that scares them. Do it anyway. Go through the presentation several times. Do it out loud.

Should you practice in front of a mirror? Have you ever sat in a restaurant with a mirrored wall? It can be pretty distracting. Instead, tape (audio or video) your speech and have a friend or two help you analyze it.

Try to discover any nervous ticks and get rid of them. For example, instead of saying “ah, ah, ah,” learn to just pause. Pauses are okay — you’re not a radio station, so it’s not “dead air time.” Keep your hands out of your pockets. Don’t hesitate to walk around (but don’t leave the microphone behind). Try not to look like a stick. You know what happens to the British guards at Buckingham Palace — if they don’t relax a bit and unlock their knees, they pass out.

**If you want people to pay attention, don’t read or memorize your speech!** Yes, we’re serious. If you memorize the speech and forget a couple of words in the middle, you’re in trouble. Meanwhile, you sound like an automaton because you’re so worried about forgetting. Memorizing will make you crazy and your audience sleepy.

Reading your speech can be worse. We once watched an attorney give a talk on a very important, complex topic to 300 potential clients (agency



managers and CEOs). Because he didn't want to miss a word, he read his slides — each containing a paragraph of text — to the audience. By the third slide, the audience was audibly groaning. So much for potential clients.

Now, this doesn't mean you shouldn't practice until almost all of your speech comes naturally — just don't be so neurotic about every word. After all, *your audience doesn't know what you didn't say.*

**Good public speakers are made, not born.** That's right. *You only get good at what you practice. You practice things you like. You like things you're good at.* So, if you practice giving speeches enough by giving speeches, you will get good at it and, ultimately, like it. (It's something about the applause at the end, we think.)

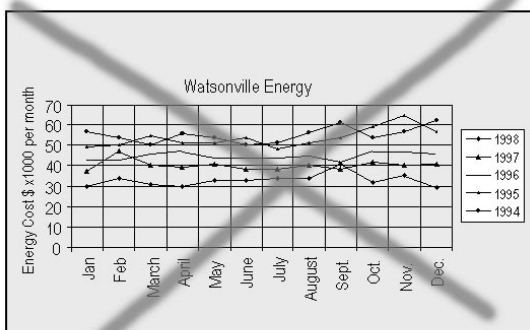
Remember what Tom Peters says in his 1990 video, "10 Vital Rules for Giving Incredible Speeches and Why They're Irrelevant":

- *Each speech is an experiment.* They won't all come out perfect, and some may fall flat, but repeating the experiment many times will make you much better at it.
- *Don't take yourself too seriously, or no one else will.* You've certainly seen speakers who are so wrapped up by the experience and false sense of importance that they almost scare themselves to death. Here, a little bit of your own natural humor goes a long way. If you think of something humorous to say (keep it tasteful), go ahead and say it.

**As for the butterflies in your stomach ... you're not trying to get rid of the butterflies, just get them to fly in formation.** As this famous Toastmasters International (Rancho Santa Margarita, California) saying implies, the point is not to get rid of your fear but to manage it. Yes, fear. Let's admit it and get it out of the way.

The fear you feel is natural. It's the "fight or flight" syndrome that comes from being cornered

**Figure 3 - A perfect example of a cluttered, confusing graph that doesn't make a key point.**



by a 100-legged, 100-eyed beast — in this case, your audience. What happens is the adrenalin starts to pump, your stomach starts to churn, your palms get sweaty, your mouth gets dry, your knees start to shake ... in other words, all physical hell breaks loose. For people used to being in control, that's scary.

What we're afraid of is failing. The fear reminds us of old traumas, like that time in third grade when the teacher asked you a question you couldn't answer, so you just stood there while all the kids laughed. But if you prepare and practice, you won't fail — unless you drop dead on the stage (which is, admittedly, unusual and memorable).

In fact, the tension caused by adrenalin can be a powerful tool for giving a dynamic presentation. Actors call it "creative tension" and turn the adrenalin into an important part of the speech. How do they get past that horror of almost passing out, the "deer in the headlights" syndrome, the "mind blanking" experience? They practice, practice, practice. (They call it rehearsing.)

Anyone in front of an audience without some butterflies either isn't human or doesn't care what that audience thinks. Butterflies are natural; we just need to get them in flying formation.

**Technical talks don't have to be dull.** They also don't have to be an exposition of formulas and data. Most technical talks are not a high academic exercise, and even those that are don't have to be dull.

Your speech is a chance to reveal something new to your audience, to give them an exciting new point of view or a new metaphor that can make your work understandable. Wouldn't it be

**Figure 4 - An excellent example of how to present data.**



great if members of your audience said, “Wow, I never thought of it that way!” Then yours will be that rare talk they remember next week.

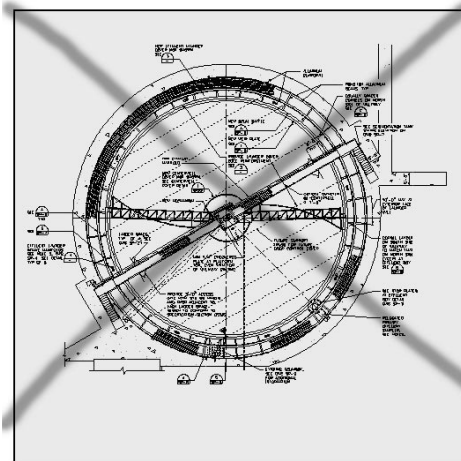
**Tell a few stories — people love stories.** Even we technical people love a story about how a project came to be or how the experimenters discovered that magic moment.

*Try the active voice.* We technical types love to write and speak in the third-person, passive voice (“The store was gone to by John”) in the name of objectivity. When you’re standing in front of an audience, however, “John went to the store” is a much better sentence because it makes for a better story. “I” and “we” also are perfectly reasonable terms to use in speeches.

*Think of speakers’ notes as the titles of little stories that you already know.* Then you can look down at your notes, see the two or three words that remind you of the story, and off you go. Because you’ve told the story many times before — either in practice or conversation — you can tell it while looking at the audience and modify it as seems appropriate. No story is told exactly the same way each time — you elaborate or change the sequence, all of which is interesting and sounds spontaneous to your audience. (Visual aids can act as speakers’ notes, but be careful not to bore your audience by reading them. If you don’t practice enough, that’s what you’ll do.)

Interestingly enough, if you organize your speech as “stories,” you can actually give them out of sequence and still keep your audience fascinated because they are busy looking for the connections. Each story makes a point, and the points, when gathered together, fulfill your theme. The light goes on

**Figure 5 - Never, never, never use a design drawing in a presentation.**



and your audience thinks you are brilliant.

**You can’t give a speech about the hole in the donut without knowing the whole donut.** No one is going to ask you to give a speech about something you don’t know, so prepare and practice so you can give them your best insights and inspire them with your enthusiasm for the subject. After all, you’re the expert. That’s why you were asked to give the presentation.

And here is an added bonus. According to Malcolm Kushner’s 1997 *Successful Presentations for Dummies*, enthusiasm is often mistaken for charisma. Hot stuff. You’re brilliant and charismatic! So, tell stories enthusiastically.

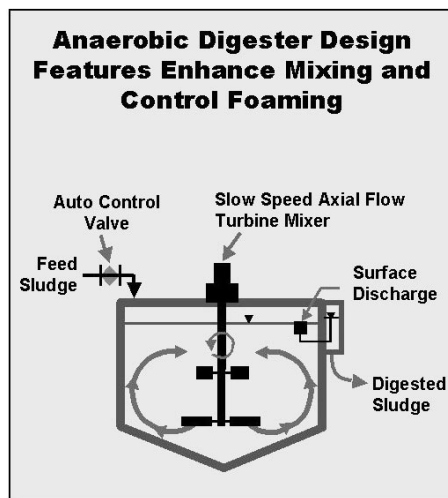
**Arrive early and conclude on time.** Arrive early so you can check out the room, mikes, projector, and screen. Greeting your audience members at the door actually will relax you (it reduces the fear of the unknown).

Wrap up your talk on time. *No one ever complained that a talk was too short.*

**Your audience is on your side.** Really. The audience wants you to be successful — after all, they’re stuck with you for the next half hour or so. All you have to do to make them happy is show them you’re human and can deliver information clearly and concisely.

*To show them that you’re human, look at your audience — just like you would in a personal conversation.* This doesn’t mean you have to make eye contact with everyone or move your head back and forth in a sweep pattern, like some kind of a radar unit. Just scan the audience, pick out three or four individual faces across the room, and talk to those three or four.

**Figure 6 - Use a simplified schematic or detail rather than construction drawings.**



(Also, looking out at your audience keeps your head up and helps you project your voice.)

*After all, a speech is just a conversation, albeit somewhat one-sided.* That's why reading a speech is such a killer — the whole human side collapses. Can you imagine reading your side of a personal conversation?

### Picture This

The whole idea of a speech is to create a hologram in your audience's heads — one they can rotate and ponder. It's a lot like teaching. You can even say things in several ways — that's right, repeat yourself — because people only listen about one-third of the time. Repetition will help them complete the hologram, and so will visual aids.

**Graphics rule.** Let's face it; it's a PowerPoint world. Sophisticated graphics, once a luxury, are now easily achievable for almost any presentation. Yet few take advantage of this opportunity.

What do they do instead? Rely almost exclusively on the dreaded "bullet" visual. Even in its most glamorous form, this style of presentation is a loser. Figure 1 (p. 106) shows an example of a bullet visual that is brief, to the point, and about as attractive as these things get. Figure 2 (p. 106) shows one more typical of the quality we often see.

Your visuals typically should be analog graphs, charts, tables, data, or pictures that clearly and simply augment what you are saying.

**Visual aids should be simple and clear.** Unfortunately, too many of the visuals we've seen detract rather than enhance the presentation because they show far too much information and obfuscate the key points. At least once every conference, we have to put up with a super-analytical person who tries to present his or her case with design drawings. Almost always, the visual is preceded by "I know you can't see this but ..." WELL, IF YOU KNOW WE CAN'T SEE IT, THEN WHY ARE YOU BOTHERING TO SHOW IT TO US!

Put the gory data and details in the technical paper; presentation visuals should be much simpler. The visual's title should clearly summarize its key point or thesis, and all the data on the visual should support that title [see Figure 3 (p. 107) and Figure 4 (p. 107), for good and bad examples].

Basically, each visual should be understandable without a laser pointer, and if you can't read it on a 6-ft-wide screen when standing or sitting 30 ft away, *don't use it.*

Imagine a presenter trying to explain the

details of a clarifier design by showing the visual in Figure 5 (p. 108). A more effective way to present this information is with a simplified process schematic (see Figure 6, p. 108). Remember, *your audience has about 30 to 60 seconds per visual to digest and store the information.* So each visual should have no more than four to six pieces of information, including the labels of a graph's X and Y axes, according to Dag Knudsen's 1999 book, *Designing Winning Presentations.*

**Visual aids make or break your presentation.** We have seen some of the most renowned speakers lose credibility with poor visuals and mediocre speakers greatly enhance their presentation with first-rate graphics. Try to make your graphics the best that your audience will see that day — your (and your audience's) reward will be a memorable and effective presentation. If you are just starting out in your public speaking career, effective visuals provide the perfect security blanket until you develop the confidence you need.

The list below summarizes Joe and Dave's tips for developing effective visuals.

- Lose all text slides, and limit your use of bullet slides.
- Don't tell them, show them. Show pictures; technos love pictures of interesting things.
- Keep it simple: no more than five points to each visual.
- Data and details are not as important as trends or summaries.
- The title and information should make the visual virtually self-explanatory.
- Can your visual be read on a 6-ft screen from 30 ft away? If not, lose it.
- Can you get the point across in 60 seconds? Again, if not, lose it or change it.
- Use bold sans serif fonts for titles and pleasing colors.
- Lose the laser pointer (let the 10-year-old play with it).

Developing effective public speaking skills could be the most important step in your career. By using the techniques outlined in this article, you can make a winning presentation to supervisors, potential clients, and peers. Remember, there is nothing wrong with being mistaken for a brilliant, charismatic leader!

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*David J. Reardon, P.E., is senior vice president in the Folsom, Calif., office of HDR Engineering Inc. (Omaha, Neb.). Joseph G. Haworth, P.E., is an information officer at the Sanitation Districts of Los Angeles County (Whittier, Calif.).*



# Facility Tours

*Courtesy of Joe Haworth, Chief Public Information Officer, Sanitation Districts of Los Angeles County, California*

A tour of the facility is the best way you can show the public what you do for them. It's an easy and relatively inexpensive event that is fun for neighbors, elected officials, the media, and people of all ages and education levels. When people tour the facility, they learn about the wastewater treatment process and meet the people who make it happen.

## **TOUR OBJECTIVES**

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Facility tours can accomplish a multitude of objectives. Here are just a few:

- Show the community you spend their money well.
- Show elected officials you need more funding.
- Show your commitment to clean water, the environment, and public health.
- Show students your technological excellence.
- Show volunteers your willingness to cooperate with the community.
- Show off your staff.
- Show employees they are appreciated by the community.
- Show employees the neighbors are concerned about noise and odors.
- Show the media you have the biggest and shiniest toy on the block.

## **PLAN A ROUTE**

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Think about the audience and develop a tour especially for them. Consider how far people will need to

walk and how long it will take. Avoid dangerous locations (follow [Occupational Safety and Health Administration] and other safety guidelines) and rigorous climbs. Headworks are pretty disgusting, but some tour groups love them! Some areas will be off limits due to safety and security concerns.

Don't pretend there are no odors. It's sewage! Openly talk about the odors and the cause. Then explain the odor control processes and innovations. Put the issue in perspective, it's amazing the odors aren't worse!

## **PREPARE THE FACILITY**

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An upcoming tour is a great reason to get spring cleaning done. Staff might resent the extra work on a tight timeline, but they will be proud when they hear the rave reviews from the people on the tour.

## **SCHEDULING**

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Choose times and days that will be convenient for the tour attendees. Develop a tour schedule, checklist, and calendar. Include the date, time, location, name of the organization, areas of special interest, number in tour, and name of contact person (phone, e-mail, address). Keep a master schedule of tours and appoint one person to be in charge of tours to avoid confusion.

## **GUIDE AND STAFFING**

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Tour guides need to know all about the facility and how it operates. They should be able to explain operations and processes in simple terms. A friendly, helpful nature is also a plus. You might need to schedule extra staffing during large tours for safety and security.

## **HANDOUTS AND SIGNAGE**

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Prepare a packet of materials for tours. So people won't have to carry it around for the tour, explain what's in it before you begin, and ask them to pick them up before they leave. Directional signage helps keep groups together. Signs explaining major elements of the treatment process are also helpful.

## **CLOTHING AND SHOES**

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Tell tour groups in advance what type of clothing and footwear they should wear. Athletic shoes are best; high heels are generally not allowed due to metal grids. Hats, sunscreen, jackets, or umbrellas might be called for depending on the site and the season.

## **WATER AND REFRESHMENTS**

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Provide drinking water and snacks for tours, if possible.

## **RESTROOMS**

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Provide access to restrooms. Advise tour groups to wash their hands after the tour. Be careful not to alarm them, but remind them the plant is septic.

## **FOLLOW UP**

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Call or send a note to the tour contact person. Thank them for taking the tour and invite them to contact you for information or to schedule more tours.



**Press Release**

FOR IMMEDIATE RELEASE  
August 15, 2002

Contact: Lori Burkhammer  
1 (703) 684-2400

**U.S. REPRESENTATIVE WINS STOCKHOLM JUNIOR WATER PRIZE**  
*Virginia Student Was Selected to Compete by the Water Environment Federation*

(Alexandria, VA) – The Water Environment Federation’s (WEF) nominee **Katherine Holt**, of Williamsburg, VA, is winner of the 2002 International Stockholm Junior Water Prize. HRH Crown Princess Victoria of Sweden awarded Holt, better known as the “Oyster Lady”, the prize of \$5,000 and a crystal sculpture at a gala ceremony held August 13 in Stockholm.

“Katherine is a very talented young water scientist, said WEF President, **Jim Clark**. “We are excited to be able to sponsor her participation in the most prestigious international award for youth water-related research”. Holt’s winning project, “Cleaning the Chesapeake Bay with Oysters,” includes a scientific and business analysis of introducing Asian oysters to clean the Chesapeake Bay. Her research looked at how the foreign species (*Crassostrea ariakensis*) could be introduced to benefit the Chesapeake while preserving the Bay’s native oyster species (*Crassostrea virginica*) and meeting national environmental goals.

A panel of WEF water quality experts selected Holt to be the U.S. Representative earlier this year at the national competition in Dallas, TX. She was among forty-five finalists from 22 countries sent to Stockholm to compete in the international competition. According to WEF Executive Director, **Bill Bertera**, “the Stockholm Junior Water Prize competition is an important element in WEF’s efforts to attract the very best people to the water quality field. The competition promotes excellence. Its rewards are realized by the individual and the entire environmental community”.

The International Stockholm Junior Water Prize was established in 1995 to engage and support the interest of young people in water environment issues. It is awarded annually to high school students who have contributed to water conservation and improvement through outstanding research. WEF and ITT Industries co-sponsor the SJWP in the United States; ITT is the international sponsor. For more information, please visit [www.wef.org/publicinfo/stockholm/](http://www.wef.org/publicinfo/stockholm/).

♦♦♦

Founded in 1928, **the Water Environment Federation (WEF)** is a not-for-profit technical and educational organization with members from varied disciplines who work toward the WEF vision of preservation and enhancement of the global water environment. The WEF network includes more than 100,000 water quality professionals from 79 Member Associations in 32 countries.

**ITT Industries, Inc.** (<http://www.ittind.com>) is a global, multi-industry company with leading positions and advanced technologies in its served markets. The company reported revenues of \$4.6 billion in 1999 from its four segments: Connectors & Switches, Defense Products & Services, Pumps & Complementary Products and Specialty Products. ITT Industries employs approximately 38,000 people around the world.



## Media Panel Speaks Out

Journalists are open about what they want and how they get it. In the 1980s, a media panel addressing wastewater professionals in San Francisco, California, had comments that hold true today. The following paraphrased excerpts portray their advice.

### ***Radio Reporting, comments by Gil Haar, KYUU Radio***

"Of thousands of stories every day, we determine which we cover by asking, 'Does this affect people—their health, their pocketbooks, their lives.' You affect our lives, but as long as everything works, we flush and it goes away, we don't think about it".

"We don't know your business and neither does the public. Explain it as if you were talking to your neighbor".

"We hate to get the answer wrong, or not at all. When Smith is 'not available for comment' what does it say? Radio has a continuous deadline, so be available and keep it simple".

### ***Newspaper Reporting, comments by Dale Champion, San Francisco Chronicle***

"People want good management of air and water quality, and land use. People expect imaginative solutions to environmental problems. If you can show that you're turning the tide, they want to know about it".

"Don't be timid about approaching a reporter. If it isn't a story now, maybe one will emerge. We like pictures and diagrams to help translate jargon".

"You don't need perfect answers, just the best answers available. The public is entitled to know even if you have doubts. If you treat us professionally, we'll treat you professionally. We're all in this together; it's a cooperative relationship".

**Television Reporting,  
comments by Irv Kass, RON-TV**

"If the pictures move, you have a better chance of getting a reporter to produce a piece. You have more time, it has more impact, and viewers pay more attention. We ask you how it works. A 30 minute interview ends up being 30 seconds on the air".

"Newspapers tell stories in detail and radio gets it to you quicker. Unless we can do it better, we let them do it".

"Pin it down. Tell us what it means to people's lives in dollars and cents, or health. We want to meet you and understand the things you know".

# How an Earthquake Can Shake Up Communications

*A Case Study by the Los Angeles County Sanitation District*

January 17, 1994, at 4:31 a.m. the Northridge earthquake rocked California's San Fernando Valley with a deadly force of 7.0 on the Richter scale. This is the story of how the Los Angeles County Sanitation District dealt with the media then. Of 11 treatment facilities, only the Valencia plant suffered major damage. There, the tertiary filtration system was down for awhile, but Operations set up emergency power and kept the activated sludge process operating.

The world watched dramatic TV reports of collapsed freeways, malls, and apartment buildings. Days after the quake, the media became interested in the infrastructure, the damage costs, and the time it would take to recover services. The L.A. County Sanitation District public information officer, Joe Haworth, took a proactive approach to make sure people got the facts.

## **1. You have to know what's going on**

Because the phones were working, we could keep tabs on the plants and communicate with reporters. I stayed in touch with the Sewerage Department Head, Mike Moshiri, and the Valencia Plant supervisor, Ron Kettle. From the main office, I kept up to date on the repair and recovery at all facilities. Field people knew reporters should contact my Information Office so we could coordinate responses. I promised reporters they could talk with Ron as the recovery progressed. Reporter access to both Ron and myself as sources was important to our credibility. Often, we had conference calls where I could listen to Ron's talk with a reporter, which allowed me to stay abreast of events and guide him with additional questions. (Since then,

we all use cell phones and have reliable communications even in the midst of catastrophic disasters.)

**2. Establish one spokesperson**

Although Ron helped, I was the primary spokesperson for the Sanitation Districts. Staff was too busy with repair and maintenance of the plants to talk with reporters. I could filter the stories and trace down rumors. Our main office was the information headquarters and media contact.

**3. Be available—the media is on deadlines**

The media struggles to get stories in front of the public. Deadlines are their religion. Each format has its strength and needs: radio is now, television is pictures, and the newspaper is details. Both TV and newspapers often have late afternoon deadlines. The radio can broadcast anytime from anywhere via telephone. Being available to the media is the best way to avoid rumors or inaccurate reporting and to get your story told.

**4. Be candid**

If something is a problem, say it's a problem. Describe what the public is expected to do and be clear about the estimated costs that might be involved. If there is a substantial sewage spill that could jeopardize public health, make sure the signs are posted and the public is told through all the local media. In a major disaster, it's tempting to think the media and the public are busy with other stories. But, if a public health situation arises, they'll come back to you to find out why they weren't informed. You can never quell the rumors without candor and honesty. Credibility with a reporter usually grows out of mutual respect.

**5. Be helpful, be a teacher**

Reporters rarely encounter a wastewater story, and our business is very complex and not easy to explain. You have to be patient and help educate the reporter about treatment processes, public health and safety, and related issues. Remember to call on other sources that might better address certain issues, such as the Health Department.

In the aftermath of the Northridge quake, one rumor was that "partially treated sewage" was flowing down the Santa Clara River toward Ventura. The Valencia Water Reclamation Plant was fully functioning for secondary treatment, but the tertiary filters were shut down. To say the sewage was "partially treated" was somewhat accurate, but very provocative. I explained to reporters that the water was receiving secondary treatment like most plants on any other river in the United States. The difference was that for awhile we were unable to dechlorinate to protect the fish. At the same time and place in the river, the Fish and Game Department was trying to clean up an oil spill from a ruptured oil pipeline. It took many hours on the phone with reporters for me to explain the oil spill was probably more danger to the fish. You must be a patient teacher.

**6. Keep your own people informed**

In the chaos of recovery it was very important to keep our own people informed. On one occasion, I was unavailable and assumed our Operations Chief could act as a spokesperson that day. He was busy with operations and hadn't planned on spending time with the reporter. He was able to provide all the information, but I should have kept him informed as to my availability.

**7. Always do the follow up**

Instead of letting the story go away, you can gain credibility by following up with reporters and helping them complete the picture. This is often where the best part of your story can be told. After all, your people have responded to the emergency and have finally brought the plant back to operating like it should. What happened to the fish? What happened to the Fish and Game people who were in the river? These make interesting stories.

**8. Look for the stories you might have missed**

After the plant was completely back online, we found the earthquake had opened some expansion joints too far, letting water out of the tanks and flooding the galleries. To keep the plant from sinking in its own activated sludge,

sump pumps were running nonstop until the joints could be epoxied. The repair was done by a hard-hat diver in deep sea gear working two days, diving in a fully operating treatment plant. That's a human interest story.

**9. Key theme—public health and safety**

In earthquakes, people just want to flee. I've watched people run out of buildings to the sidewalk, one of the worst places to be because of falling glass and masonry. We should never assume our public is trained or knows what to do in an emergency. We have to teach them what we do and what they need to do. Being a teacher to the media is being a teacher to your public. In wastewater treatment, our primary job is to protect public health and safety. That's the bottom line, whether we're recovering from an earthquake or cleaning up a manhole overflow.

**10. Don't be knee-jerk defensive**

Stories must provoke interest in order for people to read them or pay attention. Sometimes the most interesting stories are not what the management team wants told. Especially during a disaster, people need the whole story, good and bad. If your sludge truck crashes, it gives you an opportunity to talk about composting and recycling. You'll keep your credibility by telling both the good and the bad news.

# The Four Stages of Risk Communication

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1. Stonewall Stage  
No communication—ignore the public.
2. Missionary Stage  
One-way communication—show the public why you're right and they're wrong.
3. Dialogue Stage  
Two-way communication—learn from the public the ways in which they're right and you're wrong.
4. Organizational Stage  
Internal communication—become the sort of organization that finds dialogue possible, even natural.

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# The Four Traditional Stages of a Risk Controversy

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1. Ignore Them  
Your research tells you the hazard is low, so you do nothing. This typically generates more outrage.
2. Bury Them in Data  
Ignoring them didn't work, so you try to convince them that they're wrong. This typically generates more outrage.
3. Impugn Their Motives  
If they're local, call them ignorant or hysterical. If they're nonlocal, call them radicals, mercenaries, or outside agitators. This typically generates more outrage.
4. Give Them What They Asked For  
Management wants them to go away! Nothing else has worked, so you finally decide to pretend the hazard is huge, though you know it is not. Even this typically generates more outrage. They wanted an apology and a Community Advisory Panel; instead, you gave them a cleanup or an expensive piece of equipment. They are still outraged—and now so are you!

Conclusion: The proper response to a serious outrage is neither to ignore the outrage nor to pretend that it is a serious hazard. Just as a serious hazard requires hazard mitigation, a serious outrage requires outrage mitigation.

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# Reducing Outrage: The Principal Strategies

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1. *Stake out the middle, not the extreme.* In a fight between "terribly dangerous" and "perfectly safe", the winner will be "terribly dangerous". But "modestly dangerous" is a contender. Activists can afford to exaggerate their case; industry and government cannot. Move to the middle of the seesaw.
2. *Acknowledge prior misbehavior—repeatedly.* The prerogative of deciding when we can put our mistakes behind us belongs to our stakeholders, not ourselves. The more often and apologetically we acknowledge the sins of the past, the more quickly others decide it's time to move on.
3. *Acknowledge current problems—dramatically.* Omissions, distortions, and "spin control" damage credibility nearly as much as outright lies. The only way to build credibility is to acknowledge problems, going beyond mere honesty to "transparency". And since people don't expect such acknowledgements, they have to be dramatic or no one will notice.
4. *Discuss achievements with humility.* Odds are you resisted change until pressure from regulators, neighbors, or activists forced your hand. Now have the grace to say so. Attributing your good behavior to your own natural goodness triggers skepticism; attributing it to pressure greatly increases the likelihood that we'll believe you actually did it.
5. *Share control and be accountable.* The higher the outrage, the less willing people are to leave control in your hands or to accept your assurances that all is well. Look for ways to put the control elsewhere (or to show that it is already elsewhere). Let others—regulators, neighbors, activists—keep you honest and certify your good performance.

# Issues Management Case Studies: Biosolids

*by Sam Hadeed, Technical Communications Director  
Courtesy of the National Biosolids Partnership*

The National Biosolids Partnership (NBP) developed the Environmental Management System (EMS) to help improve public understanding of and support for biosolids management programs. The series of articles on how to build public acceptance is summarized here.

## **PERCEPTION IS REALITY**

Public perception can make or break your program. If you adopt the EMS, you will exceed regulatory requirements to be a good neighbor and protect public health and the environment. But no one will know if you don't tell them. Develop a public acceptance strategy with your staff and secure the funding to implement the plan.

Concerns about health, odor, groundwater contamination, decline in property values, and other legitimate issues can be defused through effective, two-way communication. Explain the beneficial aspects of your program in credible and easy-to-understand language. Express your confidence in the scientific integrity of biosolids regulations and practices, but don't expect science alone to win over people when you're dealing with perceived risks. People have fears and concerns, even though safe biosolids management is based on protective assumptions about impacts on the environment, animals, crops, and humans. Their willingness to accept your messages will depend upon your credibility, openness, empathy, and responsiveness to their concerns.

Odors are the most obvious cause for resistance to biosolids. You can meet all the regulations and still not

have an acceptable odor level even if the odors are harmless. More troubling are recent concerns that odors might impact respiratory health. To build public acceptance, you need to make a strong commitment to control odors. In most cases, achieving an acceptable odor level for the neighbors will mean exceeding disinfection requirements. It might be difficult to get funding to exceed regulatory standards, but the return on the investment is greater public acceptance.

## **AUDIENCE, KEY MESSAGES, COMMUNICATION TOOLS**

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Your target audiences and the types of information to be exchanged for biosolids management programs are outlined here.

### ***Biosolids Users***

Help prepare them to respond to questions from neighbors, community leaders, media, and the general public and to articulate the value of biosolids to their business and the community.

### ***Public Officials***

Give them a brief, easy-to-read summary of your program's costs and benefits so they can speak knowledgeably to their constituents; if problems arise they can help calm fears if they are informed.

### ***Distant Communities***

Because agricultural application often occurs in another political jurisdiction than where the plant is located, distant communities also may be part of your audience.

To communicate most effectively, you would want to

- Present technical messages creatively and compellingly.
- Listen carefully and empathetically to questions, concerns, and doubts.
- Establish an atmosphere of mutual respect.

Your key messages would focus on benefits.

- ✓ *Clean water.* Help people understand the connection between wastewater treatment, biosolids management, and their clean water.
- ✓ *Safety.* Talk about the low risk of biosolids; simplify, but maintain scientific accuracy.
- ✓ *Beneficial impacts.* Land application of biosolids provides nutrients and organic matter to improve soil and is less likely to pollute than animal manure or chemical fertilizers.

Other key topics would be regulatory requirements, wastewater treatment and biosolids processes, the properties of biosolids, and nuisance potential. Make people aware of your quality control and odor control efforts, your commitment to protect public health and the environment, and your local history and experience.

Communication tools and events that would help you deliver your message might include

- Presentations to local groups,
- Community events and festivals,
- Facility and operations tours,
- Brochures and other educational materials,
- Media outreach,
- Hotline,
- Response team,
- Advisory committee (include neighbors), and
- School programs.

A wastewater agency should use proactive public participation to involve interested parties in its biosolids management program and EMS planning process. Your approach should reflect your organization's commitments to the NBP's *Code of Practice*. It must fit with your biosolids management program, local issues, and past and current levels of public interest and involvement. The public participation process must provide meaningful opportunities for interested parties to express their views about your biosolids management activities, including concerns about environmental impacts, program performance, and potential areas for improvement.

The purpose for involving the public in your biosolids management program and EMS planning process is to foster a meaningful, two-way dialogue that improves the program from everyone's vantage point. Such involvement can give you an opportunity to hear public

concerns and better understand the public's perspective. It also helps you identify important and serious issues early and provides a venue to address them together. Moreover, it creates a setting where you can tell the public about your processes and programs and explain how you meet your various requirements. At a minimum, providing people with information and an opportunity for input to your planning processes can go a long way to building mutual respect and program support.

Without proactive involvement, most biosolids producers' contact with the public may be limited to formal regulatory settings, such as permit hearings, abnormal or emergency situations where public relations are likely strained or damaged, or public tours taken by people who already are probably supportive of program activities. This level of involvement in these types of settings may not be sufficient to build the public acceptance of your biosolids program needs.

Involving the public in planning processes builds trust and support that can help propel you toward your goals and objectives and increase the chances that isolated negative events in an otherwise good program are viewed in the proper context. The need for public engagement is heightened when an EMS is or will be part of the biosolids management program. Many people are unfamiliar with EMSs and how they relate to regulatory requirements and voluntary standards. As with general biosolids management program activities, the involvement of interested parties in the EMS can establish a constructive, two-way learning opportunity for wastewater agency staff, other stakeholders, and the public.

For more guidance on how to explain what happens with biosolids, please visit [www.biosolids.policy.net/proactive/newsroom/release](http://www.biosolids.policy.net/proactive/newsroom/release) or [www.biosolids.org](http://www.biosolids.org).



# THE IAP2 PUBLIC PARTICIPATION SPECTRUM

Developed by the International Association for Public Participation



INCREASING LEVEL OF PUBLIC IMPACT

| Inform   | Consult  | Involve   | Collaborate   | Empower  |
|--|--|---|---|--|
| <p><b>Objective:</b><br/>To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, and/or solution.</p> <p><b>Promise to the Public:</b><br/>We will keep you informed.</p> <p><b>Example Tools</b><br/>Fact sheets<br/>Web sites<br/>Open houses</p> | <p><b>Objective:</b><br/>To obtain public feedback on analysis, alternatives and/or decisions.</p> <p><b>Promise to the Public:</b><br/>We will keep you informed, listen to and acknowledge concerns, and provide feedback on how public input influenced the decision.</p> <p><b>Example Tools</b><br/>Public comment<br/>Focus groups<br/>Surveys<br/>Public meetings</p> | <p><b>Objective:</b><br/>To work directly with the public throughout the process to ensure that public issues and concerns are consistently understood and considered.</p> <p><b>Promise to the Public:</b><br/>We will work with you to ensure that your concerns and issues are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.</p> <p><b>Example Tools</b><br/>Workshops<br/>Deliberative polling</p> | <p><b>Objective:</b><br/>To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.</p> <p><b>Promise to the Public:</b><br/>We will look to you for direct advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.</p> <p><b>Example Tools</b><br/>Citizen Advisory Committees<br/>Consensus-building<br/>Participatory decision-making</p> | <p><b>Objective:</b><br/>To place final decision-making in the hands of the public.</p> <p><b>Promise to the Public:</b><br/>We will implement what you decide.</p> <p><b>Example Tools</b><br/>Citizen Juries<br/>Ballots<br/>Delegated decisions</p> |

| Tools and Techniques  |   | Always Think It Through   | What Can Go Right  | What Can Go Wrong |
|---|---|---|--|-------------------|
| <p><b>PRINTED PUBLIC INFORMATION MATERIALS</b></p> <ul style="list-style-type: none"> <li>- Fact Sheets</li> <li>- Newsletters</li> <li>- Brochures</li> <li>- Issue Papers</li> </ul>      | <ul style="list-style-type: none"> <li>• KISSI - Keep It Short and Simple</li> <li>• Make it visually interesting but avoid a slick sales look</li> <li>• Include a postage-paid comment form to encourage two-way communication and to expand mailing list</li> <li>• Be sure to explain public role and how public comments have affected project decisions</li> <li>• G&amp;A format works well</li> </ul> | <ul style="list-style-type: none"> <li>• Can reach large target audience</li> <li>• Allows for technical and legal reviews</li> <li>• Encourages written responses if comment form enclosed</li> <li>• Facilitates documentation of public involvement process</li> </ul>         | <ul style="list-style-type: none"> <li>• Only as good as the mailing list/distribution network</li> <li>• Limited capability to communicate complicated concepts</li> <li>• No guarantee materials will be read</li> </ul> |                   |
| <p><b>INFORMATION REPOSITORIES</b></p> <p>Libraries, city halls, distribution centers, schools, and other public facilities make good locations for housing project-related information</p> | <ul style="list-style-type: none"> <li>• Make sure personnel at location know where materials are kept</li> <li>• Keep list of repository items</li> <li>• Track usage through a sign-in sheet</li> </ul>   | <ul style="list-style-type: none"> <li>• Relevant information is accessible to the public without incurring the costs or complications of tracking multiple copies sent to different people</li> <li>• Can set up visible distribution centers for project information</li> </ul> | <ul style="list-style-type: none"> <li>• Information repositories are often not well used by the public</li> </ul>   |                   |
| <p><b>TECHNICAL REPORTS</b></p> <p>Technical documents reporting research or policy findings</p>  | <ul style="list-style-type: none"> <li>• Reports are often more credible if prepared by independent groups</li> </ul>   | <ul style="list-style-type: none"> <li>• Provides for thorough explanation of project decisions</li> </ul>  | <ul style="list-style-type: none"> <li>• Can be more detailed than desired by many participants</li> <li>• May not be written in clear, accessible language</li> </ul>   |                   |
| <p><b>ADVERTISEMENTS</b></p> <p>Paid advertisements in newspapers and magazines</p>   | <ul style="list-style-type: none"> <li>• Figure out the best days and best sections of the paper to reach intended audience</li> <li>• Avoid rarely read notice sections</li> </ul>   | <ul style="list-style-type: none"> <li>• Potentially reaches broad public</li> <li>• May satisfy legal notification requirements</li> </ul>   | <ul style="list-style-type: none"> <li>• Expensive, especially in urban areas</li> <li>• Allows for relatively limited amount of information</li> </ul>  |                   |
| <p><b>NEWSPAPER INSERTS</b></p> <p>A "fact sheet" within the local newspaper</p>  | <ul style="list-style-type: none"> <li>• Design needs to get noticed in the pile of inserts</li> <li>• Try on a day that has few other inserts</li> </ul>   | <ul style="list-style-type: none"> <li>• Provides community-wide distribution of information</li> <li>• Presented in the context of local paper, insert is more likely to be read and taken seriously</li> <li>• Provides opportunity to include public comment form</li> </ul>   | <ul style="list-style-type: none"> <li>• Expensive, especially in urban areas</li> </ul>   |                   |

# AP2 Public Participation Toolbox

## PASSIVE PUBLIC INFORMATION TECHNIQUES

| Tools and Techniques   |  | Always Think It Through   | What Can Go Right  | What Can Go Wrong |
|--|--|---|--|-------------------|
| <b>FEATURE STORIES</b><br>Focused stories on general project-related issues                              | <ul style="list-style-type: none"> <li>Anticipate visuals or schedule interesting events to help sell the story</li> <li>Recognize that reporters are always looking for an angle</li> </ul>       | <ul style="list-style-type: none"> <li>Can heighten the perceived importance of the project</li> <li>More likely to be read and taken seriously by the public</li> </ul>  | <ul style="list-style-type: none"> <li>No control over what information is presented or how</li> </ul>   |                   |
| <b>BILL STUFFER</b><br>Information flyer included with monthly utility bill                              | <ul style="list-style-type: none"> <li>Design bill stuffers to be eye-catching to encourage readership</li> </ul>  | <ul style="list-style-type: none"> <li>Widespread distribution within service area</li> <li>Economical use of existing mailings</li> </ul>  | <ul style="list-style-type: none"> <li>Limited information can be conveyed</li> <li>Message may get confused as from the mailing entity</li> </ul>                                     |                   |
| <b>PRESS RELEASES</b>  | <ul style="list-style-type: none"> <li>Try to hand deliver press releases or kits to get a chance to discuss project</li> <li>Foster a relationship with editorial boards and reporters</li> </ul> | <ul style="list-style-type: none"> <li>Informs the media of project milestones</li> <li>Press release language is often used directly in articles</li> <li>Opportunity for technical and legal reviews</li> </ul> | <ul style="list-style-type: none"> <li>Generally low media response rate</li> <li>Frequent poor placement of press release within newspapers</li> </ul>                                |                   |
| <b>NEWS CONFERENCES</b>  | <ul style="list-style-type: none"> <li>Make sure all speakers are trained in media relations</li> </ul>  | <ul style="list-style-type: none"> <li>Opportunity to reach all media in one setting</li> </ul>   | <ul style="list-style-type: none"> <li>Limited to news-worthy events</li> </ul>  |                   |
| <b>TELEVISION</b><br>Television programming to present information and elicit audience response          | <ul style="list-style-type: none"> <li>Cable options are expanding and can be inexpensive</li> <li>Check out expanding video options on the internet</li> </ul>                                    | <ul style="list-style-type: none"> <li>Can be used in multiple geographic areas</li> <li>Many people will take the time to watch rather than read</li> </ul>  | <ul style="list-style-type: none"> <li>High expense</li> <li>Difficult to gauge impact on audience</li> </ul>  |                   |
| <b>WEB SITES</b><br>World wide web sites which contain project information, announcements, and documents | <ul style="list-style-type: none"> <li>Keep it simple and easy to navigate</li> <li>Use a logical site organization</li> <li>Always keep site up to date</li> </ul>                                | <ul style="list-style-type: none"> <li>Capable of reaching very large audiences with enormous amounts of information</li> <li>Can be a very low cost way of distributing larger documents</li> </ul>              | <ul style="list-style-type: none"> <li>Many people still cannot access the web</li> <li>Information overload and poor design can prevent people from finding what they need</li> </ul> |                   |



# AP2 Public Participation Toolbox

## ACTIVE PUBLIC INFORMATION TECHNIQUES

| Tools and Techniques   |  | Always Think It Through  | What Can Go Right  | What Can Go Wrong |
|--|--|--|--|-------------------|
| <p><b>BRIEFINGS</b><br/>Use regular meetings of social and civic clubs and organizations to provide an opportunity to inform and educate. Normally these groups need speakers. Examples of target audiences: Rotary Club, Lions Clubs, Elks Clubs, Kiwanis, League of Women Voters. Also a good technique for elected officials.</p> | <ul style="list-style-type: none"> <li>• KISS - Keep it Short and Simple</li> <li>• Use "show and tell" techniques</li> <li>• Bring visuals</li> </ul>   | <ul style="list-style-type: none"> <li>• Control of information/presentation</li> <li>• Opportunity to reach a wide variety of individuals who may not have been attracted to another format</li> <li>• Opportunity to expand mailing list</li> <li>• Similar presentations can be used for different groups</li> <li>• Can build community good will</li> </ul> | <ul style="list-style-type: none"> <li>• Project stakeholders may not be in target audiences</li> <li>• Topic may be too technical to capture interest of audience</li> </ul>  |                   |
| <p><b>CENTRAL INFORMATION CONTACT</b><br/>Designated contacts are identified as official liaisons for the public and media</p>   | <ul style="list-style-type: none"> <li>• If possible, list a person not a position</li> <li>• Best if contact person is local</li> <li>• Anticipate how phones will be answered</li> <li>• Make sure all recorded messages are kept up to date</li> </ul>                            | <ul style="list-style-type: none"> <li>• People don't get "the run around" when they call</li> <li>• Controls information flow and promotes information consistency</li> <li>• Conveys image of "accessibility"</li> </ul>   | <ul style="list-style-type: none"> <li>• Designated contact must be committed to and prepared for prompt and accurate responses</li> <li>• May filter public message from technical staff and decision makers</li> <li>• May not serve to answer many of the toughest questions</li> </ul> |                   |
| <p><b>INFORMATION HOT LINE</b><br/>Identify a separate line for public access to prerecorded project information or to reach project team members who can answer questions/obtain input, also use email and web sites</p>  | <ul style="list-style-type: none"> <li>• Make sure contact has sufficient knowledge to answer most project-related questions</li> <li>• If possible, list a person not a position</li> <li>• Best if contact person is local</li> <li>• Use toll free number if not local</li> </ul> | <ul style="list-style-type: none"> <li>• People don't get "the run around" when they call</li> <li>• Controls information flow and promotes information consistency</li> <li>• Conveys image of "accessibility"</li> <li>• Easy to provide updates on project activities</li> </ul>  | <ul style="list-style-type: none"> <li>• Designated contact must be committed to and prepared for prompt and accurate responses</li> </ul>   |                   |
| <p><b>TECHNICAL ASSISTANCE</b><br/>Providing access to technical expertise to individuals and organizations</p>  | <ul style="list-style-type: none"> <li>• The technical resource must be perceived as credible by the audience</li> <li>• Work with your technical people to make sure they understand public issues</li> </ul>   | <ul style="list-style-type: none"> <li>• Builds credibility and helps address public concerns about equity</li> <li>• Can be effective conflict resolution technique where facts are debated</li> </ul>  | <ul style="list-style-type: none"> <li>• Availability of technical resources may be limited</li> <li>• Technical experts may not be prepared for working with the public</li> </ul>  |                   |

# AP2 Public Participation Toolbox

## ACTIVE PUBLIC INFORMATION TECHNIQUES

| Tools and Techniques   | Always Think It Through  | What Can Go Right   | What Can Go Wrong   |
|--|--|---|---|
| <p><b>SIMULATION GAMES</b><br/>Exercises that simulate project decisions</p>   | <ul style="list-style-type: none"> <li>• Test "game" before using</li> <li>• Be clear about how results will be used</li> </ul>  | <ul style="list-style-type: none"> <li>• Can be designed to be an effective educational/training technique, especially for local officials</li> </ul>   | <ul style="list-style-type: none"> <li>• Requires substantial preparation and time for implementation</li> <li>• Can be expensive</li> </ul>  |
| <p><b>INFORMATION CENTERS and FIELD OFFICES</b><br/>Offices established with prescribed hours to distribute information and respond to inquiries</p> | <ul style="list-style-type: none"> <li>• Provide adequate staff to accommodate group tours</li> <li>• Use brochures and videotapes to advertise and reach broader audience</li> <li>• Consider providing internet access station</li> <li>• Select an accessible and frequented location</li> </ul>                | <ul style="list-style-type: none"> <li>• Provides opportunity for positive media coverage at groundbreaking and other significant events</li> <li>• Excellent opportunity to educate school children</li> <li>• Places information dissemination in a positive educational setting</li> <li>• Information is easily accessible to the public</li> <li>• Provides an opportunity for more responsive ongoing communications focused on specific public involvement activities</li> </ul> | <ul style="list-style-type: none"> <li>• Relatively expensive, especially for project-specific use</li> <li>• Access is limited to those in vicinity of the center unless facility is mobile</li> </ul> |
| <p><b>EXPERT PANELS</b><br/>Public meeting designed in "Meet the Press" format. Media panel interviews experts from different perspectives.</p>      | <ul style="list-style-type: none"> <li>• Provide opportunity for participation by general public following panel</li> <li>• Have a neutral moderator</li> <li>• Agree on ground rules in advance</li> <li>• Possibly encourage local organizations to sponsor rather than challenge</li> </ul>                     | <ul style="list-style-type: none"> <li>• Encourages education of the media</li> <li>• Presents opportunity for balanced discussion of key issues</li> <li>• Provides opportunity to dispel scientific misinformation</li> </ul>   | <ul style="list-style-type: none"> <li>• Requires substantial preparation and organization</li> <li>• May enhance public concerns by increasing visibility of issues</li> </ul>                         |
| <p><b>FIELD TRIPS</b><br/>Provide tours for key stakeholders, elected officials, advisory group members and the media</p>                            | <ul style="list-style-type: none"> <li>• Know how many participants can be accommodated and make plans for overflow</li> <li>• Plan question/answer session</li> <li>• Consider providing refreshments</li> <li>• Demonstrations work better than presentations</li> <li>• Make sure everything is safe</li> </ul> | <ul style="list-style-type: none"> <li>• Opportunity to develop rapport with key stakeholders</li> <li>• Creates greater public knowledge of issues and processes</li> </ul>  | <ul style="list-style-type: none"> <li>• Number of participants is limited by logistics</li> <li>• Potentially attractive to protestors</li> </ul>  |

| <b>AP2 Public Participation Toolbox</b>  |   | <b>ACTIVE PUBLIC INFORMATION TECHNIQUES</b>  |  |
|--|---|--|--|
| <b>Tools and Techniques</b>  | <b>Always Think It Through</b>  | <b>What Can Go Right</b>   | <b>What Can Go Wrong</b>   |
| <p><b>OPEN HOUSES</b><br/>An open house to allow the public to tour at their own pace. The facility should be set up with several stations, each addressing a separate issue. Resource people guide participants through the exhibits.</p> | <ul style="list-style-type: none"> <li>Someone should explain format at the door</li> <li>Ask participants to fill out a comment sheet</li> <li>Be prepared for a crowd all at once - develop a meeting contingency plan</li> <li>Set up stations so that several people (6-10) can view at once</li> </ul> | <ul style="list-style-type: none"> <li>Fosters small group or one-on-one communications</li> <li>Ability to draw on other team members to answer difficult questions</li> <li>Meets information and interaction needs of many members of the public who are not served by typical public meetings</li> <li>Builds credibility</li> </ul> | <ul style="list-style-type: none"> <li>Difficult to document public input</li> <li>Protestors may use the opportunity to disrupt event</li> <li>Usually more staff intensive than a meeting</li> <li>May not provide the opportunity to be heard that some public will expect</li> </ul> |
| <p><b>COMMUNITY FAIRS</b><br/>Central event with multiple activities to provide project information and raise awareness</p>  | <ul style="list-style-type: none"> <li>All issues, large and small must be considered</li> <li>Make sure adequate resources and staff are available</li> </ul>  | <ul style="list-style-type: none"> <li>Focuses public attention on one element</li> <li>Conducive to media coverage</li> <li>Allows for different levels of information sharing</li> </ul>   | <ul style="list-style-type: none"> <li>Public must be motivated to attend</li> <li>Usually expensive to do it well</li> <li>Can damage reputation if not done well</li> </ul>  |

# AP2 Public Participation Toolbox

## SMALL GROUP PUBLIC INPUT TECHNIQUES

| Tools and Techniques  |   | Always Think It Through   | What Can Go Right  | What Can Go Wrong |
|---|---|---|--|-------------------|
| <b>INTERVIEWS</b>   |   |   |  |                   |
| One-to-one meetings with stakeholders to gain information on public concerns and perspectives for developing or refining public involvement and consensus building programs | <ul style="list-style-type: none"> <li>Where feasible, interviews should be conducted in-person, particularly when considering candidates for citizens committees</li> <li>Take advantage of opportunity for public to input in how they participate</li> </ul> | <ul style="list-style-type: none"> <li>Provides opportunity to get understanding of public concerns and issues</li> <li>Provides opportunity to learn how to best communicate with public</li> <li>Can be used to evaluate potential citizen committee members</li> </ul> | <ul style="list-style-type: none"> <li>Scheduling multiple interviews can be time consuming</li> <li>Interviewers must engender trust or risk negative response to format</li> </ul> |                   |
| <b>IN-PERSON SURVEYS</b>  |   |   |  |                   |
| One-on-one "focus groups" with standardized questionnaire or methodology such as "stated preference"  | <ul style="list-style-type: none"> <li>Make sure intended use of result is clear before technique is designed</li> </ul>  | <ul style="list-style-type: none"> <li>Provides traceable data</li> <li>Reaches broad, representative public</li> </ul>   | <ul style="list-style-type: none"> <li>Expensive</li> <li>Focus Groups may have a marketing/public relations image</li> </ul>  |                   |
| <b>COFFEE KLATCHES</b>  |   |   |  |                   |
| Small meetings within neighborhood usually at a person's home   | <ul style="list-style-type: none"> <li>Make sure staff is very polite and appreciative</li> </ul>   | <ul style="list-style-type: none"> <li>Relaxed setting is conducive to effective dialogue</li> <li>Maximizes two-way communication</li> </ul>   | <ul style="list-style-type: none"> <li>Requires a lot of labor to reach many people</li> </ul>   |                   |
| <b>SMALL FORMAT MEETINGS</b>  |   |   |  |                   |
| Small meetings at existing groups or in conjunction with another event  | <ul style="list-style-type: none"> <li>Understand who the likely audience is to be</li> <li>Make opportunities for one-one-one meetings</li> </ul>  | <ul style="list-style-type: none"> <li>Opportunity to get on the agenda</li> <li>Provides opportunity for in-depth information exchange in non-threatening forum</li> </ul>   | <ul style="list-style-type: none"> <li>May be too selective and can leave out important groups</li> </ul>  |                   |

# AP2 Public Participation Toolbox

## LARGE GROUP PUBLIC INPUT TECHNIQUES

| Tools and Techniques  | Always Think It Through  | What Can Go Right   | What Can Go Wrong  |
|---|--|---|--|
| <p><b>RESPONSE SHEETS</b><br/>Mail-in-forms often included in fact sheets and other project mailings to gain information on public concerns and preferences</p> | <ul style="list-style-type: none"> <li>Use prepaid postage</li> <li>Include a section to add name to the mailing list</li> <li>Document results as part of public involvement record</li> </ul>  | <ul style="list-style-type: none"> <li>Provides input from those who would be unlikely to attend meetings</li> <li>Provides a mechanism for expanding mailing list</li> </ul>   | <ul style="list-style-type: none"> <li>Does not generate statistically valid results</li> <li>Only as good as the mailing list</li> <li>Results can be easily skewed</li> </ul>  |
| <p><b>MAILED SURVEYS &amp; QUESTIONNAIRES</b><br/>Inquiries mailed randomly to sample population to gain specific information for statistical validation</p>    | <ul style="list-style-type: none"> <li>Make sure you need statistically valid results before making investment</li> <li>Survey/questionnaire should be professionally developed and administered to avoid bias</li> <li>Most suitable for general attitudinal surveys</li> </ul> | <ul style="list-style-type: none"> <li>Provides input from individuals who would be unlikely to attend meetings</li> <li>Provides input from cross-section of public not just activists</li> <li>Statistically tested results are more persuasive with political bodies and the general public</li> </ul> | <ul style="list-style-type: none"> <li>Response rate is generally low</li> <li>For statistically valid results, can be labor intensive and expensive</li> <li>Level of detail may be limited</li> <li>May be perceived as a public relations tool</li> </ul> |
| <p><b>TELEPHONE SURVEYS/POLLS</b><br/>Random sampling of population by telephone to gain specific information for statistical validation</p>                    | <ul style="list-style-type: none"> <li>Make sure you need statistically valid results before making investment</li> <li>Survey/questionnaire should be professionally developed and administered to avoid bias</li> <li>Most suitable for general attitudinal surveys</li> </ul> | <ul style="list-style-type: none"> <li>Provides input from individuals who would be unlikely to attend meetings</li> <li>Provides input from cross-section of public, not just those on mailing list</li> <li>Higher response rate than with mail-in surveys</li> </ul>                                   | <ul style="list-style-type: none"> <li>More expensive and labor intensive than mailed surveys</li> <li>Bias is easily charged if questions not carefully constructed</li> </ul>  |
| <p><b>INTERNET SURVEYS/POLLS</b><br/>Web-based response polls</p>   | <ul style="list-style-type: none"> <li>Be precise in how you set up site, chat rooms or discussion places can generate more input than you can look at</li> </ul>  | <ul style="list-style-type: none"> <li>Provides input from individuals who would be unlikely to attend meetings</li> <li>Provides input from cross-section of public, not just those on mailing list</li> <li>Higher response rate than other communication forms</li> </ul>                              | <ul style="list-style-type: none"> <li>Generally not statistically valid results</li> <li>Can be very labor intensive to look at all of the responses</li> <li>Cannot control geographic reach of poll</li> <li>Results can be easily skewed</li> </ul>      |
| <p><b>COMPUTER-BASED PARTICIPATION</b><br/>Surveys conducted via computer network</p>   | <ul style="list-style-type: none"> <li>Appropriate for attitudinal research</li> </ul>   | <ul style="list-style-type: none"> <li>Provides instant analyses of results</li> <li>Can be used in multiple areas</li> <li>Novelty of technique improves rate of response</li> </ul>   | <ul style="list-style-type: none"> <li>High expense</li> <li>Detail of inquiry is limited</li> </ul>   |
| <p><b>PUBLIC HEARINGS</b><br/>Formal meetings with scheduled presentations offered</p>  | <ul style="list-style-type: none"> <li>Avoid if possible, otherwise try to use informal meetings immediate before</li> </ul>   | <ul style="list-style-type: none"> <li>Provides opportunity for public to speak without rebuttal</li> <li>meets legal requirements</li> <li>puts comments on record</li> </ul>  | <ul style="list-style-type: none"> <li>Does not foster dialogue</li> <li>Creates us vs. them feeling</li> <li>Many dislike public speaking</li> </ul>  |

**AP2 Public Participation Toolbox** **SMALL GROUP PROBLEM-SOLVING TECHNIQUES**

| Tools and Techniques  |  | Always Think It Through  | What Can Go Right  | What Can Go Wrong |
|---|--|--|--|-------------------|
| <p><b>DESIGN CHARRETTES</b><br/>Intensive session where participants re-design project features</p>   | <ul style="list-style-type: none"> <li>• Best used to foster creative ideas</li> <li>• Be clear about how results will be used</li> </ul>  | <ul style="list-style-type: none"> <li>• Promotes joint problem solving and creative thinking</li> <li>• Effective for creating partnerships and positive working relationships with public</li> </ul>   | <ul style="list-style-type: none"> <li>• Participants may not be seen as representative by larger public</li> <li>• May not have lasting effect if used as a one-shot technique</li> </ul> |                   |
| <p><b>COMMUNITY FACILITATORS</b><br/>Use qualified individuals in local community organizations to conduct project outreach</p>   | <ul style="list-style-type: none"> <li>• Define roles, responsibilities and limitations up front</li> <li>• Select and train facilitators carefully</li> </ul>   | <ul style="list-style-type: none"> <li>• Promotes community-based involvement</li> <li>• Capitalizes on existing networks</li> <li>• Enhances project credibility</li> </ul>   | <ul style="list-style-type: none"> <li>• Can be difficult to control information flow</li> <li>• Can build false expectations</li> </ul>   |                   |
| <p><b>MEDIATION/NEGOTIATION</b><br/>The process of resolving disputes through compromise</p>  | <ul style="list-style-type: none"> <li>• Should be used typically as a last resort to solve specific problems with well-defined stakeholders groups</li> </ul>   | <ul style="list-style-type: none"> <li>• Promotes accountability on both sides</li> <li>• Focuses on specific issues</li> </ul>  | <ul style="list-style-type: none"> <li>• Difficulty of defining who the parties are and whom they represent</li> <li>• Time and labor intensive</li> </ul>                                 |                   |
| <p><b>CONSENSUS BUILDING TECHNIQUES</b><br/>Techniques for building consensus on project decisions such as criteria and alternative selection. Often used with advisory committees. Techniques include Delphi, nominal group process and public value assessment and many others.</p> | <ul style="list-style-type: none"> <li>• Use simplified methodology</li> <li>• Allow adequate time to reach consensus</li> <li>• Consider one of the computerized systems that are available</li> <li>• Define levels of consensus, i.e. a group does not have to agree entirely upon a decision but rather agree enough so the discussion can move forward</li> <li>• Make sure decision maker is committed to consensus</li> </ul> | <ul style="list-style-type: none"> <li>• Encourages compromise among different interests</li> <li>• Provides structured and trackable decision making</li> <li>• Focuses on solving problems with mutually satisfactory solutions</li> <li>• Can help avoid later conflicts</li> </ul> | <ul style="list-style-type: none"> <li>• Not appropriate for groups with no interest in compromise</li> <li>• Consensus may not be reached</li> </ul>                                      |                   |
| <p><b>FOCUS GROUPS</b><br/>Message testing forum with randomly selected members of target audience. Can also be used to obtain input on planning decisions</p>  | <ul style="list-style-type: none"> <li>• Conduct at least two sessions for a given target</li> <li>• Use a skilled focus group facilitator to conduct the session</li> </ul>   | <ul style="list-style-type: none"> <li>• Provides opportunity to test key messages prior to implementing program</li> <li>• Works best for select target audience</li> </ul>   | <ul style="list-style-type: none"> <li>• Relatively expensive if conducted in focus group testing facility</li> </ul>  |                   |

# AP2 Public Participation Toolbox **SMALL GROUP PROBLEM-SOLVING TECHNIQUES**

| <b>Tools and Techniques</b>   |   | <b>Always Think It Through</b>   | <b>What Can Go Right</b>  | <b>What Can Go Wrong</b> |
|---|---|--|---|--------------------------|
| <p><b>ADVISORY COMMITTEES</b><br/>A group of representative stakeholders assembled to provide public input to the planning process</p>  | <ul style="list-style-type: none"> <li>Define roles and responsibilities up front</li> <li>Be forthcoming with information</li> <li>Use a consistently credible process</li> <li>Interview potential committee members in person before selection</li> <li>Use third party facilitation</li> <li>Make sure members communicate with their constituencies</li> </ul> | <ul style="list-style-type: none"> <li>Provides for detailed analyses for project issues</li> <li>Participants gain understanding of other perspectives, leading toward compromise</li> </ul>                                  | <ul style="list-style-type: none"> <li>General public may not embrace committee's recommendations</li> <li>Members may not achieve consensus</li> <li>Sponsor must accept need for give-and-take</li> <li>Time and labor intensive</li> </ul> |                          |
| <p><b>TASK FORCES</b><br/>A group of experts or representative stakeholders formed to develop a specific product or policy recommendation</p>   | <ul style="list-style-type: none"> <li>Obtain strong leadership in advance</li> <li>Make sure membership has credibility with the public</li> <li>Make sure members represent diverse perspectives and will be independent</li> </ul>   | <ul style="list-style-type: none"> <li>Findings of a task force of independent or diverse interests will have greater credibility</li> <li>Provides constructive opportunity for compromise</li> </ul>                         | <ul style="list-style-type: none"> <li>Task force may not come to consensus or results may be too general to be meaningful</li> <li>Time and labor intensive</li> </ul>   |                          |
| <p><b>PANELS</b><br/>A group assembled to debate or provide input on specific issues</p>  | <ul style="list-style-type: none"> <li>Most appropriate to show different views to public</li> <li>Panelists must be credible with public</li> </ul>  | <ul style="list-style-type: none"> <li>Provides opportunity to dispel misinformation</li> <li>Can build credibility if all sides are represented</li> <li>May create wanted media attention</li> </ul>                         | <ul style="list-style-type: none"> <li>May create unwanted media attention</li> <li>Can polarize issues if not conceived and moderated well</li> </ul>  |                          |
| <p><b>CITIZEN JURIES</b><br/>Small group of ordinary citizens empanelled to learn about an issue, cross examine witnesses, make a recommendation. Always non-binding with no legal standing</p> | <ul style="list-style-type: none"> <li>Requires skilled moderator</li> <li>Commissioning body must follow recommendations or explain why</li> <li>Be clear about how results will be used</li> </ul>  | <ul style="list-style-type: none"> <li>Great opportunity to develop deep understanding of an issue</li> <li>Public can identify with the "ordinary" citizens</li> <li>Pinpoint fatal flaws or gauge public reaction</li> </ul> | <ul style="list-style-type: none"> <li>Resource intensive</li> </ul>  |                          |
| <p><b>ROLE-PLAYING</b><br/>Participants act out characters in pre-defined situation followed by evaluation of the interaction</p>   | <ul style="list-style-type: none"> <li>Choose roles carefully. Ensure that all interests are represented.</li> <li>People may need encouragement to play a role fully</li> </ul>  | <ul style="list-style-type: none"> <li>Allow people to take risk-free positions and view situation from other perspectives</li> <li>Participants gain clearer understanding of issues</li> </ul>                               | <ul style="list-style-type: none"> <li>People may not be able to actually achieve goal of seeing another's perspective</li> </ul>   |                          |

# AP2 Public Participation Toolbox **LARGE GROUP PROBLEM-SOLVING TECHNIQUES**

| Tools and Techniques  |  | Always Think It Through   | What Can Go Right  | What Can Go Wrong |
|---|--|---|--|-------------------|
| <p><b>ELECTRONIC DEMOCRACY</b><br/>Internet, Websites, Teleconferencing, On-line Dialogue, On-line Delivery of Government Services</p>        | <ul style="list-style-type: none"> <li>Carefully plan how information will be presented and how feedback will be used</li> </ul>   | <ul style="list-style-type: none"> <li>Facilitates interactive communication</li> <li>Convenient</li> </ul>   | <ul style="list-style-type: none"> <li>Not accessible to everyone</li> <li>Opportunity for manipulation/misinformation/incivility</li> </ul>   |                   |
| <p><b>SAMOAN CIRCLE</b><br/>Leaderless meeting that stimulates active participation</p>   | <ul style="list-style-type: none"> <li>Set room up with center table surrounded by concentric circles</li> <li>Need microphones</li> <li>Requires several people to record discussion</li> </ul>   | <ul style="list-style-type: none"> <li>Can be used with 10 to 500 people</li> <li>Works best with controversial issues</li> </ul>   | <ul style="list-style-type: none"> <li>Dialogue can stall or become monopolized</li> </ul>   |                   |
| <p><b>OPEN SPACE TECHNOLOGY</b><br/>Participants offer topics and others participate according to interest</p>                                | <ul style="list-style-type: none"> <li>Important to have a powerful theme or vision statement to generate topics</li> <li>Need flexible facilities to accommodate numerous groups of different sizes</li> <li>Groundrules and procedures must be carefully explained for success</li> </ul>              | <ul style="list-style-type: none"> <li>Provides structure for giving people opportunity and responsibility to create valuable product or experience</li> <li>Includes immediate summary of discussion</li> </ul>  | <ul style="list-style-type: none"> <li>Most important issues could get lost in the shuffle</li> <li>Can be difficult to get accurate reporting of results</li> </ul>   |                   |
| <p><b>WORKSHOPS</b><br/>An informal public meeting that may include a presentations and exhibits but ends with interactive working groups</p> | <ul style="list-style-type: none"> <li>Know how you plan to use public input before the workshop</li> <li>Conduct training in advance with small group facilitators. Each should receive a list of instructions, especially where procedures involve weighting/ranking of factors or criteria</li> </ul> | <ul style="list-style-type: none"> <li>Excellent for discussions on criteria or analysis of alternatives</li> <li>Fosters small group or one-to-one communication</li> <li>Ability to draw on other team members to answer difficult questions</li> <li>Builds credibility</li> <li>Maximizes feedback obtained from participants</li> <li>Fosters public ownership in solving the problem</li> </ul> | <ul style="list-style-type: none"> <li>Hostile participants may resist what they perceive to be the "divide and conquer" strategy of breaking into small groups</li> <li>Several small-group facilitators are necessary</li> </ul> |                   |
| <p><b>FUTURE SEARCH CONFERENCE</b><br/>Focuses on the future of an organization, a network of people, or community</p>                        | <ul style="list-style-type: none"> <li>Hire a facilitator experienced in this technique</li> </ul>   | <ul style="list-style-type: none"> <li>Can involve hundreds of people simultaneously in major organizational change decisions</li> <li>Individuals are experts</li> <li>Can lead to substantial changes across entire organization</li> </ul>   | <ul style="list-style-type: none"> <li>Logistically challenging</li> <li>May be difficult to gain complete commitment from all stakeholders</li> <li>2 – 3 day meeting</li> </ul>  |                   |
| <p><b>DELIBERATIVE POLLING</b><br/>Measures informed opinion on an issue</p>  | <ul style="list-style-type: none"> <li>Do not expect or encourage participants to develop a shared view</li> <li>Hire a facilitator experienced in this technique</li> </ul>   | <ul style="list-style-type: none"> <li>Can tell decision-makers what the public would think if they had more time and information</li> <li>Exposure to different backgrounds, arguments, and views</li> </ul>   | <ul style="list-style-type: none"> <li>Resource intensive</li> <li>Often held in conjunction with television companies</li> <li>2 – 3 day meeting</li> </ul>   |                   |



## Measuring Public Involvement Efforts

How do you know if public involvement efforts are successful or productive? Although there are many sophisticated and costly methods to measure effectiveness, a simple self-test can be informative. You can develop a simple assessment tool like the one shown below. Expand or simplify the statements to suit your needs. To use it before, during, and after the process, just change the verb tenses. For greater validity than your own opinion, ask internal and external stakeholders to respond and compile their answers. This sort of tool serves the dual purpose of measuring effectiveness and helping to focus on priorities.

| Results Of The Public Involvement Process                                     | Yes | Maybe | No | Don't Know |
|---|-----|-------|----|------------|
| Improved understanding of the project   |     |       |    |            |
| Increased public support for the project                                      |     |       |    |            |
| Helped build public support for the organization                              |     |       |    |            |
| Generated positive media coverage   |     |       |    |            |
| Engaged community leaders in the process                                      |     |       |    |            |
| Community leaders spoke out in favor of the project                           |     |       |    |            |
| The outcome (plan, design, policy, etc.) is better as a result of the process |     |       |    |            |
| Project was completed on schedule   |     |       |    |            |
| Outcome improved organization's efficiency                                    |     |       |    |            |
| Outcome improved organization's service                                       |     |       |    |            |
| Litigation was avoided  |     |       |    |            |
| Reduced delays due to protests  |     |       |    |            |
| Contributed to a strong bond rating   |     |       |    |            |
| Enhanced the organization's financial position                                |     |       |    |            |
| Helped identify a fundable outcome  |     |       |    |            |
| Stakeholders felt the process was fair  |     |       |    |            |
| Stakeholders felt their input was valued                                      |     |       |    |            |
| Stakeholders understood the process   |     |       |    |            |
| Participants had the information they needed                                  |     |       |    |            |
| Process was flexible to meet participant needs                                |     |       |    |            |
| Public input was used to make the decision                                    |     |       |    |            |



# **Public Perception & Participation in Water Reuse:**

## **Literature Summary**

August 2, 2001  
Washington, D.C.

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This Literature Summary is part of the Water Environment Research Foundation (WERF) project Framework for Public Perception and Participation in Water Reuse Initiatives, 00-PUM-1. This project was jointly sponsored by WERF, the American Water Works Association Research Foundation, the National Water Research Institute, and the WateReuse foundation. For more information, contact WERF. The full project report will be available through WEF in 2003.

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## I. INTRODUCTION

*Water is a limited resource in a rapidly expanding global population. Reclaiming water after it is treated in a modern wastewater treatment plant has been promoted as an element of sustainable water resource management strategies. Water reuse for non-potable (i.e., non-drinking) purposes is widely accepted, with communities using reclaimed water for a range of activities, including irrigate golf courses and landscaping, cooling waters for industry, and canals, ponds, and other aesthetic water features. However, in a growing number of cases, communities have considered using highly treated municipal wastewater to augment drinking water supplies. While engineering and science have achieved great success in addressing human health and environmental issues with reclaimed water, many water reuse initiatives have been terminated due to lack of public support. The use of reclaimed water as a resource is dependent upon public support. Why that support does not exist and how to best engage in a public discussion about water reuse involves gaining a better understanding of public perception and the development of effective mechanisms for public participation. RESOLVE, Inc, is considering these questions, with support from the Water Environment Research Foundation (WERF), in cooperation with the National Water Research Institute, American Water Works Association Research Foundation, and the WateReuse Foundation.*

The purpose of this literature review summary is to examine a variety of perspectives on perception and public participation in complex environmental issues, and in particular, issues of water reuse. The literature review summary is the first step in a three-staged process of distilling the key factors that influence public perception and participation in a water reuse decision. For our purposes, a factor is any characteristic, phenomenon, or fact that influences in some way the perception held by individuals or the nature of the public participation experience. The literature summary, along with case studies and short white papers from experts in perception and participation, will serve as background material to stimulate discussion in a symposium held in Washington, DC in the summer of 2001. The symposium will bring together academic experts with water reuse professionals and stakeholders for a facilitated discussion. Together, researchers and practitioners will identify the most critical factors and develop strategies for addressing those factors. Finally, a *Framework* document will be written that bridges disciplinary and stakeholder perspectives and supplies practical, effective guidance and tools for water resource professionals. The *Framework* will also identify gaps in our current social science understanding of the factors underlying perception and public participation.

The summary begins with a brief introduction to water reuse, including the literature on how people perceive water reuse. It then shifts to the broader social science literature on perception and public participation, characterizing that literature and providing an overview of the major themes emerging from the diverse social science perspectives. The concluding section discusses the results of the small number of larger, comprehensive empirical studies in the field to date.

The first attachment (Attachment 1) breaks down the over-arching themes into more specific factors, discussing in greater detail the nature of twenty-three factors. The factors are organized

into individual, decision context, and institutional and societal context categories. Attachment 2 is the complete reference list reflected in this literature review summary.

## II. WHAT IS WATER REUSE & WHAT DO PEOPLE THINK OF IT?

Water reuse, reclaimed water, recycled water, repurified water are all terms for the beneficial use of water after it has been treated in a state-of-the-art, multi-stage wastewater treatment process. Worldwide, water is reused for industrial purposes, landscaping, agricultural irrigation, and indirect and direct potable uses. In the U.S., reclaimed water has been used predominantly for non-potable (i.e., non-drinking) purposes, with only a few indirect potable examples. As early as the 1930s, reclaimed water was discharged on to the ground and allowed to recharge the groundwater aquifer that serves as a drinking water supply in California – i.e., indirect potable reuse. In the late 1950s and early 1960s, additional indirect potable reuse projects in California and Nevada were initiated, as was a temporary, drought-driven direct potable reuse in Kansas – i.e., reclaimed water being directly routed to a drinking water treatment plant. By the mid-1970s, Virginia had an indirect potable reuse project. The 1980s and 1990s were a period of rapid expansion of water reuse, as communities in Colorado, California, Texas, Florida, and Arizona considered indirect potable uses. The 2000s promise additional initiatives, particularly as population and economic growth pressures further tighten water supplies. However, at the same time public has become increasingly uncomfortable and less accepting of indirect potable projects.<sup>i</sup>

The public supports the general concept of reusing reclaimed water, and are highly supportive of non-potable reuse. People favor reuse that promotes water conservation, provides environmental protection benefits, protects human health, and cost effectively treats and distributes a valuable and limited resource. However, as the water reuse option becomes more concrete, with specific proposed projects in communities, and the proposed use increases the likelihood of direct human contact, attitudes change – the public becomes less supportive. Attitude surveys from the 1970s and 1980s identified five factors contributing to the public’s acceptance of water reuse initiatives. As a sixth factor, recent surveys in Orange County, California, where a water reuse initiative is currently underway, revealed that the public was concerned by the fact that the reclaimed water was originally wastewater.<sup>ii</sup> Surveys in the UK confirmed this “source” factor, with people more willing to use recycled water from their own wastewater than from second parties or a common public source.<sup>iii</sup> Thus, sources may be an additional acceptance factor:

- Degree of human contact
- Protection of public health
- Protection of the environment
- Promotion of water conservation
- Cost of treatment and distribution technologies and systems<sup>iv</sup>
- Perception of waste water as source of reclaimed water

Case studies from the 1970s and 1980s identified additional awareness and trust factors influencing whether the public would accept the use of reclaimed water:

- Awareness of water supply problems

- Perception of role of reclaimed water in overall water supply allocation scheme
- Perception of the quality of reclaimed water
- Confidence in local management of public utilities and technologies<sup>v</sup>

In general, trust and confidence in public agencies and officials is in decline in America.<sup>vi</sup> Likewise, belief that even the best technologies can remove all impurities and germs from waste water is in decline, according to a California survey.<sup>vii</sup> Furthermore while the public has reported trusting university-based scientists and the medical community on technical and health issues related to water reuse, a recent UK survey showed people trusting their own personal impressions of water quality (often based upon the water's cloudiness or turbidity) more than these experts.<sup>viii</sup>

In the 1990s, a number of high profile indirect potable water reuse projects encountered stiff public opposition. The public effectively organized themselves politically and prevented projects from being implemented in these cases. Terms like "Toilet to Tap" and "Sewage Beverage" framed the political discussion. Within this context, recent surveys have confirmed and expanded some of the underlying factors that contribute to these perceptions and concerns about water reuse. Demographic indicators have been identified:

Opponents tend to be:

- Seniors
- Long-time residents
- Lower education attainment
- Lower income

Proponents tend to be:

- Younger
- Greater education attainment
- Higher income<sup>ix</sup>

There have been studies that claim men are more supportive than women in water reuse; however, other studies have concluded the opposite.<sup>x</sup> Overall, demographic factors may be weak indicators and unreliable if not confirmed by other measurement instruments. In addition, while information sharing, educational activities, and opportunities for reflection upon the concept of water reuse do increase support, it has also been shown to intensify the extremes. In other words, those that are opposed to water reuse are more strongly opposed and those that support it are more strongly supportive after becoming more knowledgeable and aware.<sup>xi</sup>

In spite of serious opposition, the public has expressed an interest in being meaningfully involved in water reuse decision-making, and finding ways to ensure an independent and secure water supply for their communities.<sup>xii</sup> The public is, in a very general sense, aware that there are water supply problems in many parts of the country and a few believe that some form of potable reuse is inevitable, given growth and water supply constraints.<sup>xiii</sup>

Within this context, the water reuse community has asked for greater clarification as to *why* the public holds these perceptions of potable reuse and *what* can be done to discuss these perceptions through public participation efforts. The first step in a comprehensive effort to examine the crucial elements of **public perception** and **participation** that underlie the public's opposition and behavior includes the broader review of the social science literature reported here. Subsequent steps include case studies, a symposium in the summer 2001, and a final framework report.

### III. WHAT DOES SOCIAL SCIENCE SAY ABOUT PERCEPTION & PARTICIPATION?

Public perception and participation have been widely discussed in a broad array of social science fields. However, the body of literature is quite heterogeneous with many small empirical studies consisting of case studies and limited survey research. In recent years there have been increasing attempts to draw conclusions across a larger number of cases, either through meta-analysis techniques applied to several pre-existing case studies or large scale research projects. Furthermore, there is a considerable literature from democracy theory and other normative perspectives on society that consider how the public ought to behave, engage and participate in public decisions. Here too there have been efforts to examine the empirical realities underlying the social goals of normative theories.

#### LITERATURE PROFILE

Of the seventy-three (73) references on public perception and participation currently in the literature review, over half are from a resource management context, including 12% from water reuse and biosolids and 10% that are water quality and conservation and watershed management. In fact, many of the water reuse citations are summaries of the research literature from the 1970s and 1980s and thus reflect the vast majority of research on public perception and participation in the water reuse context. Slightly over one-quarter of the literature relate to risk management (e.g., hazardous and nuclear wastes, incinerators, environmental health, etc.). The remaining sources are predominantly land use issues and there are a few general public policy decision-making examples. Nearly 80% are empirical studies (e.g., surveys, case studies, simulations). The remaining are normative theories, emerging from political and social theories of participation in decision-making, communicative action, and justice. The vast majority of examples (94%) are from the U.S., although the literature includes two relevant water studies in Australia, a water reuse survey in England, and two risk management cases from Europe. Overall, the social science disciplines represented in the literature review include:

- 30% Public administration, policy, management, or planning [22]
- 21% Psychology (social and cognitive) [15]
- 16% Political science [12]
- 11% Communication science [8]
- 8% Sociology [6]
- 7% Conflict Resolution [5]
- 6% Marketing and opinion surveying [4]
- 1% Economics [1]

Perception is usually considered an individual-level factor, while participation is a process context, social, and structural-level phenomenon. In other words, perception relates to what is going on in an individual's head -- how they think and feel about things. Participation, on the other hand, refers to all the features of a decision-making process in which individuals are participating. Perception and participation are closely related, as individual factors influence the



outcomes, success and characteristics of the process and context for decisions. At the same time, the nature of the process contributes to shaping an individual's perceptions.

The literature contains a wide variety of views on what is called *success* in public participation. Some researchers and scholars define success in terms of a broad majority of participants perceiving the process and outcome as fair, based upon sound logic, and legitimate. Others are more concerned that the outcome is implementable or that a particular decision (e.g., water reuse) is acceptable to the public. These two views of success do not necessarily produce the same results in regards to what factors are important in public perception and participation. The perspective of the author is that it is wise to identify both process and outcome dimensions to the success, under the assumption that attending to both simultaneously is the best chance to ensure fair and credible processes and sound, legitimate outcomes. As Caron Chess states in her white paper:

In general, I think both process and outcome variables need to be considered. I do not feel that good processes necessarily lead to good outcomes. I even think that it is possible to have good outcomes even with what many would consider poor processes

#### OVERARCHING THEMES

In spite of the “messy” relationship among social science factors, a few common themes emerged from literature review. The cross-cutting ideas reflect clusters of factors that influence public participation and perception issues of water reuse. The exact nature of the influence is unclear – it is not possible to say that X causes Y. In fact, there are many chicken-and-egg relationships where it is difficult to decipher whether X leads to Y, Y leads to X, or whether there are several other factors, A, B, and C, that contribute to both X and Y influencing each other.

Nonetheless, general themes are present. When factors within these themes function in certain ways, they tend to have a positive or negative impact on an individual's perception and the nature of public participation. There are at least five themes:

**Information & Context:** Information, knowledge, local context, education all play an important role in shaping perception and the nature of public participation. The information relates to the science and technologies, local knowledge and site-specific characteristics, values and interests, the local context – e.g., political, social, economic, and environmental landscape, and other information-based factors. Furthermore, the uncertainty or incompleteness of information in any of these information categories influences perception about water reuse. Therefore, information and context factors contain concrete facts, as well as flavor or richness that embellishes the influence of those facts.

**Communication & Dialogue:** Communication is the means of exchanging information, developing mutual understanding and defining relationships. Public dialogue is a broader factor related to the quality of the overall public discussion and cumulative influence of individual communication events. While the effectiveness of the communication events seem to be critical to the success of information exchange and expanding understanding, it is the quality of the overall dialogue that appears to contribute to relationship factors that contribute to public perception and individual's behavior when participating in public decision-making. For example, people seem to assess communication based upon the:

- sincerity and honesty of the speaker;
- legitimacy and credibility of the speaker;
- comprehensiveness, clarity and coherent (e.g., no jargon or technical language); and
- factual accuracy.<sup>xiv</sup>

While communication and dialogue are the channels in which information and contextual factors flow, the combined impact of communication and dialogue, and information and context may contribute to shaping the trust and perceived fairness among the individual participants and members of the public.

**Trust & Trust-Building:** Perception of water reuse and behavior in participation is influenced by trust. Likewise, perceptions impact the level of trust people have in many dimensions of the water reuse issue. It is a cyclical relationship. People can trust or have confidence in many different types of things, including people's trust of technologies, science, the people managing the technologies and systems, and each other. Trust is built through the nature of communication and dialogue and has been shown to increase in cases of high risk perception when:

- dialogue is sustained
- public has independent sources of information, not linked to the sponsoring agency
- public can ask questions
- public is involved early
- information is available to everyone
- behavior is non-coercive – it is considered a reasoned, fair way to make a decision
- everyone's opinion matters and there is a willingness to listen to all views and expand the discussion if necessary, and
- citizens have some level of control in the process (e.g., contributing to the agenda or ground rules).<sup>xv</sup>

**Fairness:** The perception of fairness is important in public participation and perceptions of water reuse. Fairness applies to both the decision-making process and the outcome. For example, was the process of making the decision fair? Was it reasoned, involved everyone, genuinely listened to everyone, addressed all concerns appropriately, etc.?

Fairness also relates to the outcome – that is, are the burdens and/or benefits being shared fairly? A fair outcome may not need to be an equally distributed outcome. From cases of hazardous waste facility siting, it has been shown that people will take on more burdens than others (e.g., one neighborhood will host the landfill), as long as the process of making the decision was perceived as fair *and* there is some level of burden sharing.<sup>xvi</sup> In other words, while one community takes the landfill, the community sees that a neighboring community is committing to measurable, verifiable waste reduction activities, and a third community is hosting a waste transfer station. Everyone is seen as doing their part.

**Motivation & Commitment:** Individuals need to be motivated to participate in water reuse decision-making. Rarely is a single motive enough; usually someone needs multiple motives to engage. Commitment, as discussed here, is considered an organizational-level factor in a public dialogue. The organizations involved must show a genuine commitment to public participation that contributes to trust-building and the perceptions of fairness.

These five themes are not independent and distinct from one another. Quite the opposite, they may very likely interact and overlap in multiple ways. In fact, it may be that interaction among the themes that most shapes the public participation experience and the individuals' perceptions of water reuse issues. For example, communication and dialogue seem to be the pipelines through which all forms of information flow. Relationships among people appear closely connected to the information and may be influenced by the effectiveness of the communication channels. The strength of the relationships may contribute to an individual's perception of fairness, the level of trust and degree of trust building (or destruction), and the motivation of individuals and commitment of organizations. It is a complex, circulatory system with factors both influencing and being influenced by other factors. It is difficult to determine where it starts and where it ends, although it is clear when the system fails because conflict escalate and public decisions are derailed (i.e., by the author's definition of success both process and outcome dimensions were ineffective).

#### IV. WHAT DOES ALL THIS TELL US?

Additional lessons can be gleaned from this wide ranging body of literature on public perception and participation. First, a few studies have sought to identify specifically what led to public acceptance of unpopular facilities and less desirable land uses. For example, studies on the public's willingness to accept radioactive waste repositories or hazardous waste facilities have concluded that acceptance may depend upon:

- Reducing uncertainty
- Increasing trust
- Nature and extent of participation opportunities provided
- Knowledge of problem and alternatives
- Perception of credibility and competence of government agency
- Assessment of the technical data
- Burden sharing among communities, including those not hosting the facilities
- Fair decision-making process<sup>xvii</sup>

A comprehensive study of public participation programs concluded that successful (defined by desirable social goals) public participation processes depended upon:

- Tasks consistent with the capacity and expectations of the public and government
- Open, fair communication, emphasizing deliberation
- High quality, two-way communication among citizens, government and scientists
- Sufficient government resources (financial and staff time) to support the process<sup>xviii</sup>

Preliminary results from a study of watershed partnerships in California, Oregon and Washington found that there was multiple dimensions of success in partnerships, including: educational and outreach; capacity-building among stakeholders; reaching agreements; project and policy modifications; perceived impacts on the watershed; achievement of goals; and monitoring programs as a proxy for outcomes. Each type of success was associated with a different set of explanatory factors. Nonetheless, trust among stakeholders was the strongest and most consistent factor, followed by age of the partnership, i.e., experience working together.<sup>xix</sup>

A few of these studies were some of the first attempts to identify generalizable findings by examining large samples. While they were broad, they could not go into the depth that smaller case studies accomplished and at times they had to consolidate many factors into larger macro-variables to demonstrate statistical significance. Therefore, it is best to interpret these studies in conjunction with the wider literature. The purpose of the literature review is to contribute to our overall understanding of the factors at play in shaping perception and the nature of public participation.

#### NEXT STEPS

The literature review was the first step in a sequence of events to bring multiple disciplinary and stakeholder perspectives together to clarify the nature, extent, and performance of key factors in water reuse public perception and participation. The next steps include:

- Case summaries from communities that have initiated water reuse projects
- White papers from a panel of experts on public perception and participation
- Symposium in August 2001 to bring together diverse social scientist and water reuse stakeholders for structured, facilitated dialogue
- Framework document that summarizes the entire project, including the literature review, case studies, white papers, and symposium. It will bridge disciplinary and stakeholder perspectives and supplies practical, effective guidance and tools for water resource professionals.

For more information about the *Framework for Public Perception and Participation in Water Reuse Initiatives* project contact the Principal Investigator at RESOLVE, Troy Hartley, Ph.D. (202-944-2300) or the Project Manager at the Water Environment Research Foundation, Bonnie Bailey (703-684-2470).

## ATTACHMENT 1

### WHAT IS BEHIND THESE FIVE THEMES? THE DEVIL IS IN THE DETAILS.

The five overarching themes – Information & Context, Communication & Dialogue, Trust & Trust-Building, Fairness, and Motivation & Commitment – reflect clusters of more specific and narrow factors. Each factor seems to contribute to how the theme is expressed in a given case. This section describes the twenty-three factors in greater detail. For our purposes, a factor is any characteristic, phenomenon, or fact that influences in some way the perception held by individuals or the nature of the public participation experience.

For ease of reporting and clarity, the key factors in public perception and participation identified from the literature review are presented below under three general categories: 1) Individual; 2) Decision Context; and 3) Institutional and Societal Context. Individual-level factors relate to the individuals participating directly or indirectly in a public decision making effort (e.g., demographics, knowledge and awareness, motivation). Decision context factors refer to the features of the particular public issue and the mechanisms for public decision-making (e.g., nature of the information available and needed, quality of the dialogue). Finally, institutional and societal factors reflect the broader landscape within which individuals act and decision-making processes are undertaken (e.g., institutions and decision-making authority, organizational culture).

The categories and factors identified here are not completely distinct from one another; rather factors overlap. Factors vary in scale, with a few applying to narrow components of perception and participation (e.g., specific psychological processes) and others to broader elements (e.g., trust). Relative weight and significance for factors are not given, in part because the relationships among factors are not well understood, nor do analytical methods or theoretical frameworks exist to measure factors in relationship to one another. Furthermore, factors likely interact or produce cyclical relationships that make causality difficult to verify. For example, while an individual's attitudes and communicative skills contribute to trust in government officials, technologies and management systems, trust also shapes attitudes and how one chooses to communicate. The reciprocal, feedback impacts of factors on one another produces a chicken and egg type dilemma.

Attachment 1 discusses each factor in more detail; see Table 1 on the following page for a summary of the twenty-three factors. Below is a discussion of the Individual, Decision Context, and Institutional and Societal Level factor categories. Following the description of each factor is a list of literature sources covering the information presented in the description and cross-referenced to the overall reference list in Attachment 2.

**Table 1: Overview of Public Perception & Participation Factors from a Social Science Literature Review**

| CATEGORY 1:<br>INDIVIDUAL LEVEL FACTORS   | CATEGORY 2:<br>DECISION CONTEXT FACTORS  | CATEGORY 3:<br>INSTITUTIONAL & SOCIETAL FACTORS  |
|---|--|--|
| <ul style="list-style-type: none"> <li>• Attitudes</li> <li>• Commitment &amp; Motivation</li> <li>• Communicative Skills</li> <li>• Demographics</li> <li>• Interests, Concerns, &amp; Values</li> <li>• Knowledge &amp; Awareness</li> <li>• Learning Abilities</li> <li>• Personal Behavior</li> <li>• Power</li> <li>• Psychological Processes</li> <li>• Risk Perception</li> <li>• Trust</li> </ul> | <ul style="list-style-type: none"> <li>• Complex Information</li> <li>• Dialogue Quality</li> <li>• Empowerment</li> <li>• Fairness</li> <li>• Leadership</li> <li>• Process Features</li> <li>• Representation</li> </ul> | <ul style="list-style-type: none"> <li>• Institutional Authority</li> <li>• Organizational &amp; Professional Cultures</li> <li>• Organizational Commitment</li> <li>• Social Capital</li> </ul> |



## CATEGORY 1: INDIVIDUAL LEVEL FACTORS

Below is a discussion of the individual level factors that the literature identifies as potentially influencing how people think and feel and the nature of public participation.

**Attitudes.** A set of broad psychological perspectives may contribute to how individuals perceive information, the issues and solutions they believe are relevant, and their roles and responsibilities in decision-making. All individuals, including citizens, elected officials, government officials, interest group representatives, journalists, businesspeople, and others concerned with water reuse are influenced by their attitudes. Attitudes are judgements about or preferences for or against an object, idea, person, institution, or other physical and psychological object.

Attitudes are fairly strongly held, although they can be changed. The strength of an attitude can be measured or indicated by the information the attitude is based upon, the degree of elaboration of the argument in support of the attitude, and its stability and certainty among those holding the attitude. Many factors may contribute to shaping attitudes, including:

- Expertise or level of familiarity with particular issues
- Demographic factors (e.g., race, ethnicity, age, gender, class, ideology, education)
- Social community and natural environment
- Communicative style

Experts seem to view things differently than lay people, regardless of educational level – everyone is an expert in something, having a more detailed knowledge of their area of expertise and experience than others. This is discussed in more detail below in the risk perception section.

Cultural background, for example, may have an impact on how someone frames a problem and whether they view government or experts as the ones responsible for solving the problem. A person's disciplinary training may contribute to their perception of what information and solution options are relevant, and the legitimacy of other's concerns. The social community and natural environment in which someone is raised and/or is living may shape their sense of identity and their perceived role in society. Attitudes may be influenced by communicative style; for example, re-framing is a dispute resolution strategy that seeks to change language and the perception of issues. Changing the frame from "resolving disputes" to "finding constructive improvements in the status quo" may contribute to altering parties' attitudes and perspectives from strongly defending their positions to examining the complexity of an issue and seeking alternatives.

In turn, attitudes may influence the atmosphere of the communication and the quality of the dialogue in the decision-making process. Attitudes may influence how people view decision-makers. Furthermore, these psychological factors may contribute to the most effective learning styles of individuals, (e.g., Native American communities and the role of stories in learning).

Like almost all of the factors identified in the literature, attitudes may exhibit the feedback affects of higher-order factors discussed above. For example, a study concluded that when trust is lacking, if one party frames an issue differently than another, then the second party may



attribute the difference to a hidden agenda, narrow self-interests, or moral lapses. Furthermore, if government officials use language and information perceived to be unrelated to frames adopted by the community, the government officials may be judged by the community to be unresponsive and this may undermine trust.

Literature sources: B4; B7; B8; J1; J15; J18; J29; J31; J32; J40; R1; R2; C1; C3.

***Commitment & Motivation.*** Commitment is the willingness and responsiveness to engage in the public decision-making process. Motivation refers to the reasons why people decide to engage and remain engaged in the public issue. The literature identifies a wide range of self-interests and common-interests that motivate participation in public decision-making, including:

- Personal enjoyment, satisfaction, and fun from engagement
- Perception of fairness
- Suspicion of others' interests as opposing one's own interests
- Sense of importance of tasks and impact on community
- Hope for the future and optimism that a good solution can be found
- Framing problems as opportunities

Multiple motives appear to be the most consistent conclusion in the literature. In other words, people may need more than one motive or incentive to act.

Commitment was shown to be particularly important for government officials. Agencies may undermine participation programs if it is not committed to them, engaging in good faith with the intent to follow-through on the outcomes of discussions. Depending upon the nature of the public participation program and the discussions with the public, commitment may require considerable flexibility and willingness to move forward under uncertainty about what comes next in the decision-making process. In highly participatory public discussions, commitment may also require overcoming significant challenges and barriers, e.g., historical relationships and legislative or regulatory requirements.

There is disagreement in the literature over whether common interests emerge from more participatory public deliberations. In other words, some argue that the act of participating in deliberative processes produces more common interest among the participants. Others disagree, believing self-interest remains dominant. Both seem to agree that additional common interests are identified, however they disagree how significant an impact those common interests have on the group.

Literature sources: B1; B4; B6; B7; J4; J7; J10; J13; J20; J21; J22; J23; J25; J26; J29; J30; J32; J34; J42; J44; R1; R7; N1; N2.

***Communicative Skills.*** Communicative skills refer to an individual's abilities to articulate, listen, clarify, reflect upon, and respond to a wide range of types of information (e.g., technical, scientific, values, process, group agreements, legal, etc.). Highly constructive communicators demonstrate many skills, including:

- Listening

- Seeking clarification
- Providing feedback
- Modeling communicative behaviors

Ideas are more effectively communicated by increasing their clarity and making them coherent, increasing its salience -- i.e., relevant to the listener's experiences and knowledge structure. For example, images and simulations, particularly those that include readily identified local landmarks, can be very effective at communicating the outcome of design alternatives. Simple mechanisms of organizing written materials advance understanding by presenting information in way consistent with the configuration of knowledge in the brain, e.g.:

- Overviews for each section
- Headings to break sections of 3-6 paragraphs
- Headings stated as questions and distinguished by a change in print style
- Technical information explained in text, not a glossary
- Bullets to convey technical specifications rather than in the body of text

Communicative skills may interact closely with the type of information being discussed (e.g., the degree of complexity and uncertainty) and the relevance of the information to the problem at hand. In addition, effective communicators model behavior, e.g., an emphasis on deliberation rather than coercion. Furthermore, participants may assess speakers based upon:

- Sincerity and honesty of speaker
- Legitimacy and credibility of speaker
- Thoroughness of information, without use of jargon and technical language
- Factual accuracy of information.

The importance of communicative systems and the act of communicating are themes that cross the categories of factors. Effective communication may play a crucial role in public perception and participation at all levels.

Literature sources: B6; J7; J22; R5; R7

**Demographics.** A wide range of demographic factors may influence certain perceptions and behaviors, in part because they reflect deeper psychological and social belief systems. Relevant demographic factors from the literature include:

- Age
- Income
- **Culture or ethnicity**
- Education
- Gender
- Ideology (i.e., political party, interest group affiliation)
- Length of residency
- **Race**

Culture, ethnicity, and race seem to have a more powerful influence than other demographic factors. Communication is filtered through belief and value systems, and cultural, ethnic, and racial experiences and norms may contribute to the structure and content of the belief and value systems. In certain cases (e.g., low-income, African American and Native American) the belief and values systems may lead to a higher degree of mistrust and suspicion in government. Length of residency, as a person interacts daily with the natural and social features of their community, has been linked to a person's beliefs and values system through establishing their sense of place and identity. Thus, a perceived risk may be viewed as more threatening to a long-time resident in the water reuse context, although other studies in different context have suggested the opposite.

In general, demographic factors may influence:

- Perception toward water reuse, hazards, and other scientific and technical issues
- Commitment and willingness to participate (including likelihood of contacting political representatives)
- Interests and values
- Trust
- Process and outcome expectations
- Behavioral norms

However, there appears to be important modifying effects as demographic factors interact with contextual factors. For example, while surveys in California and Colorado have shown older women to be less supportive of potable water reuse and hazardous waste siting in part because of perceived public health concerns and the general interpretation that women are more risk averse than men, a study in risk perception raises the possibility of an important exception. In a New Jersey study where communities were already stressed with multiple hazards (e.g., landfills, hazardous waste sites, chemical and industrial facilities, airports, blighted buildings, crime, etc.) both men and women respond similarly to perceived risks.<sup>xx</sup> Furthermore, another study from the risk perception literature suggested that *together* age, education, gender, societal risk aversion, personal risk aversion, perceived appropriateness of actions, perceived detail of action, and technical details of action accounted for a relatively small percentage of variation in perceived risk and a smaller percentage of variance in behavioral intentions.<sup>xxi</sup> In other words, while these demographic factors may allude to whether or not someone would perceive risks from a hazardous facilities and was willing to do something about it, many other factors not studied and not well understood may contribute significantly to those perceptions and behaviors. While research on demographics produce a cloudy picture, one things seems clear -- relying on demographics alone will not provide an adequate picture of public perception and participation.

Literature sources: B1; J6; J16; J35; J41; J42; R2; R8; C1

***Interests, Concerns, & Values.*** Individual's interests, concerns and the expression of values relate to a specific context. Interests and concerns are the individuals' articulated reasons for believing or acting. They may include a set of desires, needs, and expectations that exist in a particular decision context. Values are deeper, core principles, desires, and expectations that are often reflected in the interests and concerns expressed by people. Consequently, differences over

values are much more difficult to overcome than differences in interests or concerns. In fact, the negotiation research has shown benefits from re-framing disputes and conflicts from differences in concrete positions and values to a discussion over each parties' interests and concerns. While the underlying value differences may not be resolved, both parties' interests and concerns sometimes can be adequately addressed in "win-win" solutions that permit constructive improvements in a status quo.

Research within a water reuse context has identified several specific public interests, concerns and values. The following were discussed in the introductory section of this literature summary; however, they included:

- Public health and safety concerns
- Cost, capability and reliability of treatment and distribution systems concerns
- Water conservation and environmental protection values
- Water supply independence interests

In general, interests, concerns, and values have been shown to be shaped by many factors, including demographic characteristics, and knowledge and awareness levels. Knowledge and awareness includes recognition of one's interests, including economic and other value interests, awareness of risks, and other context-specific impacts on a person's values and interests. Interest, concerns, and values can vary by scale. For example, if an individual represents a local interest group, their interests, concerns, and values may differ from the same interest group's regional, state, or national representative.

While interests, concerns, and the expression of values are issue-specific, there are a few broader values that have been observed across cases, e.g.:

- Democratic values
- Justice

Some scholars argue that the public has certain democratic values. Many also believe that access to clean water is a fundamental right. Further, they believe the public holds an expectation that they should serve a role in decision-making and be kept informed of issues. When that role is not provided, and particularly if the opportunity is taken away without their knowledge and consent – and they find out – then significant suspicion and mistrust may be generated. Likewise, there is an expectation for justice. These democracy scholars believe the public's interest is in a fair decision-making process, equity in the distribution of the outcome (both burdens and benefits), and a non-coercive approach by the more powerful participants.

Fairness and procedural justice has received attention in the literature, and in particular, research has considered what participants' perceive as fair in a public decision-making process on controversial environmental and natural resource issues. A discussion of fairness exists below in the Decision Context Level Factors, since it is a value and interest particular to the decision-making process.

Literature sources: B3; J3; J21; J23; J24; J31; J38; J41; J42; R1; R2; R4; R7; R8; C3; M2

**Knowledge & Awareness.** Knowledge and awareness relate to the understanding and application of information relevant to the particular decision at hand. Generally, the public is not scientifically trained and may have less of an understanding of specific scientific and technical issues under consideration in many complex public decisions. While education level attainment is one measure of knowledge and awareness, there are many types of relevant information, including technical and scientific information, decision-making procedures, community interests, values and dynamics, and the nature of the problem. Distinctions are made in the literature between generalized expert knowledge and site-specific local knowledge. Both can have relevance and importance to decision-making; a challenge for decision-making is to effective information sharing and communication between those that possess expert knowledge and those versed in local knowledge.

In one study, a distinction was made between knowledge (i.e., knowing something) and creativity (i.e. using what one knows). There may be an application dimension to knowledge and awareness that is important in public decision-making.

The research on diffusion of suggests that there will be less public support for an innovation when there is uncertainty in the scientific community and competing scientific views expressed in the media and in public dialogue.

The psychology literature has identified important distinctions between knowledge and behavior. In fact, there is little support for the notion that educating the public, increasing their awareness of relevant issues, and adjusting their attitude or values toward the issue will result in the intended behavior. Rather, individuals need knowledge *and* intent before they will act. Intent is an attitude and motivation related to a specific behavior. In the suggested causal link between knowledge and behavior, intent is an intermediary factor and is controlled in part by a range of factors:

- Motivation
- Interests and concerns
- Convenience of the desired behavior
- Perception

Awareness of water reuse in areas of the country where reuse initiatives exist is fairly low, often well less than half of a surveyed population sample. In one survey, short explanations of the water reuse process increased support for indirect potable reuse, although it also intensified the opinions of those opposing it. Public opinion surveys over the past three decades have found the respondents with higher levels of educational attainment more supportive of the indirect potable reuse idea than others. However, when examining opinions surrounding specific, real-life cases of reuse in a respondent's community rather than the general concepts, support wanes among the highly educated. This is consistent with the literature on the NIMBY (Not In My Back Yard) phenomenon in siting waste facilities and other undesirable land uses in a community. In NIMBY cases, opponents have been found to be highly educated on the specifics of the technologies and the science involved in proposed uses.

Literature sources: B1; B2; B6; J4; J5; J18; J23; J26; J29; J43; J44; R1; R2; R5; R7; R8; R8; C3; M2

**Learning Abilities.** Learning is closely related to knowledge and awareness, since it is the process of converting information to knowledge and awareness. While learning styles may be a basic, first-order factor, there are more impacts on public perception and participation from the learning factor than absorbing information. On the basic level, every individual has his or her own optimal learning styles. Different cultural backgrounds may predict individual learning styles (e.g., Native American communities often employ stories as learning techniques). Consequently, processes that employ multiple techniques of communicating and presenting ideas can be more effective at producing a knowledgeable public and participants.

Furthermore, people are most effective learners when information is explained in a holistic and systematic manner, which is consistent with intuitive perspectives. Systems thinking considers the interrelatedness of forces and elements, viewing them as part of a common process. People are more effective learners if they are permitted to guide and influence the types of information to be learned. For example, people may be more motivated learners when they have a role in identifying the information and knowledge needed to make a decision. This takes time and requires patience.

In addition, learning may have broader impacts on issues of public perception and participation, including links to:

- Motivation
- Mutual understanding, respect and social capital
- Coping

Learning is linked to motivation, since knowledge and awareness can increase public interest and involvement. In one study, sharing information was found to be motivational. In addition, based upon survey results in California, many people appear to want to learn and have expressed an interest in learning about water reuse and participating in the decisions about water reuse. Many dispute resolution and sociology scholars believe a group of diverse stakeholders learning together may build mutual understanding and social capital (i.e., the societal norms, networks, and social trust that permit coordinated action). While group learning efforts have built the norms, networks and trust of social capital, there is disagreement whether it fosters a group identity with common interests. Finally, confidence in one's ability to learn may be important when tackling unfamiliar, complex information. In other words, promoting learning and an individual's experience with learning complex information may help individuals cope.

Literature sources: B2; B6; B7; J7; J8; J10; J23; J29; J31; J35; J39; J44; R1; R5; R7

**Personal Behavior.** An individual's behavioral patterns in public interactions either promote or interfere with several civic values identified by normative democracy theories. In particular, behavioral factors that shape public perception and participation include:

- Mutual respect, including respecting others individually and their constraints
- Honesty
- Constructive interaction and personal behavior

- Fear of trying or engaging in public dialogue
- Ability to balance multiple roles in public dialogue

One study found a government official, who was perceived by the public as more personable than his predecessor, far better able to serve multiple roles as a regulator, educator, and innovator than his predecessor. Other research found citizens wanting constructive personal interactions in public participation processes. In the end, behavior does matter.

Literature sources: B6; J29; J34; J38; R5; C6

**Power.** Power is a broad factor that includes many elements that supply an individual with control and influence. It can be derived from many sources, including:

- Financial resources
- Human resources
- Decision-making authority
- Coalition building and maintenance
- Technical and scientific expertise and/or access to technical and scientific assistance

Research has shown that financial resources and access to technical assistance alone do not make citizen participation effective. In addition, the capacity to build coalitions that can support positions is needed. In forms of participation that involve negotiation among stakeholders, there is a need for on-going communication with constituencies of representatives. This ensures that the constituency groups support the agreements negotiated by their representatives.

Research on technical assistance for community groups has only begun to illuminate what technical assistance can and cannot accomplish. For example, technical assistance to organized citizen advisory groups may:

- Promote monitoring, environmental reviews and analyses
- Contribute to environmental improvements
- Improve the quality of decisions

Technical assistance may not:

- Promote citizens' acceptance of a technical decision or siting location
- Promote political consensus
- Bolster citizens' clout in decision-making

Power is not merely an inherent social characteristic, it is also defined by its use. In other words, how someone applies the power that they have may make a difference in public perception and participation. This is important in part because power inequities remain and can emerge in any public participation process. In many participatory processes, administrators have been found to be most successful when they serve multiple roles, balancing their authority and power as stakeholders, information sources, and interpreters of legal requirements.

Authority-sharing may empower participants. However, recent research on public participation programs suggest that flexibility and genuine responsiveness of decision-makers to the concerns and issues raised by others may be more important than or as effective as formal power-sharing arrangements. In fact, the act of participation may generate a sense that government is more responsive and listens. In other words, in some cases of successful public participation, government may maintain authority while sharing power.

Literature sources: B1; B6; J5; J6; J8; J11; J21; J22; J26; J41; J44; R1; R7; C6; P1.

***Psychological Processes.*** Psychological processes are patterns in human's cognitive processing. Specific processes that impact public decision-making situations include:

- Jumping to conclusions
- Bias toward the familiar
- Limited attention capacity
- First impressions establish the frame of mind
- Coping

People are quick to jump to conclusions and apply stereotypes. Jumping to conclusions is predicting outcomes based upon prior knowledge and experience. It provides greater predictability and makes it easier to function, particularly under conditions of uncertainty and/or complexity. For example, negative relationships between parties are quite durable and familiar, and parties will have selective perceptions of each others' actions which reinforce negative impressions of one another.

Similarly, people have a strong bias toward the familiar and will distort information that runs counter to their sense of the familiar. People will look at a new situation or problem, quickly label it as similar or the same as a previously solved problem, and then apply the solution to the earlier problem in the new context. The bias is so strong that if information in the new situation contradicts someone's perception of the context as familiar, people will exclude or ignore the contradictory information and not perceive the competing facts. Strongly held, familiar ways of doing things or views of the world are hard to break.

People's attention capacity is more limited than the informational resources available for decision-making. People will cognitively fatigue if managing too much information, uncertainty, or unfamiliar information. When fatigued the biases are stronger and the individual's learning and cognitive effectiveness is inhibited. Cognitive restoration will occur with time, a break, and other restorative activities.

The initial representation of a problem, or framing of the issue, is critical to how the psychological biases will function. First impressions do matter, in part because the initial representation triggers whether and how the psychological processes function.

A narrow psychological factor, coping, was identified as potentially important in the public policy and administration fields for its impact on successful public deliberation among multiple participants with diverse backgrounds and interests. Coping is a stable pattern of cognition and behavior that helps people function in the face of uncertainty, confusion, discomfort, and other



sources of stress. While psychologists have studied coping for years, they have not often examined it in an environmental or public decision-making context. A study discovered that government officials' patience can be strained by citizens and political activists. Likewise, citizens and community leaders can also exhibit patience and have their patience strained during their interactions within government decision-making processes. The need to cope may arise from many characteristics of public participation programs and interactions between the general public and highly technical and scientific experts. In particular frustration may arise from the:

- Lengthy, exhausting participation processes
- Behavioral challenges
- Hard ball negotiating tactics and strategic behavior
- Conflicts
- Misunderstandings and miscommunication

Coping lessens the consequences of these frustrations. Coping strategies that have been seen in some cases and may be helpful include:

- Versatility
- Patience
- Non-Defensiveness (including a sense of humor)

Other types of factors, such as motivation and learning, have been identified as possibly serving coping functions as well.

Literature sources: B6; B7; J1; J10; J28; J31; J34; J5; R5

**Risk Perception** Risk perception has been studied predominantly within the context of hazards (e.g., hazardous waste management, nuclear waste management, occupational and environmental health). There is fairly strong support for the notion that laypersons and experts do not share the same perspective on the sources or severity of risks. The general public may be more concerned with the impacts and severity of an accident than the likelihood of an accident, whether the risk is voluntarily or involuntarily imposed upon them, and the difference of opinions that exists within the technical and scientific communities. The expert, on the other hand, appear to be less concerned with the severity of risk and the difference of opinions among scientists, attending more to the risk probabilities and relative risks.

Existing knowledge structures and experiences may be important in risk perception. People do not interpret risk information in isolation, but rather it seems to be filtered and interpreted in the context of their existing knowledge structure. So, ignoring what people already know and believe in risk communication may confuse people and fail to inform them.

While some demographic characteristics may correlate to certain risk perceptions (e.g., income levels are linked to willingness to accept greater occupational risks, females are generally more risk averse than males), recent studies have cast doubt on the power of these trends. In one study, multiple hazards in a neighborhood (e.g., blighted communities with several less desirable land uses, high crime, drugs, etc.) were found to eliminate some gender differences and was

hypothesized to alter variation in risk perception by age, education level, economic class, risk aversion, and other demographic factors.

There have been studies examining the role of the media in shaping risk perception. For example, a simulation study found that if the media frames issues with distrust and controversy, it seems to increase the perception of risk, even if the factual risk information is held constant.<sup>xxii</sup>

Literature sources: J12; J16; J17; J20; J23; J36; J38.

**Trust.** Trust emerges consistently in the literature as a key factor at play in perception and public participation. Trust is a large factor with many components that relates to the belief and confidence in the reliability, credibility, and fairness of people, organizations, decision-making processes, management systems, technologies, or other dimensions of decision-making and implementation. Trust affects individuals differently. In general, trust in government is in decline.

The public seems to trust and believe in science and technology for the most part, and they believe that adequate analysis is needed prior to making a decision. However, they may not always trust the sources of information, including government, industry, and the media. The public seems to trust university scientists and the medical community as more credible than other sources of information. Nonetheless, adherence to expert knowledge at the expense and disregard for local knowledge and concern seems to lead to mistrust and suspicion among local communities, particularly when the expert knowledge is inconsistent with local knowledge or perspectives. In such cases of inconsistency between expert and local knowledge, the motives of the expert or scientist may be called into question and their information may be discarded.

Public trust in government may be promoted when:

- Sustained dialogue exists
- Participants are able to secure independent expert advice
- Participants are free to question others
- Early involvement in a public decision
- All information readily available to all involved
- Logical and transparent process of selecting options
- Decision-makers take seriously or endorse the outcome of a public participation process
- Citizens have some level of control of the format of decisions (e.g., agenda, rules)

There is overlap in what builds and promotes trust and what people perceive as a fair process. Consequently, perception of fairness may relate closely to whether the participants and processes are viewed as trustworthy – acting fairly may contribute to making someone trustworthy.

Literature sources: B1; B4; B7; J20; J22; J23; J25; J34; J38; J44; R1; R8; M2.

CATEGORY 2: DECISION-MAKING & SITUATIONAL CONTEXT LEVEL FACTORS

Below is a discussion of the decision-making and situational context factors that the literature identifies as potentially influencing how people think and feel and the nature of public participation.

**Complex Information.** Information includes the diverse types of data, evidence, values and other information that relates to the individuals involved, specific problem and decision-making process at hand, and the broader institutions in which decisions are made and implemented. The information itself is communicated, learned, and generally managed in a manner shaped by the many factors discussed in this literature review.

Information has a complexity dimension that is comprised of many dimensions, including:

- Degree of scientific uncertainty
- Degree of scientific disagreement
- Unique perspectives on particular pieces of information held by specific groups (e.g., culture, race, ethnicity, expert, layperson)
- Characteristics that make information less universally understood and harder to communicate

The variety of information types calls for a variety of communicative, learning, and management strategies.

Recently concerns have been raised by members of the scientific community (e.g., U.S. EPA's Science Advisory Board) about whether participatory, stakeholder involvement mechanisms promote the level of dialogue necessary to ensure a high-quality, science-based decision. In other words, some are concerned that quality science is getting short-changed in favor of public values and uninformed decisions.

The U.S. EPA Science Advisory Board undertook an investigation of the issue and while the report is currently being finalized they likely will conclude that participatory processes that involve consultation and negotiation among involved stakeholders can result in high-quality, science-based decisions (see draft final report on Science Advisory Board's web site, [www.epa.gov/sab](http://www.epa.gov/sab)). This may be particularly true when decisions include:

- Careful and complete review and analysis of available scientific evidence
- State-of-the-art methods of assessing the available evidence
- Integration of scientific understanding, communities' interests and values, and government agency's interest in the broader public interest
- Stakeholders identify and agree on whom should be responsible for obtaining needed factual information

Literature sources: J4; J6; J7; J18; J19; J20; J26; J31; J32; J40; R1; R4; R7; R8; R9; C3; M1.

**Dialogue Quality.** The quality of a public dialogue is a set of characteristics that contribute to how constructive and productive discussions are among participants within the broader context of political society. It is closely related to process, information, and communication factors discussed elsewhere, although it may also integrate these ideas and shapes the relationships

among participants. There is a wide range of issues and types of information that must be effectively communicated, including:

- Technical and scientific information
- Legal and decision making procedures
- Interests and values
- Emerging agreements

According to normative communicative action theories and a few empirical studies, a communicative system that produces a high quality dialogue and promotes mutual understanding, trust, and social capital may include, at least:

- Face-to-face discussion
- Frequent interactions
- Simple, accurate and comprehensive explanations

The simple, accurate and comprehensive explanations appears to create rich imagery, i.e., a holistic cognitive image of a decision or outcome that has relevance to past experiences and existing knowledge.

Different kinds of information may often need different presentation and communication strategies because of the nature of the information and people's diverse learning styles. Communication systems that promote dialogue through multiple venues may be most effective at dealing with these differences. There are many approaches to managing and sharing information, including technical assistance, computer mapping and models, media, etc.

Different groups or types of participants (e.g., citizens, elected officials, and government managers and experts) sometimes communicate as if they speak different languages. In other words, each group may articulate their interests, issues, and problem solving perspectives in unique ways that may not be readily understood by members of the other participants groups. A study of hazardous waste regulation in several states that examined these communicative perspectives concluded that there are very few opportunities in society to promote dialogue across these groups speaking different "languages."

In public participation processes that depend upon representatives from interest groups, constituencies may fail to achieve the same level of mutual understanding, trust, and social capital that developed among the representatives. If this is true, it would place significant demands on the representative to consistently inform their own constituency and maintain their role as a legitimate voice for their constituency. The constituency may need to be sufficiently well informed and supportive of their representative to endorse the decision. (See the discussion on representation under Process Features above)

Finally, the public outreach, information and education approaches that utilize the media as a predominant communication channel may not always be conducive to promoting a high quality dialogue, since little discussion and multi-way communication can take place. There are some examples of media-sponsored series of public forums that promote interactive, sustained public

dialogue. Furthermore, while studies have found that the public does not generally trust the media as a source of accurate information, the media is the predominant information source for most of the public.

Literature sources: B2; B3; B7; J10; J17; J18; J19; J22; J27; J32; J36; J39; J43; J44; R1; R8; R9; R8; P1; M1; N3.

**Empowerment.** Empowerment is a higher order factor that is complex and has many components. It involves increasing a person's capacity to define, analyze, and act upon his or her own problems. It includes individuals who possess personal capacity to influence decisions, and decision-making process and organizations that build and promote personal capacity. It has emerged in social science theory over the past couple of decades to understand complex individual, community, and societal interactions among:

- Self-esteem
- Self-efficiency
- Knowledge and skills
- Political awareness
- Social participation
- Political participation
- Rights and responsibilities
- Access to psychological, social and material resources

Empowerment at the individual level has three dimensions: 1) intrapersonal – perceived personal capacity to influence social and political systems; 2) interactional – knowledge and skills to master social and political systems; and 3) behavioral – actions that influence social and political systems. There are four forms of empowerment, all of which are necessary for community empowerment, although different forms may be achieved without achieving others:

- Formal
- Intrapersonal
- Instrumental
- Substantive

Formal empowerment is created when institutions (governments, businesses) provide mechanisms for the public to influence decisions. Intrapersonal empowerment is a feeling of personal competence in a given situation. Instrumental empowerment refers to the individuals' actual capacity for participating in and influencing a decision-making process. Substantive empowerment refers to the ability to reach decisions that solve problems or produce desired outcomes and it requires that citizens and formal institutions work together to reach decisions.

In the environmental decision-making context, processes that are not empowering may present perceived threats to public health, disrupt existing social networks, and provide a loss of personal control. Dis-empowerment can be extremely frustrating and may lead to a "reactive" form of empowerment where groups mobilize their resources and skills to respond to the perceived threat. In fact, the mobilization and organization of a response can be empowering for the participants, supplying procedural, psychological, and substantive satisfaction. An increase in

empowerment without adjusting the administrative system (e.g., genuine commitment, power-sharing, real opportunity to shape outcome, new roles that change experts to partners) may also lead to frustration.

Literature sources: B1; B5; J5; J8; J9; J10; J22; J27; J33; R1

**Fairness.** While the concept of fairness has permeated throughout other discussions of factors, it is sufficiently important to warrant its own discussion here. Perception of fairness relates to both outcomes (i.e., fairly distributed burdens and benefits) and the process of making the decisions. Being treated fairly communicates respect, that one's views are important, and that the person is a valued member of the community. The public's perception of fairness often depends upon:

- Government's receptiveness to citizen's input
- Influence citizens have over decision-making process and outcome (procedural justice)
- Quality of government's knowledge and reasoning
- Burden sharing of outcome (distributive equity)
- Degree to which relationships improved during the process

Government's receptiveness and citizens' influence over decisions relate, at least in part, to the degree to which the public had control over the process and decision, including a role in problem identification and finding a solution. Control includes being given opportunities to present evidence and voice their opinions. In other words, citizens want to be heard in a meaningful way, know that their opinion matters, and be treated with respect. Furthermore, government responsiveness and citizen control relate, in part, to the consistency with which procedures are applied over time and across individuals, and the neutrality and trustworthiness of decision-makers. The quality of the knowledge and reasoning concerns the use of accurate information, the existence of opportunities to correct or modify decisions, and the representation of important perspectives in the process. In addition, the quality of the reasoning can include the maintenance of ethical standards throughout the decision-making process.

While the perception of procedural fairness may result in satisfaction with the decision process, fairness also relates to the decision outcome. In some cases, there seems to be an expectation that decisions will reflect a sharing across society of the negative, undesirable results. In a U.S.-Canadian comparative case study on hazardous waste siting, the researcher found that the burdens do not necessarily need to be equal; however, everyone seems to have to demonstrate they are doing their part and contributing to addressing the problem and issue. In this case, a community was willing to accept a hazardous waste landfill, in part because they saw that others outside of their community who benefit from the landfill were taking on some responsibility for overall hazardous waste management, e.g., hosting a transfer station, committing to concrete waste reduction measures.

However, a "frustration effect" has been observed in situations where participants perceived procedural fairness, but still were unsatisfied in the decision process and/or outcome. While the frustration effect is not well understood or studied, some scholars suggest it occurs when communities feel dis-empowered, particularly when two conditions may exist:

- negatively perceived outcome that is exacerbated by repeated disappointment with the decision-makers or broader social support for the perception that the outcome is unfair; *AND*
- decision-maker perceived as having a personal stake in the outcome, rather than being viewed as an impartial judge.

Frustration effects have not been seen in studies of legal settings, with perceived neutral judges making decisions.

Other research has concluded that risk management agencies often encounter this frustration effect because they frame the public issues (e.g., hazardous waste facility decisions) as factual arguments about risk probabilities and the extent of potential harm. Meanwhile, citizens and communities are framing the issues as more intense concerns about the institutional competencies to deal with risks, and/or different social or cultural values. Nonetheless, communities are forced to make their arguments about their value concerns on factual grounds of risk probabilities and human health risks, resulting in the perception that their views are not heard, not respected, and do not matter. For the government official, these arguments are perceived as irrational.

The perception of procedural fairness differs from citizen to citizen, although the relative importance of procedural fairness may relate to:

- Gender (males less concerned with fairness than females)
- Favorability of decision to one's interest
- Quality of outcome (e.g., science-based, perceived as well-reasoned)
- Level of conflict

Literature sources: J24; J25; J31; C6.

**Leadership.** A fairly specific, narrow set of factors relate to the role of a leader and/or policy professional in shaping the decision-making context, promoting an empowering atmosphere by setting the tone and expectations of the decision-making process, advancing innovation, and reaching consensus among diverse interest groups. Leaders may function as collaborative leaders, leveraging the skills of individual members of a group, facilitating group processes, and articulating agreements. They often serve roles that are viewed as legitimate by a large number of interest groups, and are not necessarily the participating individual with the most authority or power.

Policy professionals are staff and managers in agencies and implementing organizations across local, regional, state, and national levels who share a common interest in a particular policy approach or outcome. They form networks of like-minded officials and build the networks' capacity to promote a particular policy innovation, such as water reuse. Policy professionals can serve champion roles for an innovation.

In successful participatory processes, government agencies have demonstrated leadership in the following areas:

- Ensuring the quality of the communication
- Clarifying the scope of tasks
- Providing resources
- Ensuring the quality of the process
- Demonstrating a commitment to legitimate public involvement.

Literature sources: B3; J2; J5; J21; J22; R1.

**Process Features.** Process features are the specific design characteristics of the public participation program and activities. There are many options for decision-makers, each with strengths and weaknesses, and each producing different kinds of outcomes. What is considered a success in a public participation process can be defined in many ways. Some objectives relate to pragmatic, constructive progress on the decision at hand, while others involve broader societal goals related to democracy and individual rights. For example, the literature includes the following success measures:

- | <u>Outcome Success</u>  | <u>Process Success</u>           |
|---|----------------------------------|
| • Acceptable decision   | • Fairness                       |
| • Consensus, reduce conflict  | • Information exchange           |
| • Educated public   | • Access to information          |
| • Improved quality of decision  | • Procedures adhered to by group |
| • Incorporate public values   | • Group processes                |
| • Builds trust  | • Representation                 |
| • Build capacity of participants and the group to work together in the future |                                  |

However, many factors beyond the structure of the participation process account for the variation in public participation success seen in the literature. For example, studies on citizens' perceptions of a good, successful participation process have identified several elements:

- Access to process, fairness
- Power to influence the process and outcome, balanced use of power
- Access to necessary information
- Structural characteristics promote constructive interactions
- Facilitation of constructive personal behaviors
- Adequate analysis, information and reasoning; not political or power-driven reasoning
- Enabling of future processes through capacity-building, social capital

Many of these factors relate to the individual, contextual and institutional/societal factors discussed elsewhere in this literature review. So, the manner in which a process is designed can influence the formation of many of the characteristics and factors perceived as important by citizens, but process design alone may not necessarily ensure a successful public participation program.

Under certain circumstances that are not well understood, participation may:



- Defuse hostility
- Increase tolerance of differences and patience in participation
- Build trust and sense of responsiveness of government
- Increase mutual understanding
- Increase appreciation of the limits of government
- Increase confidence of citizens to participate
- Increase knowledge of political systems and case-specific information
- Increase motivation to participate

At the same time, it appears that participation may or may not:

- Overcome deep-rooted social and community problems (e.g., socioeconomic and racial biases)
- Result in representative participation – often the processes under-represent disadvantaged groups and favor advantaged groups within communities
- Smooth the path of implementation of decision
- Increase the number of participants (particularly in the case of more open, deliberative processes)

There is disagreement over whether participation builds a sense of community. Some argue that it does, while others have found little empirical support for it. There may exist agreement that a greater sense of community and common identity may emerge from public participation programs. However, the question of significance of that sense of community remains unresolved.

Public participation programs in the literature faced several distinct challenges, including but not limited to:

- Integrating science and technology adequately can be difficult
- Processes can be difficult to manage
- Stakeholders not well defined
- Processes can be intimidating to citizens
- Organizations may not be committed to it (e.g., inadequate funding and staffing)
- Social and political history may have hardened resistance

Which form of public participation selected (e.g., public meetings, workshops, advisory groups, citizen panels, deliberative polls, town hall meetings, charettes, etc.) may depend upon many issues, including the level and nature of the conflict or disagreements over the decision at hand. For example, some scholars suggest that if the disagreement is over facts, then education may be the primary objective and process design feature. If there are distinctly different social values lifestyles at play, then extensive information sharing and co-learning may prove helpful. In today's complex public decision-making context, often education, trust building, and value differences are only three of many issues that must be addressed in a public participation

program. Table 2 on the next page summarizes many of the characteristics of different forms of public participation, including factors that enhance or limit their effectiveness.

Overall, successful public participation programs are often expensive, slow and challenging. Several characteristics may enhance their likelihood of success, including:

- Staff and financial commitment
- Liaison to promote participation
- Neutral, competent facilitator
- Government commitment to follow recommendations
- Clarify public participation goals, since they are likely to vary
- Clarify roles of participants
- Collect feedback on public participation effort
- Design a process that can accommodate conflict and resolve disputes
- Avoid condescension toward any participant, no matter what their limitation

Recent studies have shown that a wide range of processes can be successful at achieving several public participation goals and objectives. So, it may not be the form of the process that is critical, but rather the dialogue itself. Processes must promote dialogue. Nevertheless, opportunities for face-to-face dialogue alone may not be sufficient; there may also be a need for government endorsement and commitment. The communication must be open, fair, and 2-way among the participants.

Literature sources: B1; B3; B6; J2; J4; J7; J8; J9; J11; J13; J14; J26; J28; J38; J40; R1; R3; R4; R8; B1; M1

**Table 2: Public Participation Design Options\***

| Types                   | Some of the Possible Process & Outcome Features  | Characteristics that <i>MAY</i> Limit Effectiveness  | Characteristics that <i>MAY</i> Enhance Effectiveness  |
|-------------------------|--|--|--|
| PUBLIC MEETINGS         | <ul style="list-style-type: none"> <li>• Focal point of opposition</li> <li>• Less likely to yield consensus</li> <li>• Can lead to subsequent institutional changes, organizational &amp; social learning</li> </ul>  | <ul style="list-style-type: none"> <li>• Inadequate Agency outreach</li> <li>• Limited provisions of technical information</li> <li>• Procedures that disempower citizens</li> <li>• Unwillingness to accommodate discussion of social issues</li> <li>• Timing of hearings: held late in decision-making process</li> </ul> | <ul style="list-style-type: none"> <li>• Holding meetings in combination with other forums</li> <li>• Provide significant technical assistance</li> <li>• Conduct vigorous outreach</li> <li>• Encourage participation of native peoples (and other under-represented groups)</li> <li>• Discuss social issues</li> <li>• Field Questions adequately.</li> </ul>   |
| WORKSHOPS               | <ul style="list-style-type: none"> <li>• Process perceived as fair</li> <li>• Improve understanding of issues</li> </ul>   | <ul style="list-style-type: none"> <li>• Inadequate outreach</li> <li>• Logistics: held at inconvenient time or location</li> </ul>  | <ul style="list-style-type: none"> <li>• Site-visits, experiential activities</li> <li>• Joint fact-finding among participants</li> <li>• Holistic, systems thinking approach to information sharing</li> <li>• Connections to existing knowledge structure and experiences</li> <li>• Multiple presentation techniques</li> </ul>   |
| CITIZEN ADVISORY GROUPS | <ul style="list-style-type: none"> <li>• The weaker the ties to the sponsoring Agency, the less controlling the Agency might be perceived, but the less likely they might be to deal with significant issues.</li> <li>• Scope may include influence on the development of risk assessments and constructive changes to facility siting plans.</li> <li>• May permit citizens monitor environmental reviews and analyses, and secure project improvements</li> <li>• May improve quality of decision</li> <li>• May not promote citizen acceptance or promote political consensus</li> </ul> | <ul style="list-style-type: none"> <li>• Agency overly controlling</li> <li>• Value judgements</li> <li>• Institutional or structural separation from planning process</li> </ul>  | <ul style="list-style-type: none"> <li>• Outreach to variety of channels for support of recommendations</li> <li>• Professional members (possibly).</li> <li>• Composition of committee (representative) and credibility of members; mechanisms of accountability to broader community</li> <li>• Utilize pre-existing citizen networks and infrastructure</li> <li>• Committed members</li> <li>• Input sought early in decision-making process</li> <li>• Agency has genuine interest in the input; independence of advisory group from sponsor</li> </ul> |

|  |  |  |  |
|--|--|--|--|
|  |  |  | <ul style="list-style-type: none"> <li>• Political commitment</li> <li>• Clear tasks, agendas, expectations and roles</li> <li>• Facilitators</li> <li>• Use of information sources beyond sponsor</li> <li>• Focus on issues of significance to participants</li> </ul> |
|--|--|--|--|

\* Every public participation process is unique and not all types of designs will have all of the features identified in Table 2. Furthermore, there is insufficient empirical work to be certain about the factors that limit or enhance effectiveness. Therefore it is important to view the public participation design features in Table 2 not as definitive and independent processes and factors, but rather as general rules of thumb to guide practitioners – if particular processes or efforts to enhance their effectiveness do not work, be willing and ready to try something else.

There are many variations on public participation mechanisms and new mechanisms that have not been well studied. For example,

- Citizen Panels (Juries) – assign randomly selected citizens to hear testimony from experts and make a decision.
- Deliberative Polls – randomly select a large sample, supply them with intensive background information and briefings over 2-3 day period, and then conduct a poll to obtain an “informed citizen’s” view.
- Town Hall Meetings – moderated large group meeting with citizens asking representatives or officials questions.
- Charrettes – use of rough models of a design or plan that small groups of citizens manipulate and discuss, arriving at an agreed upon design.

(see, Renn, Webler, and Wiedemann, 1995; Fishkin, 1995).

**Representation.** While representation can be considered one of the process features, the nature of representation has drawn considerable attention in the literature. It is controversial and reflects a debated area in the literature; therefore, it is discussed here as its own factor.

Some suggest that what constitutes a stakeholder is unclear and thus makes selection of representatives for participatory processes difficult. For example, since the concerns of the same interest group can vary along a local, regional, state and national scale, identifying the most appropriate representative can be difficult.

Others add that many of the highly participatory processes (e.g., stakeholder negotiations) do not permit large numbers of the community to participate; they must remain relatively small to effectively negotiate and reach agreements. This may violate democracy values and principles that seek to prevent control by the elite and promote active citizenry.

Still others argue that different parts of the decision-making process (e.g., problem definition, option generation, analysis, implementation) require different stakeholders and representatives.

Furthermore, representatives may need adequate skills to function and represent their constituency's interests effectively and to communicate and maintain accountability with the broader public. In some cases, research has found that citizens may lack skills in coalition building, constituency maintenance, negotiation, communication, collaborative multi-party problem-solving, and group processes. In one study, surveyed representatives of interest groups were mixed in their beliefs of whether citizens could be trusted to be valuable participants in participatory processes.

Socially and economically disenfranchised groups have historically been under-represented in many participatory processes. In part because of these implementation difficulties and the normative, democratic and justice concerns, some argue that interest group representative processes should be used sparingly in favor of randomly selected citizen panels. Citizens act as juries, hearing evidence from the interested parties, and making decisions. Some proponents of citizen panels argue that the random selection process to identify representatives for a citizen panel is preferable to interest group representatives because randomly selected citizens are uncommitted to a position, and can take advantage of new information and adjust their preferences accordingly. In addition, randomly selected citizens may be less concerned about the social status and power of each individual member outside of the panel, since they may be less likely to interact with the stakeholder representatives in the future.

Literature sources: B1; J8; J26; J27; J31; J32; J37; J43; J44; R1; R8; P1; M1; C4

### CATEGORY 3: INSTITUTIONAL & SOCIETAL CONTEXT FACTORS

Below is a discussion of the institutional and societal context factors that the literature identifies as potentially influencing how people think and feel and the nature of public participation.

***Institutional Authority.*** Overall, institutional and societal factors relate to the cultural and behavioral norms that shape the societal context in which individuals and decision-making processes take place. Decision-making authority is a basic component and it is established through law and regulation. Specifically, who is the ultimate decision-maker and what are the legal administrative procedural requirements for decision-making?

In fact, one of the challenges for decision-makers in contentious public policy decisions may be how to manage the authority in such a way that both retains the authority and shares the power, since promoting the trust-building, empowerment, and commitment discussed above depends in part on power-sharing through public involvement. Administrative procedural requirements may constrain or may provide opportunities for the deliberation and effective management of authority and power-sharing. There appears to be a communicative dimension to managing authority to retain it and share power at the same time. For example, a study found that clearly articulating 1) a genuine interest in implementing the outcome of a participatory process to the fullest extent possible, 2) a commitment to negotiate in good faith, *and* 3) that the government agency is the ultimate decision-maker seemed effective for government officials in a participatory public decision-making process. It appeared to retain and ratify the agency's authority, and it seemed to contribute to building trust, empowerment, and commitment needed to achieve an acceptable, implementable decision.

Literature sources: J9; J12; P1.

***Organizational & Professional Cultures.*** Organizations and disciplinary professions have their own culture (and sometimes more than one) -- i.e., a persistent, patterned way of thinking about tasks and relationships to other people within and outside of their organization and/or profession. Cultures are strongly held and resistant to change. Tasks and relationships outside the norms of an organizational or professional culture are often difficult to accomplish effectively or efficiently.

The norms and expectations determined by organizational and professional cultures contribute to many of the factors discussed above. For example, they may contribute to the specific assumptions and conclusions that experts and laypersons reach quickly as a result of the psychological processes, such as jumping to conclusions. Cultures may shape the nature and expectations of communication styles, and the distinct "languages" spoken by community members, elected officials, government bureaucrats, attorneys, scientific and technical experts, and other distinct organizational or professional groups.

Literature sources: J9; J12; P1.

***Organizational Commitment.*** While it has been mentioned within the context of other factors, an organizational commitment to public involvement seems to be important. In other words, genuine commitment that communicates good faith may be different than the perception of public involvement as "window dressing," as a citizen called it in one study. Organizational commitment, as distinct from an individual's commitment as a representative of an organization, suggests that there are broader components to demonstrating commitment, e.g., resources, staffing, consistent messages, and others.

Literature sources: R5

***Social Capital.*** Social capital is the societal norms, networks, and social trust that permit coordinated action. Social capital is the atmosphere and overall social environment in which decision-making takes place. Social capital has emerged as a social science concept in the theory-building around political systems and democracy, in particular.

Scholars suggest that social capital can support cooperation and civic engagement for mutual beneficial gains, or if built around different societal objectives (e.g., totalitarianism), it may support rigid, power-driven, coercive decision-making. Social capital is simultaneously a product of the individual interactions and decision-making processes that define the behavioral norms, social networks, levels of trust *and* a strong influencing factor on what behaviors, interactions, and relationships are possible in a society.

Social capital can reside in neighborhood strength, a sense of community and belonging, and the mutual respect people show toward one another. It appears that through deliberation and learning together social capital may be built to produce an atmosphere conducive to agreements. However, as has been suggested above, social capital may also exist that inhibits high quality public dialogues. This is particularly true in cases where the underlying norms, networks and social trust define an atmosphere of mistrust, distinct and opposing interests, and limited deliberation among citizens, interest group leaders, government and elected officials, businesspeople, and other participants. Since social capital is a relatively new theoretical concept, it is not clear how to modify it. It would appear to be resistant to change in a similar manner that cultures are resistant to change.

Literature sources: B1; B2; J7; J18; J40; R1; R7.

#### CONCLUSION

The twenty-three factors above reflect a summary of those variables discussed in a broad array of social science literature. The specific literature sources referenced at the end of each discussion of a factor are listed in Attachment 2.

## Attachment 2

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