# Source Water Protection Planning

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#### Purpose of Training Session

## 01

WHAT IS REQUIRED BY THE REGULATION 02

WHAT YOU NEED TO DO TO HAVE AN EFFECTIVE PLAN 03

DEADLINES & FUTURE COMMITMENTS

#### Source Water Protection Defined

- Source Water Protection involves maintaining, safeguarding, and/or improving the quality of a water source (surface water or groundwater) used as a supply for drinking water
- Source Water Protection programs identify, prioritize, implement, & evaluate specific activities & management practices that will contribute toward achieving this goal



## Why Do We Need Source Water Protection Plans?

The Illinois Pollution Control Board says you do!

(35 Ill. Admin. Code 604.300)

The goal of all water supplies is to "Assure that all persons served by community public water supplies receive water which is safe in quality, clean, adequate in quantity of satisfactory mineral character for ordinary domestic consumption."

(35 Ill. Admin. Code 601.101)

Need to protect what you have such that your water supply continues take its raw water from the best available source that is economically reasonable & technically possible.

(35 Ill. Admin. Code 604.200)

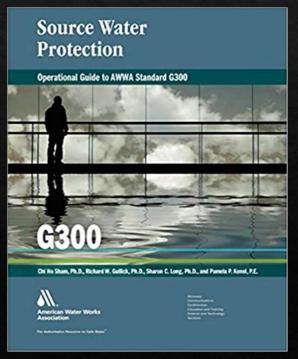
#### Source Water Protection is Part of a Multi-Barrier Approach

s	ource Water Protection
	Water Treatment System
Testing	
Secure Distribution	Safe, Clean Water

- ♦ Best Possible Source
  - ♦ Source Water Protection
    - ♦ Water Treatment
      - $\diamond$  Distribution
        - ♦ Monitoring
          - ♦ Emergency Response

## Where Did the IPCB Rule Come From?

- Patterned after AWWA Standard G300 six elements
  - ♦ Vision
    - $\diamond$  Characterization
      - ♦ Goals
        - ♦ Plan
          - $\diamond$  Implementation
            - $\diamond$  Evaluation



#### Who Needs a Source Water Protection Plan?



Each community water supply that treats surface or groundwater as a primary or emergency supply of water must develop a Source Water Protection Plan

(35 Ill. Admin. Code 604.305)

#### Source Water Protection Plan Minimum Elements

- Vision Statement
  - Source Water Assessment
    - Objectives
      - ♦ Action Plan

(35 Ill. Admin. Code 604.305)

#### Let's Break It Down



#### Vision Statement

- The community water supply's policy & commitment to protecting source water
- Explanation of the community water supply resources & barriers to protecting source water
- Names of the individuals who developed the vision statement



(35 Ill. Admin. Code 604.310)

#### Vision Statement Example

- The Source Water Protection Plan for Groton, CT contained both a Vision Statement and Mission Statement
  - Vision: To achieve long-term preservation of safe & sustainable drinking water supplies through proactive watershed protection in the Groton Utilities public water supply watershed
  - Mission: (1) To develop innovative & comprehensive approaches to protect the purity of drinking water through land & water management; (2) To strengthen & expand partnerships to balance the need for economic development & public health protection; and (3) Develop a plan established through the will of the individual communities

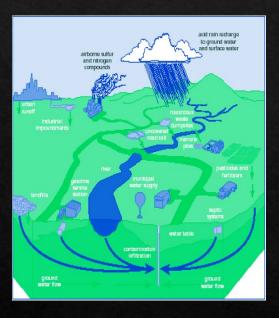
## Get Stakeholder Involvement

	NOTIFICATION	PARTICIPATION	ENGAGEMENT
GOOD	Consumer Confidence Report	Selective or Invitational	Advisory Role
BETTER	Newsletter / Newspaper	Solicit Interested Parties	Actively Solicit Input
BEST	Social Media	Open Meetings	Build / Reach Consensus

#### Define Stakeholder Roles

- Source Water Protection Plan vision
  Output
  Define each entity's area of responsibility/authority in relation to the Source Water Protection Plan vision
  - ♦ For example, are particular stakeholders capable of administering land use controls or regulating potential sources of contamination

## Source Water Assessment



- Statement of the importance of source water
- ♦ List of supplies that obtain water from this supply
- Scheme Delineation
- Report on the quality of source water & finished water
- ID of potential contamination sources
- Susceptibility analysis
- Explanation of efforts to protect source water

(35 Ill. Admin. Code 604.315(a))

#### Source Water Assessment Assistance

- ♦ Good news!
  - A community water supply may use a Source
     Water Assessment Program Fact Sheet prepared by 
     the Agency to fulfill the requirements of this
     Section
  - Upon request, the Agency will provide technical assistance to a community water supply in conducting the source water assessment



(35 Ill. Admin. Code 604.315(b) and (c))

#### Update Illinois EPA Information

- Develop a better Source Water Assessment
  - Update delineations of wellhead protection areas & watershed boundaries (new wells/intakes not included in current Assessments)
  - Update/validate potential sources, routes & problem sites identified in Illinois EPA information
  - ♦ Evaluate land use within watershed or wellhead protection areas
  - Evaluate how potential contaminants of concern relate to monitoring data collected by the water system

#### Source Water Protection Plan Objectives

- The Source Water Protection Plan must contain a list of the community water supply's objectives for protecting source water
  - These objectives can include meeting the requirements of any of the Sections in this Subpart, including developing a vision statement or performing a source water assessment
  - Objectives may also address the specific problems or issues identified in the source water assessment & should consider current & potential future issues

(35 Ill. Admin. Code 604.320)

#### Developing Plan Objectives

- Establish defensible protection areas
- ♦ Inventory, evaluate, & revise existing source water protection efforts
- Determine correct mixture of voluntary & regulatory protection programs
- Maintain stakeholder involvement & define responsibilities
- Sensure objectives can be measured/evaluated
- Document & monitor progress

#### Objectives Example

- The Source Water Protection Plan for the Schuylkill River incorporates the following seven major objectives (PWD 2006):
  - 1. Establish the Schuylkill Action Network as a permanent watershedwide organization charged with identifying problems & prioritizing projects & funding sources to bring about real improvement in the water quality throughout the Schuylkill River watershed
  - 2. Create a long-term, sustainable fund to support restoration, protection, & education projects in the Schuylkill River watershed

#### Objectives Example Continued

- 3. Increase awareness of the Schuylkill River watershed's regional importance as a drinking water source
- 4. Initiate changes in policies & decision-making that balance & integrate the priorities of both the Safe Drinking Water Act & Clean Water Act
- 5. Establish an Early Warning System as a regional information sharing resource & promote its capabilities for water quality monitoring & improving emergency communications
- 6. Reduce point source impacts to water quality
- 7. Reduce non-point source impacts to water quality

#### Action Plan

- Identify the actions needed to achieve the community water supply's objectives
- Must include the following:
  - Descriptions of all projects, programs, & activities developed to meet the objectives
  - Schedule for implementation & identify necessary resources
  - ♦ Potential problems & obstacles in implementing the plan

(35 Ill. Admin. Code 604.325)

#### Action Plan Considerations

#### LAND USE PLANNING Comprehensive Plan Natural Resource Element Other Resource Users SITE PLAN REVIEWS Apply BMPs to New Activities & Sites Land Use Changes – Ag to Industrial

INVENTORY/ INSPECTION Local Fire Department Local Emergency Planning Committee Local Zoning/Code Enforcement

#### EDUCATION

Local Schools Civic Groups Municipal & County Departments

AWARENESS Consumer Confidence Report Other Correspondence Social Media

CONTINGENCYY/ERP PLAN Early Warning Detection System Source Water Contamination Response Plan (AWIA)

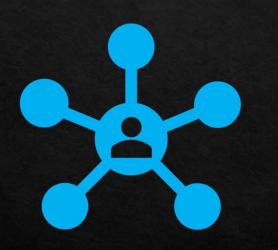
#### Sidebar on Contingency Plans/ERP/EOP

- ♦ The Illinois EPA <u>does not</u> want your ERP
  - Include a certification that you have a current ERP with your Source Water Protection Plan and indicate that it can be made available to the Agency at any time for review/comment



Illinois EPA cannot protect this information from FOIA

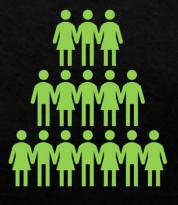
#### Plan Does Not Equal Implementation!



- Your Source Water Protection Plan describes what the stakeholders are going to do
- Implementation of the action plan of your Source Water Protection Plan will tell your consumers what stakeholders have done & are doing

#### Source Water Protection Plan Deadlines

- ♦ Community water supplies with:
  - Population > 50,000 = submit by July 26, 2022
  - ♦ Population > 3,000 & < than 49,999 = submit by July 26, 2023</p>
  - ♦ Population < 2,999 = submit by July 26, 2024</p>



Population = population served in your system + population of your satellites

(35 Ill. Admin. Code 604.330)

#### Future Commitments

- Plans must be updated & submitted with construction permit applications for new wells or intakes
- Plans must be reviewed every 5 years & re-submitted if there are changes
- Agency has 45-day review period to approve or deny adequacy

(35 Ill. Admin. Code 604.335 & 604.340)

#### Source Water Protection Plan – A Living Document

- Maintain a steering committee & meet regularly to review, evaluate, & update plan
- ♦ Include provisions for review & revisions
  - It may be necessary to revise the vision of the plan as well as other key elements
    - Measuring accomplishments & completing projects is important & may result in updating the action plan
    - ♦ Identifying obstacles & developing additional objectives will evolve over time

#### How Will I Get This Plan Done?

#### ♦ Use available resources

- ♦ Reach out to the IRWA Source Water Protection Technician
- Access the AWWA G300 or other available templates that will lead you in the process
- ♦ Contact industry counterparts that have already completed a successful Plan
- ♦ Attend future training & workshops that are anticipated as deadlines loom

Bite this off in small pieces-you have time-but don't procrastinate!

