



# Wellhead Protection

for safe drinking water in Indiana



## Forming the Wellhead Protection Planning Team

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Safe drinking water is vital to the health and prosperity of our communities. The best way to ensure a safe water supply, now and for the future, is to protect the area around wells that supply our drinking water. Indiana requires all community water suppliers using ground water to develop and implement a wellhead protection plan with members of the local community.

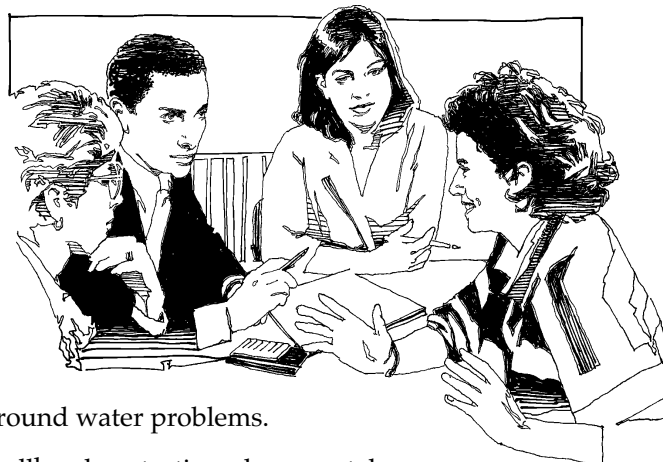
This publication provides assistance to operators of public water supply systems in forming the wellhead protection planning team in their community.

**Wellhead protection** is a community-based process focused on protecting ground water from potential contamination. "Potential" is the important word here, because Indiana's Wellhead Protection Rule (327 IAC 8-4.1) emphasizes prevention rather than remediation of ground water problems.

Developing an approvable wellhead protection plan may take a year or more. One of the first—and most important—steps of wellhead protection planning is forming the wellhead protection planning team. The team guides the development of a wellhead protection plan. An effective plan must include delineation of the wellhead protection area, identification of potential sources of contamination, planning for effective management of the area, contingency planning for water supply contamination, and public education.

### Wellhead Protection Planning Overview

- Local planning team
- Delineation of the wellhead protection area
- Identification of potential sources of contamination
- Management of the wellhead protection area
- Contingency plan
- Public participation, education, and outreach



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## Why Do You Need a Team?

- The team can build community involvement. Getting the community to buy into wellhead protection through participation is crucial if your protection plan is to succeed.
- Having a few more people makes the job go faster and more smoothly. The most frequently overlooked resources of a community are the energy, knowledge, and enthusiasm of its citizens.
- An active wellhead protection team that can identify possible contaminant sources and develop management strategies can save the system and the consumer money.
- Forming a local planning team is a required part of Indiana's Wellhead Protection Rule (327 IAC 8-4.1).

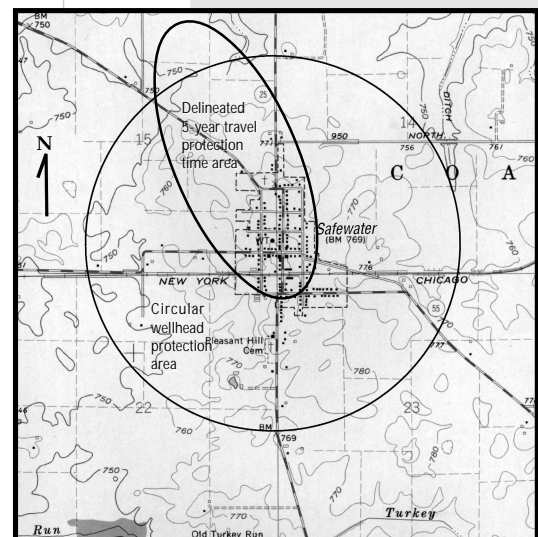
## What Is the Wellhead Protection Planning Team & What Does It Do?

The team is a group of interested citizens who will guide the process of developing the wellhead protection plan. The size of the team may vary, depending on the size of the community.

### *The Wellhead Protection Planning Process*

The team will undertake the wellhead protection planning process outlined below. Some of parts of this process require more time and effort than others.

- **Delineation** is the process of determining the size and shape of the area near the wellhead that should be managed. Systems pumping less than 100,000 gallons per day may qualify to use a 3000-foot radius for their wellhead protection area. Systems using more than 100,000 gallons of water per day need to hire a consultant to model the aquifer near the pumping well(s). The team's participation in this case involves choosing a consultant to model the aquifer, writing the contract, and overseeing the work that is done. Because some modeled delineations can take several months to complete, it is important to begin the delineation process early.
- **Contaminant Source Inventory** involves driving or walking through the wellhead protection area and searching existing files and databases of regulated materials to identify potential sources of contamination. A good contaminant source inventory may require the participation of many people, depending on the size of the area to be inventoried.
- **Management** involves getting cooperation from those who live or work in the wellhead protection area. Anyone using the land in the wellhead protection area should use best management practices to protect the ground water from the possibility of



*Examples of the two different forms of wellhead protection area delineation*

contamination. Try to have members of the local Planning Commission and representatives of business, industry, and farmers help with this section of the wellhead protection plan. Regulatory and zoning options for management may be appropriate in some cases; however, for many systems good management may ultimately depend on voluntary procedures and best management practices that are brought about through effective educational efforts.

- **Contingency Planning** determines the steps to take in the case of water supply contamination from chemical spills or leaks within the wellhead protection area. Contingency planning would benefit from the participation of someone from the fire department and/or the emergency management team.
- **Education** is closely linked with management, but should be directed at a wider audience. The better informed people are about their ground water and how it may be contaminated, the safer the water supply will remain. Education is an important aspect of all of the other parts of the wellhead protection plan and should be included in them.



### *Team Membership*

Everyone in the community relies on safe water in some way, so everyone has a stake in protecting their water supply. The more the community is involved, the more effective your management and education programs will be. Community leaders, concerned citizens, firefighters, farmers, emergency response personnel,

teachers, business owners—all should be involved in the process of planning wellhead protection. The team must have at least one member who is directly affected by development and implementation of the plan.

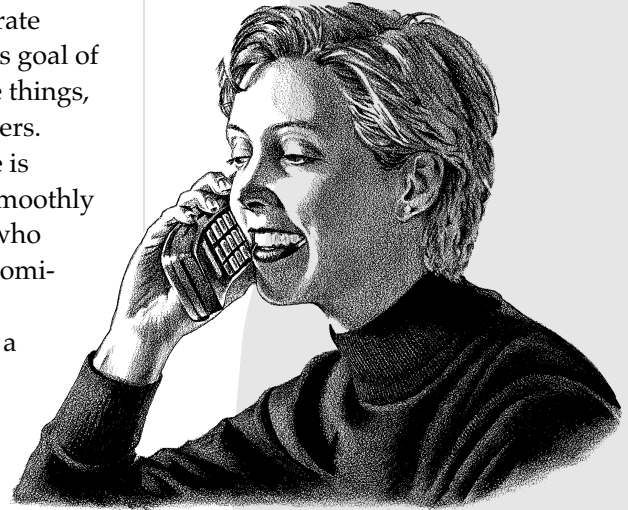
To generate awareness of and enthusiasm for the wellhead protection process, some type of community education should precede the announcement of the formation of a local planning team. This educational process might include presentations on wellhead protection given at local service clubs, the local Chamber of Commerce, senior citizens' groups, and youth organizations. The more publicity, the more potential team members you will reach.

Personal contact is the most effective method of recruiting partners from the community to serve on the wellhead protection planning team. Consider calling or sending personal letters to community leaders, concerned citizens, educators, firefighters, police, other emergency response personnel, local government and agency representatives, representatives of local business and industry, and

people who live or work near the community water supply wells. A personal visit or phone call to each person whom you want to have at the meeting is the best way to be sure that many of them come.

### ***Team Leadership***

A team needs a leader, a direction, and clearly defined steps that can be used to measure progress toward the goal. At least three separate leadership roles are important in leading the group towards its goal of protecting the water supply. One person can accomplish these things, but you might consider sharing these responsibilities with others. The first leadership role is that of meeting facilitator. Someone is needed to manage the meeting so that information is shared smoothly and with full public participation. This role requires a leader who can offer some structure to the meetings without seeming to dominate them. You may know several people capable of this. You may even choose to do it yourself. Potential resources include a local Purdue Extension Educator, someone from your local Soil and Water Conservation District, or a representative of your local Chamber of Commerce. There may also be other people in the community who are experienced meeting facilitators and who are willing to help.



The second leadership role involves overseeing and coordinating the various tasks involved with wellhead protection planning. This person needs to be a local champion, someone who can take an idea and run with it. You may be fortunate enough to find someone else who is willing to take the time to do this very important task. Remember that even with a volunteer leader, you, as the water supplier, must be prepared to share this leadership responsibility, because of your knowledge of the water supply system.

The third major leadership role is one of administration. This role requires a person who can keep track of many details, including: keeping records of meetings, notifying interested and willing volunteers, reserving rooms for meetings, sending out the public notices, making phone calls, and providing copies of the agenda. This particular role can be very time-consuming, and several people may want to rotate in and out of this task.

## **How Do You Conduct Wellhead Protection Planning Meetings?**

### ***The Initial Meeting***

You can use newspaper articles, television, and radio public service announcements to inform the public. Public notice of the initial meeting to form the wellhead protection team is required to be placed in the newspaper of largest general circulation at least 48 hours before the meeting. Be sure to include the purpose, time, and place of the initial

meeting, as well as a contact for more information, if it is needed. A sample of a public notice for the local newspaper is shown in Figure 1. The recommended size of this boxed notice is 3 newspaper columns wide and 3.75 inches high.

The initial meeting for the wellhead protection team should be held in a central location that is easy for everyone to find. The room should be well-lit and comfortable. Serving refreshments can help put people at ease.

The meeting should have a clearly stated agenda, and people should leave the meeting with the sense that they have accomplished something.

Before the meeting, designate someone as an official note-taker. That

person should keep records of all public notices, meeting agendas and minutes, and names of those who attend the meetings to document the planning process. Copies of these documents must be included in the final submission package of the wellhead protection plan. Have a sign-in sheet to pass around for everyone to sign.

Give all potential volunteers a handout outlining what their participation may involve. You may use the sample handout provided at the end of this publication. Another useful handout would be

WQ 24: "Wellhead Protection in Indiana," which provides an overview of wellhead protection planning in Indiana. (See "Useful Publications.")

Some communities have passed out questionnaires to identify special skills of community members that can be drawn upon to help with completing the wellhead protection plan. (A sample questionnaire is included at the end of this publication.) Consider tape recording the meeting so that the tape can be borrowed by those unable to attend the meeting, or used as an additional source for clarification of program minutes.

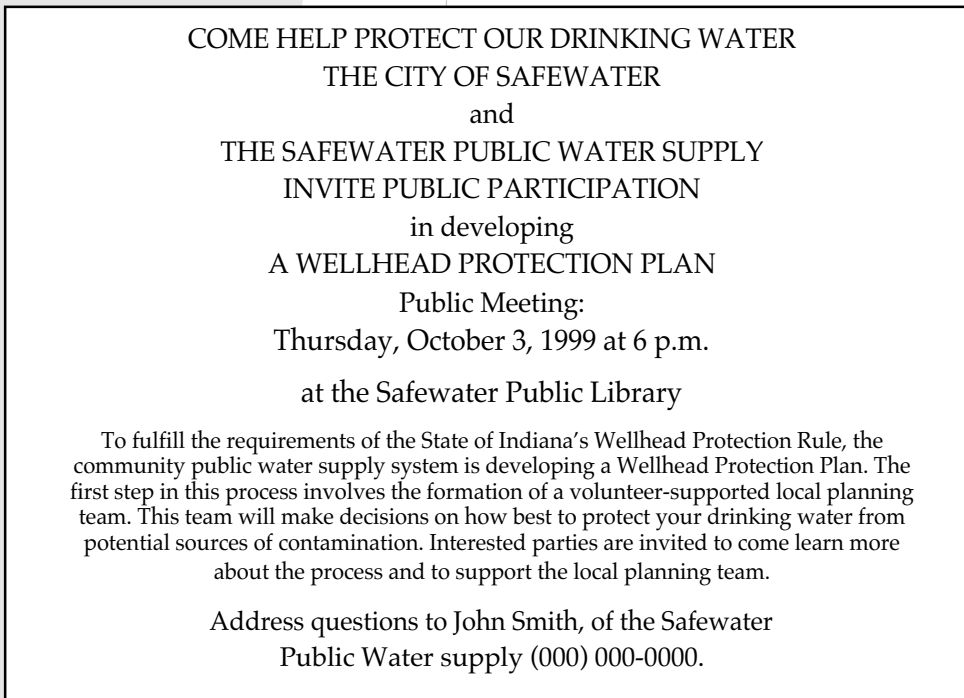


Figure 1. Sample public notice for your newspaper

## ***Suggested Agenda***

- A. Welcome:** *Introduce yourself, and tell everyone that you are glad they came. Briefly explain why the meeting was called and what you hope to accomplish. (You are going to begin the process of putting together a wellhead protection plan, and you need everyone's assistance for this very important process. You are looking for help.)*
- B. Introductions:** *If the group is not too large, have everyone introduce themselves and say a few words about their background and interest in the wellhead protection planning process.*
- C. Overview:** *Provide an overview of the wellhead protection process. You might consider asking a guest speaker to come from the Indiana Department of Environmental Management, Purdue Extension, a local college or university, another community that is further along toward completing their wellhead protection plan, the Indiana Water and Wastewater Association, or a consultant. (You can find contact information at the end of this publication.) Limit the presentation to 30-45 minutes, and focus on the broad ideas of wellhead protection. Your goal at this meeting is to raise awareness, not to create wellhead protection experts.*
- D. Questions:** *Ask the audience if they have questions. Make sure everyone who comes has the opportunity to participate and be heard.*
- E. Ask For Help:** *Ask the participants to consider volunteering for the wellhead protection team. The presentation should have briefly described each of the five major steps of wellhead protection planning. Let those willing to participate choose how they can help with the wellhead protection plan. Some people who attend the meeting may not wish to serve on the local planning team in an official way, but they may be willing to assist with specific tasks or to participate in a more limited manner (e.g., editing, compiling the parts of the final report, arranging meeting rooms, making coffee, etc.).*
- Welcome all participation. Encourage people to sign up for more than one task, because many tasks are sequential in nature and interrelated. The public water supply company should have at least one representative who participates in each of the five major tasks.*
- To get a wider range of participants, you might ask those in attendance to suggest other individuals who would be an asset to the planning team. You can contact them personally and invite them to attend the next planning meeting.*
- F. Concluding Statements:** *Review what was accomplished, thank everyone for participating, and set a time and place for the next meeting.*

## ***Welcome All Participation***

Remember, the least likely person may prove to be a valuable asset when she remembers that there was an old landfill behind the school. Or perhaps someone will remember a paint store that burned down near the wellhead long before anyone was aware of the dangers of paint residues to water supplies. These individuals can be very valuable in completing the contaminant source inventory.

### **Subcommittees**

Consider the possibility of forming separate subcommittees if enough people volunteer. Someone willing to develop and coordinate an education program involving a ground water fair; presentations at local schools; or Best Management Practice fliers for industry, agriculture, and residential areas may not want to help with the contaminant source inventory. Emergency response people may be willing to participate in contingency planning, management, or contaminant source inventory, but not in public education.

### **Subsequent Meetings**

The second meeting should focus on developing time lines and assigning specific tasks to be completed. Schedule further meetings of the wellhead protection planning team as they are needed.



If there are subcommittees, reports from each subcommittee should be made at each meeting. Good communication will speed the overall process and keep the community better informed.

Keep two copies of all meeting agendas, minutes, and names of those who attend the meeting, one to submit with your wellhead protection plan and one for your own records.

It is important to keep your team active and enthusiastic. Nothing is more distressing to people than thinking they have wasted their time. Thus, each meeting should include a review of past accomplishments, an agenda for the present meeting, and clearly stated goals for the future. People also need recognition and appreciation for a job well done. By making sure the team has a well-defined task and is appreciated, you can keep your team working enthusiastically.

### **What's Next?**

By forming the wellhead protection planning team, you have taken the first step toward protecting your drinking water supply. The team can begin working on the remaining steps of a wellhead protection plan. These steps include: delineation of the wellhead protection area, inventory of potential sources of contamination, management of the wellhead protection area, contingency planning, and public education and outreach. Wellhead protection planning is not intended to burden citizens with regulations, but to guide them through the process of collecting and organizing information to protect their drinking water from contamination.

## Useful Publications

The following Purdue Extension publications provide information about other aspects of the wellhead protection process.

- WQ-2, "What Is Groundwater?"
- WQ-24, "Wellhead Protection in Indiana"
- WQ-29, "A Shortcut to Wellhead Protection Delineation for Some Systems"
- WQ-30, "Choosing a Consultant to Delineate the Wellhead Protection Area"
- WQ-31, "Inventorying Potential Sources of Drinking Water Contamination"

To obtain these and other useful publications, contact your county Purdue Extension office, or call 1-888 EXT-INFO.

The USEPA has an informative publication, "Wellhead Protection, A Guide for Small Communities," EPA/625/R-93/002 available free by calling 1-800-490-9198.

## Indiana Information Contacts

- The Purdue Extension office in your county can provide you with information and resources on water quality protection. Look in the phone book under county government, or call 1-888 EXT-INFO.
- "Safe Water for the Future" is a Purdue Extension program that provides resources statewide on wellhead protection and watershed protection. Call 765-496-6331, or visit their Web site at <<http://www.ecn.purdue.edu/safewater>>.
- Indiana Department of Environmental Management, Ground Water Section, can provide information on Indiana's Wellhead Protection Rule and compliance. Call the Groundwater Section at 317-308-3321 or 800-451-6027, ext. 308-3321. Information is also available on the Web at <<http://www.ai.org/idem/owm/dwb>>.
- Indiana Water and Wastewater Association provides training and on-site assistance to water supply operators. They can be reached at 1-888-937-4992 or through the Web at <<http://www.iwwa.com>>.

- The Indiana "Rural" Water Association also provides education and assistance to water supply operators. They can be reached at 812-988-6631 or by Fax at 812-988-6961.

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On the following three pages you'll find a handout you can copy and distribute at your first wellhead protection planning meeting and a sample questionnaire you can copy and use to identify skills and interests of potential team members.



# The Wellhead Protection Local Planning Team—



## *What You Can Do to Help*

That old saying, “If you want it done right, do it yourself,” applies to protecting your community water supply, too. The best way to help protect your water supply is to do it yourself through local community involvement.

**Wellhead protection** is a community-based process that enables you to protect the ground water you, your family, and your neighbors drink. Wellhead protection is designed to protect the area nearest the drinking water supply wells from potential hazards. Contamination in this wellhead area could affect your water supply years into the future.

Because protecting this area is so important, Indiana requires all community water suppliers using ground water to develop and implement a wellhead protection plan with members of the local community. As a citizen of your local community, your role is to provide guidance for completion of the five steps in Phase I of a Wellhead Protection Plan.

### ***Phase I of a Wellhead Protection Plan***

- Local planning team
- Delineation of the wellhead protection area
- Identification of potential sources of contamination
- Management of the wellhead protection area
- Contingency plan
- Public participation, education, and outreach

### **Why Form a Team?**

- It’s a good way to build community involvement. Your community has the right and responsibility to decide how its drinking water supply should be managed and protected. By serving on the wellhead protection planning team, you can influence the critical decisions that must be made.
- Having people working together will make the job go faster and move smoothly. The most frequently overlooked resources a community has are the energy, knowledge, and enthusiasm of its citizens.
- An active wellhead protection team that identifies possible contaminant sources and develops management strategies will save the system—and the consumer—money.
- Forming a local planning team is a required part of Indiana’s Wellhead Protection Rule. Framers of the rule recognized the importance of local community involvement to the success of wellhead protection planning.

### **What Is a Wellhead Protection Planning Team?**

A wellhead protection planning team is a group of interested citizens who will guide the process of putting together the wellhead protection plan for their community. The size of the team may vary, depending on the community’s size. The team represents the community and should include at least one person who is directly affected by wellhead protection (i.e., someone who lives or works in the area). The

team should represent a cross-section of the community and include residents and representatives from local businesses, industry, and government.

## What Will the Team Do?

Over the next few years the team, in partnership with the water supplier, will complete the five basic steps of wellhead protection planning. As a working document, the wellhead protection plan the team puts together will need to be upgraded and amended over time. Something as important as protecting the water supply can't happen over night—and, to be effective in the future, it can't be a one-shot deal.

How often the team meets will vary depending on the team members and which step of the plan you are working on. Some of the parts require more time and effort than others. Meetings do not have to be on a fixed schedule. For example, you might not meet for several months while the delineation step is completed.

You might operate as one group or form subcommittees to divide up the work. You'll probably want to select one or more leaders (for example, Chair, Vice-Chair, Secretary). You may want to rotate tasks like note-taking and sending out agendas and minutes.

Here are the five basic steps of the wellhead protection planning process.

1. **Delineation** will determine the size and shape of the area near the wellhead that should be managed. Systems pumping less than 100,000 gallons per day may qualify to use a 3000-foot radius for their wellhead protection area. For systems using more than 100,000 gallons of water per day, the delineation involves choosing a consultant to model the aquifer using an appropriate analytical or numerical computer model. The process may also involve writing the contract and overseeing the work that's done. Because some modeled delineations can take several months to complete, it's important to begin the delineation process early.

2. **Contaminant Source Inventory** involves driving or walking through the area around the wellhead to identify and record the locations of potential sources of contamination and searching existing files and databases of regulated materials for potential sources of contamination. This step may require several people, depending on the size of the area to be inventoried.
3. **Management** involves getting cooperation from businesses and residents in the wellhead protection area to use best management practices to protect the ground water from future contamination. It would be good to have members of the local Planning Commission and representatives of business, industry, and farmers help with this section of the wellhead protection plan. There are regulatory and zoning options for management, but good management depends in large part on the voluntary procedures and best management practices used by willing partners in the wellhead protection effort.
4. **Contingency Planning** determines the steps to take in the case of water supply contamination from chemical spills or leaks within the wellhead protection area. Contingency planning would benefit from the participation of someone from the fire department and/or the emergency management team.
5. **Education** is closely linked with management, but should be directed at a wider audience. The better informed people are about their ground water and how it can be protected, the safer the water supply will remain.

## You Can Help Keep Your Drinking Water Safe

Forming a wellhead protection planning team is the first step toward protecting your drinking water supply. Wellhead protection planning isn't intended to burden you and your fellow citizens with regulations, but to guide you through the process of collecting and organizing the information you need to protect your drinking water from contamination. By participating in wellhead protection planning, you can help to ensure a safe drinking water supply for the future.

## Wellhead Protection Plan Questionnaire

*Thank you for your interest in Wellhead Protection Planning. Please provide the following information about yourself so that your skills and experience can be used in the best possible way to help us protect our drinking water.*

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Phone: (Home) \_\_\_\_\_ (Work) \_\_\_\_\_

Affiliation: \_\_\_\_\_

Occupation or Position: \_\_\_\_\_

Please list any activities, memberships, or previous occupations that will help you contribute ideas and knowledge to this committee. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If you know of someone you believe would be an asset to the committee and would be willing to work, please list his or her name and phone number below.

\_\_\_\_\_  
\_\_\_\_\_

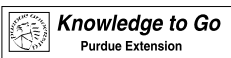
Is there a particular area of the plan with which you would prefer to be involved?

- |  |  |
|--|--|
| <input type="checkbox"/> Delineation of the wellhead protection area | <input type="checkbox"/> Identifying potential contaminant sources |
| <input type="checkbox"/> Management of the area                      | <input type="checkbox"/> Education                                 |
| <input type="checkbox"/> Contingency planning                        | Other _____  |
|  | _____  |

What times and days are best for you to attend meetings? \_\_\_\_\_

Do you have any suggestions or comments on the wellhead protection planning process in our community? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_



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