

# The following is intended to be a model or example ordinance only. To meet the needs and objectives of the local community, each local ordinance should be written in a way that works best for the community.

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**A**ppendix E contains an example ordinance. An ordinance is just one of the many zoning tools available to the local government. Your community can identify the wellhead protection area by the use of zoning or an "overlay" zone, which is a planning tool commonly used by many local governments. Then, by using the current zoning permit process that is already in place at the local government, an overlay zone or district can be applied to the wellhead protection area. This includes establishing an area for special review of proposed land uses that may contaminate the drinking water supply.

The information gathered in developing a local wellhead protection plan will also provide you with the information needed to develop a local ordinance. Delineation establishes: (1) appropriate zoning boundaries that best reflect the drinking water resource, and (2) any other interior boundaries or areas, e.g., 6 month time-of-travel boundary, wherein you may want to provide more

protection. Information gathered on potential sources of contaminants (by use of local zoning maps) will help you identify any particular areas that require special attention. The existing local zoning tells you the uses in your wellhead protection area that are permitted outright, as a conditional use, or not allowed without re-zoning. The local "Team" provides feedback and consensus on the best approach to use and how to establish a planning process that meets the needs of the local community in protecting the wellhead protection area.

For further information, refer to Statewide Planning Goal 1, Citizen Involvement, Goal 2, Part 1, Planning, and local government's enabling authorities under ORS Chapter 97 (for cities), and ORS Chapter 215 (for counties). EPA has compiled an extensive set of groundwater protection ordinances from around the country. Information about the "Compendium of Local Wellhead Protection Ordinances" can be obtained by contacting Doug White or Diana Butts at DLCD in Salem (503-373-0083).

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## *EXAMPLE ORDINANCE*

### Wellhead Protection Area District

COUNTY/CITY OF \_\_\_\_\_

#### **PURPOSE AND INTENT**

The \_\_\_\_\_ (City, County) Commission recognizes: (a) that residents of \_\_\_\_\_ rely exclusively on groundwater for a safe drinking water supply, and (b) that certain land uses in \_\_\_\_\_ can contaminate groundwater particularly in shallow/surficial aquifers.

The purpose of the Wellhead Protection Area District is to protect public health and safety by minimizing contamination of the shallow/surficial aquifers of \_\_\_\_\_. It is the intent to accomplish this, as much as possible, by public education and securing public cooperation.

Appropriate land use regulations may be imposed, however, which are in addition to these imposed in the underlying zoning districts or in other county regulations.

## Section 1.0 - Definitions

1. **AQUIFER.** A geological formation, group of formations or part of a formation capable of storing and yielding groundwater to wells and springs.
2. **BEST MANAGEMENT PRACTICES (BMPs).** Measures, either managerial or structural, that are determined to be the most effective, practical means of preventing or reducing pollution inputs from point sources or nonpoint sources of water bodies.
3. **CONFINED ANIMAL FEEDING OPERATION (CAFO).** The concentrated confined feeding or holding of animals or poultry, including, but not limited to horse, cattle, sheep or swine feeding areas, dairy confinement areas, slaughterhouse or shipping terminal holding pens, poultry and egg production facilities and fur farms, in buildings or in pens or lots where the surface has been prepared with concrete, rock or fibrous material to support animals in wet weather or which have waste water treatment works.
4. **CONTAMINATION.** An impairment of water quality by chemicals, radionuclides, biologic organisms, or other extraneous matter whether or not it affects the potential or intended beneficial use of water.
5. **DEVELOPMENT.** The carrying out of any construction, reconstruction, alteration of surface or structure or change of land use or intensity of use.
6. **FACILITY.** Something that is built, installed, or established for a particular purpose.
7. **FARM PRACTICES.** A mode of operation that is common to farms of a similar nature, reasonable and prudent for the operation of such farms to obtain a profit in money, is or may become a generally accepted method in conjunction with farm use, complies with applicable laws, and is done in a reasonable and prudent manner.
8. **GREY WATER.** All domestic wastewater except toilet discharge water.
9. **HAZARDOUS MATERIAL.** A material which is defined in one or more of the following categories:
  - **Ignitable:** A gas, liquid or solid which may cause fires through friction, absorption of moisture, or which has low flash points. Examples: white phosphorous and gasoline.
  - **Carcinogenic:** A gas, liquid, or solid which is normally considered to be cancer causing or mutagenic. Examples: PCB's in some waste oils.
  - **Explosive:** A reactive gas, liquid or solid which will vigorously and energetically react uncontrollably if exposed to heat, shock, pressure or combinations thereof. Examples: dynamite, organic peroxides and ammonium nitrate.
  - **Highly Toxic:** A gas, liquid, or solid so dangerous to man as to afford an unusual hazard to life. Example: chlorine gas.
  - **Moderately Toxic:** A gas, liquid or solid which through repeated exposure or in a single large dose can be hazardous to man.
  - **Corrosive:** Any material, whether acid or alkaline, which will cause severe damage to human tissue, or in case of leakage might damage or destroy other containers of hazardous materials and cause the release of their contents. Examples: battery acid and phosphoric acid.
10. **PRIMARY CONTAINMENT FACILITY.** A tank, pit, container, pipe or vessel of first containment of a liquid or chemical.
11. **RELEASE.** Any unplanned or improper discharge, leak, or spill of a potential contaminant including a hazardous material.
12. **SECONDARY CONTAINMENT FACILITY.** A second tank, catchment pit, pipe, or vessel that limits and contains liquid or chemical leaking or leaching from a primary containment area; monitoring and recovery are required,
13. **SHALLOW/SURFICIAL AQUIFER.** An aquifer in which the permeable medial (sand and gravel) starts at the land surface or immediately below the soil profile.

14. **SPILL RESPONSE PLANS.** Detailed plans for control, recontainment, recovery, and clean up of hazardous material releases, such as during fires or equipment failures.

15. **TIME-OF-TRAVEL DISTANCE.** The distance that groundwater will travel in a specified time. This distance is generally a function of the permeability and slope of the aquifer.

16. **WELLHEAD PROTECTION AREA.** The surface and subsurface area surrounding a water well, spring or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach that water well, spring or wellfield.

## Section 2.0 - Zones Within The Wellhead Protection Area

1. **ZONE A - DRINKING WATER CRITICAL IMPACT ZONE.** Zone A is the area within the 6-month time-of-travel distance mapped around the public water supply well(s).

a. **Encouraged Uses.** Provided they meet appropriate performance standards outlined in 2.c below and are designed so as to prevent any groundwater contamination.

1. Parks, greenways, or publicly-owned recreational areas.
2. Necessary public utilities/facilities.

b. **Special Exceptions.** The following uses are permitted only under the terms of a special exception and must conform to provisions of the underlying zoning district and meet the performance standards outlined in 2(c) below.

1. Expansion of existing nonconforming uses to the extent allowed by the underlying district. (*NOTE: consult local plan for nonconforming uses.*) The \_\_\_\_\_ Commission shall not grant approval unless it finds such expansion does not pose greater potential contamination of groundwater than the existing use.

c. **Prohibited Uses.** The following uses are prohibited within Zone A, the 6- month time-of-travel zone. (*NOTE: this is typically within about 1000 feet of the public water supply well.*)

- Automobile body/repair shop;
- Gas station;
- Fleet/trucking/bus terminal;
- Dry cleaner;
- Electrical/electronic manufacturing facility;
- Machine shop;
- Metal plating/finishing/fabricating facility;
- Chemical processing/storage facility;
- Wood preserving/treating facility;
- Junk/scrap/salvage yard;
- Mines/gravel pit (*unless zoned EFU and permitted under ORS 215.248*);
- Irrigated nursery/greenhouse stock (*unless zoned EFU*);
- Confined animal feeding operations (*unless zoned EFU*);
- Land divisions resulting in high density (>1/acre) septic systems;
- Equipment maintenance/fueling areas;
- Injection wells/dry wells/sumps;
- Underground storage tanks, (except those with spill, overflow, and corrosion protection requirements in place);
- All other facilities involving the collection, handling, manufacture, use, storage, transfer or disposal of any solid or liquid material or waste having potentially harmful impact on groundwater quality;
- All uses not permitted or not permitted as special exceptions.

2. **ZONE B.** Zone B is established as the remainder of the wellhead protection area not included in Zone A.

a. **Permitted Uses:** All uses permitted in the underlying zoning districts provided that they can meet the Performance Standards as outlined for the Wellhead Protection Area District.

b. **Special Exceptions:** All special exceptions allowed in underlying districts may be approved by the \_\_\_\_\_ Commission provided they can meet performance standards outlined for the Wellhead Protection Area District.

c. **Performance Standards:** The following standards shall apply to uses in Zones A and B of the Wellhead Protection Area District:

1. Any facility involving the collection, handling, manufacture, use, storage, transfer or disposal of any solid or liquid material or wastes, except those facilities associated with Farm Practices as defined in ORS 30.930 in an Exclusive Farm Use Zone and to the extent prohibited by SB 3486 (pesticide use and sale) and CAFOs, in excess of 1,000 pounds and/or 100 gallons which has the potential to contaminate groundwater must have a secondary containment system which are easily inspected and whose purpose is to intercept any leak or release from the primary containment vessel or structure. Underground tanks or buried pipes carrying such materials must have double walls and inspectable sumps.
2. Open liquid waste ponds containing materials referred to in item (1) above will not be permitted without a secondary containment system.
3. Storage of petroleum products in quantities exceeding fifty-five (55) gallons at one locality in one tank or series of tanks must be in elevated tanks; such tanks must have a secondary containment system noted in item (1) above where it is deemed necessary by \_\_\_\_\_.
4. All permitted facilities must adhere to appropriate federal and state standards for storage, handling and disposal of any hazardous waste materials.
5. An acceptable contingency plan for all permitted facilities must be prepared for preventing hazardous materials from contaminating the shallow/surficial aquifer should floods, fire, or other natural catastrophes, equipment failure, or releases occur:
  - (a) For flood control, all underground facilities shall include but not be limited to a monitoring system and secondary standpipe above the 100 year flood control level, for monitoring and recovery. For above ground facilities, an impervious dike, above the 100 year flood level and capable of containing 100 percent of the largest volume of storage, will be provided with an overflow recovery catchment area (sump).
  - (b) For fire control, plans shall include but not be limited to a safe fire fighting procedure, a fire retarding system, effective containment of any liquid runoff, and provide for dealing safely with any other health and technical hazards that may be encountered by disaster control personnel in combating fire. Hazards to be considered are pipes, liquids, chemicals, or open flames in the immediate vicinity.
  - (c) For equipment failures, plans shall include but not be limited to:
    - Below ground level, removal and replacement of leaking parts, a leak detection system with monitoring, and an overflow protection system.
    - Above ground level, liquid and leaching monitoring of primary containment systems, their replacement or repair and cleanup and/or repair of the impervious surface.
  - (d) For any other release occurring, the owner and/or operator shall report all incidents involving liquid or chemical material to the designated wellhead protection spill coordinator at the \_\_\_\_\_ office.
6. Since it is known that improperly abandoned wells can become a direct conduit for contamination of groundwater by surface water, all abandoned wells should be properly plugged according to Oregon Water Resources Department regulations.

### Section 3.0 - City/County Liability

1. Nothing in this ordinance shall be construed to imply that the (city/county) \_\_\_\_\_ has accepted any of an owner/developer's liability if a permitted facility or use contaminates groundwater in any aquifer.

### Section 4.0 - Enforcement

#### 1. CIVIL ENFORCEMENT:

- a. Any person may submit to this jurisdiction a verbal or written complaint alleging a violation of this ordinance.
- b. Upon receipt of a complaint, the jurisdiction shall conduct a brief investigation of the substances of the complaint, including a meeting with the landowner involved.
- c. Based upon the determination that there is a violation of this ordinance, the jurisdiction shall conduct an informal reconciliation with the violator. As part of such informal reconciliation, the jurisdiction shall:
  - (1) Notify the violator by mail of the violation of this ordinance and a desire of the jurisdiction to correct the violation through informal reconciliation. The statement shall also indicate that should the violator refuse to allow the recommended corrective actions within the time set forth by the jurisdiction, action may be taken to correct the violation and the violator will be billed for the cost of taking the corrective action.
  - (2) Make a good faith effort to meet the violator and resolve/correct the violation.
- d. If after taking the steps above and after a period of ninety (90) days following the mailing of the notice of the violation, the jurisdiction in good faith determines that the violator is unwilling to participate in informal reconciliation and take the corrective actions prescribed, the jurisdiction shall notify the violator by mail of the termination of the informal reconciliation.
- e. The jurisdiction may take the corrective action prescribed above following thirty (30) days after notifying violator by mail of the notice of termination of the informal reconciliation, and bill the violator for the reasonable cost of such action.

2. **CRIMINAL ENFORCEMENT:** In lieu of proceeding under Section 4.0, a person who is alleged to have violated this ordinance may be prosecuted for the commission of a crime. Violation of this ordinance is a misdemeanor and may be punished by imprisonment of not more than ninety (90) days or imposition of a fine of not more than \$500.00 or both.

## **Section 5.0 - Saving Clause**

1. Should any section or provision of this ordinance be declared invalid, such decision shall not affect the validity of the ordinance as a whole or any other part thereof.

Approved by: \_\_\_\_\_

\_\_\_\_\_

(Auditor/Attorney) (Authority)