# WELLHEAD PROTECTION ORDINANCE

## Town of St. George

Adopted 5/17/05 Amended 8/11/09 Amended 5/9/22

A true copy Attest: Richard A. Erb. Town Clerk

## TOWN OF ST. GEORGE WELLHEAD PROTECTION ORDINANCE

## **ARTICLE I - GENERAL INFORMATION**

## Section A. Purpose

The purpose of the Wellhead Protection Ordinance is to protect the quality of the ground water being extracted from the wells which serve the Tenants Harbor Water District (THWD) and the Port Clyde Water District (PCWD).

## Section B. Authority

The ordinance is adopted pursuant to the enabling provisions of Article VIII-A of the Maine Constitution, Title 30-A MRSA Section 3001 (Home Rule), Title 30-A MRSA Section 4311 (Growth Management) and Title 22 MRSA 2642 (Protection of Drinking Water Supplies).

## Section C. Applicability

This ordinance applies to all land uses within the Wellhead Protection Areas (WHPA) of the Tenants Harbor Water District's and the Port Clyde Water District's production wells.

1. <u>Tenants Harbor Water District</u>. The WHPA was based upon analysis of extensively monitored pumping tests, and is illustrated on maps produced by Emery and Garrett Groundwater, Inc. of Waterville, Maine for the Maine Department of Environmental Protection. The land area consists of 2 zones, with decreasing need for special land use protection. All zones were defined based upon an understanding of groundwater flow towards the two pumping wells within the bedrock aquifer. The zones are as follows:

Zone 1 includes an area of about 67 acres around the THWD wells. It is the area within which flow of groundwater towards the pumping wells is likely to be sufficiently rapid that any spills would have serious and relatively rapid consequences for water quality in the wells. This area is the area owned by the THWD, and put under a restrictive easement, so that the land can be kept in a pristine condition that favors the highest water quality standards in perpetuity.

Zone 2 includes the immediate area that may contribute groundwater to the wells while pumping. Zone 2 will be protected by the Best Management Practices (BMP's) described in Article IV.

2. <u>Port Clyde Water District</u>. The Water District has four bedrock wells, neither of which has Wellhead Protection areas defined by hydrogeological evaluation following a pumping test. In the absence of such scientific definition, the Town arbitrarily assigns Zone 1 to an area of 300-foot radius around each production well, and Zone 2 as an area of 1000-foot radius around each production well. Zone 1 and Zone 2 will be protected by Best Management Practices (BMP's) described in Article IV.

## Section D. Relationship with other Ordinances

Whenever a provision of this ordinance conflicts with or is inconsistent with another provision of this ordinance or any other ordinance, regulation or statute, the more restrictive provision shall control.

#### **Section E. Effective Dates**

The ordinance shall take effect upon its enactment by the Town of St. George.

#### Section F. Amendments

This ordinance may be amended in part or in whole by majority vote of the registered voters of the Town of St. George present at a regular or special town meeting.

## **ARTICLE II – ADMINISTRATION, ENFORCEMENT, APPEAL**

## Section A. Administering Bodies and Agents

- Code Enforcement Officer (CEO) The CEO of the Town of St. George shall administer land uses in Zone 2 and enforce this ordinance.
- 2. Town of St. George Planning Board (PB) shall administer all land uses in Zone 1 and land uses in Zone 2 that are appropriate.
- 3. Public Water Systems

The employees and officers of the public water systems shall refer any problems or potential problems regarding land uses within the wellhead protection area to the CEO.

4. Appeal to Board of Appeals

The Town of St. George Board of Appeals shall hear and act on administrative and variance appeals.

(1) Variances may be granted only under the following conditions:

a. Variances may be granted only from dimensional requirements including, but not limited to, lot width, structure height, percent of lot coverage, and setback requirements.

b. Variances shall not be granted to permit a use otherwise prohibited by this Ordinance.

c. The Board shall not grant a variance unless it finds that:

(1) The proposed structure or use would meet the standards of this Ordinance except for the specific provision which has created the non-conformity and from which relief is sought; and

(2) The strict application of the terms of this Ordinance would result in undue hardship.

The terms "undue hardship" means:

(a) That the land in question cannot yield a reasonable return unless a variance is granted;

(b) That the need for a variance is due to the unique circumstances of the property and not to the general conditions in the neighborhood;

(c) That the granting of a variance will not alter the essential character of the locality; and

(d) That the hardship is not the result of action taken by the applicant or a prior owner.

## Section B. Existing and Future Land Uses

- 1. Lawful non-conforming uses within the WHPA that existed before the effective date of this ordinance shall be allowed to continue. No expansion will be allowed unless it can be shown that the expansion does not pose a potential threat to the water supply. Changes to other non-conforming uses will not be allowed.
- 2. Any existing or future land use within the WHPA may be subject to inspection by the CEO accompanied by a representative of a Water District and their consultant to determine if an existing or future land use may pose a threat to the water supply.
  - a.) If the CEO and Water District representatives agree that there is a potential, but not immediate threat, the CEO will notify the landowner in writing of the potential threat and request that the problem be remedied.
  - b.) If the landowner cannot agree with the CEO regarding the threat or the remedy, he may ask for the opinion of a third party expert agreeable to him and the CEO. The landowner will pay for this opinion and all parties will abide by it.
  - c.) If the CEO and Water District representatives agree that there is an immediate threat, in violation of any provision in Article III, the CEO will notify the landowner in writing of the violation and request that the problem be remedied immediately. If the landowner does not agree, or the CEO is not satisfied with the response received, the CEO, or his authorized agent(s), may enter the property and remedy the problem. The Town shall be reimbursed by the landowner for the costs of the remedial action in addition to any fines associated with the violation.
  - d.) When the CEO finds that a credible threat to the public water supply exists and that groundwater monitoring in the area will serve to protect the public water supply from existing or potential land use threats, the land owner shall either: 1.) Grant the Water District the right to install groundwater monitoring wells and maintain the right to sample such wells on the applicant's property; or 2.) Install monitoring wells and implement a groundwater-monitoring program approved by the CEO.

- e.) Further, the CEO or the Water District representative shall have the right upon reasonable advance notice, to conduct such testing as the CEO may deem appropriate to determine that groundwater pollution control devices are in good condition and are working properly, and that BMP's are being followed. Such testing shall be at the expense of the Water District. If testing indicates that the groundwater has been contaminated above the State Primary or Secondary Drinking Water Standards, then further testing shall be at the expense of the landowner in question. The landowner shall reimburse the Water District for expenses incurred in the initial well installation and testing.
- 3. The above procedures do not preclude or limit the Town's rights and remedies as specified in Section D. below.

## Section C. APPEAL OF PLANNING BOARD AND CEO ACTIONS

An appeal from any action or failure to act by the Planning Board or Code Enforcement Officer under this ordinance shall be governed by the Town's Board of Appeals Ordinance.

## Section D. Violations, Enforcement, Legal Action and Fines

1. Violations and Enforcement

The CEO shall be responsible for the enforcement of this Ordinance, and upon finding a violation of the Ordinance, shall notify in writing the person or persons responsible for the violation. The notice shall include the nature of the violation and the action necessary to correct the situation. A copy of this notice shall be provided to the Select Board and the Planning Board.

2. Legal Action

When a person does not correct a violation after receiving notice to do so, the Select Board, after notice from the CEO may institute all legal and equitable actions to correct the violation. Any person who shall violate a provision of this ordinance or who fails to comply with any of the requirements thereof shall be subject to the penalties in Title 30-A MRSA Section 4452.

## **ARTICLE III – LAND USES**

## Section A. Land Uses Permitted in Zone 1

Land uses that are permitted in Zone 1 include the following:

- Uses related to well field operations: access roads, structures, power supply and water treatment strictly related to and essential to well field operations.
- Timber planting, growth and harvesting.
- Trails for non-motorized use (walking, skiing, biking, etc.).
- Structures having no floor area, i.e., transmission towers, antennas, and windmills that are deemed to have no adverse impact on water quality as determined by the Planning Board.
- Structures Accessory to permitted uses

## Section B. Land Uses Permitted in Zone 2

All land uses located within the Wellhead Protection Zone 2 shall comply with BMP's as outlined in Article IV. In some instances, there may be more than one management practice needed to fully mitigate the problem. Therefore, discretion is needed by the Planning Board/CEO in determining which management practices to apply.

# ARTICLE IV – BEST MANAGEMENT PRACTICES (BMP's) FOR WELLHEAD PROTECTION AREAS

## **Section A. Information Sources**

The following documents contain BMP's for Wellhead Protection as applied in the State of Maine: "Source Protection: A Guidance Manual for Small Surface Water Supplies in New England," 1996, by New England Interstate Water Pollution Control Commission; "Environmental Management; A Guide for Town Officials," 1992, by Maine Department of Environmental Protection; and "Best Management Practices for Marinas and Boatyards," 1999, by Maine Department of Environmental Protection. These shall be used as a guide in making a determination of the threat to the water supply and the remedial action necessary.

## Section B. General BMP's to be applied in all Wellhead Protection Zones

- 1. All federal and state laws pertaining to pesticides and chemicals shall be strictly adhered to.
- 2. Use biodegradable chemicals and cleaning agents only.
- **3.** Restore vegetation, or mulch bare soil areas, before any storm or rainfall event.

## Section C. BMP's to be applied to Specific Land Uses

- 1. <u>Agriculture/Open Space/Utility Corridors/Landscaping/Logging Operations</u> Agricultural and Forestry BMP's shall be followed according to those listed in "Source Protection: A Guidance Manual for Small Surface Water Supplies in New England".
- Storage, Handling, Use and Disposal of Hazardous Materials
   Commercial and Municipal storage, handling, use and disposal of hazardous materials is
   prohibited within the WHP Zones 1 and 2 with the exception of liquefied petroleum gas
   (LPG) when used to fuel back up power supplies.

Use of hazardous materials for domestic purposes will follow all applicable BMP's as described in "Environmental Management: A Guide for Town Officials, Best Management Practices to Control Nonpoint Source Pollution".

## 3. <u>Solid Waste Disposal</u>

The long term (>3 months) storage or disposal of solid waste is prohibited in WHP Zones 1 and 2.

## 4. <u>Mining</u>

a. Excavation shall be limited to 5 feet above the seasonal high water table.

- b. Haul roads shall be watered to control dust. Salting and oiling of roads for dust control is prohibited.
- c. A reclamation plan shall be provided, maintained and implemented.
- d. Avoid using leaking or damaged equipment.
- e. No excavation pits are to be located within 1,000 feet of the Water Districts' wells.
- 5. <u>Septic/Subsurface Wastewater/Sewage Disposal</u>
  - a. Sewer/septic systems shall be designed by registered professionals using sound engineering practices. On-site sewage disposal shall be according to the State of Maine Subsurface Wastewater Disposal Rules (144A CMR 241).
  - b. Construction of sewers and septic systems shall be carefully inspected to assure proper installation.
  - c. New sewer systems shall be tested for leakage, according to State standards.
  - d. Sewers and drainage systems shall be designed to assure that storm water does not enter sanitary sewers.
  - e. For cluster systems, 1,000 gallon septic tank capacity shall be provided for each 300 gallons of flow.
  - f. Chemicals, hazardous materials, floor drains and storm water drains (i.e. roof drains) shall not be discharged to septic systems.
  - g. Inspect old (pre-1974) septic systems and look for signs of leakage and poor soil conditions on an annual basis.
  - h. Replace or repair malfunctioning systems.
  - i. Inspect the level of septic tanks regularly (at least every 3 years) and pump out as required.
  - j. Additional septic system BMP's shall be followed according to those listed in "Source Protection: A Guidance Manual for Small Surface Water Supplies in New England".

## 6. <u>Storm Water Runoff/Snow and Ice Control</u>

a. Drainage systems, including detention basins, drainage ways, and storm sewer systems, shall be maintained in order to assure they function properly.

b. Chemicals and wastes shall be stored in such a manner to prevent rainfall from contacting them.

## 7. Wells, Abandoned, Existing and New

- a. Abandoned wells must be filled with cement grout.
- b. Wells must be constructed according to the State of Maine Regulations. This will ensure that contamination cannot enter ground water via either the inside or outside of the well.
- c. No injection wells or dry wells except for infiltration of rainwater from roof drains are permitted in the WHPA.
- 8. <u>Construction Sites</u>
  - a. Erosion control plans for any construction sites must be approved by the Planning Board/CEO prior to the start of any construction.
  - b. Erosion control plans must include a buffer strip of vegetation between construction sites and bodies of water, and the mulching and re-seeding of cleared areas.
- 9. <u>Salt Piles or Sand/Salt Piles</u>
  - a. All salt and sand/salt piles shall be located or placed on an impervious surface and shall be covered or protected from precipitation

## 10. <u>Boatyards/Boat Storage</u>

- a. Only 50% of the total storage area may be covered with impervious surfaces.
- b. All bilge water from boat pump-out facilities will be routed through an oil-water separator.
- c. All pumps, lines and fueling equipment shall be inspected annually.
- d. Prevent fuel spills by using backpressure and automatic shut-off valves on fuel pumps.
- e. Dispose of waste oil at the Town of St. George Waste Transfer Station.
- f. Collect and dispose of sand blasting and paint stripping waste at the Town of St. George Waste Transfer Station.
- g. Use propylene (instead of ethylene) glycol antifreeze. Dispose of used antifreeze at the Town of St. George Waste Transfer Station.
- h. Store and recycle used batteries at the Town of St. George Waste Transfer Station.
- i. Wash down boats with water only; use mild detergents.
- j. Do not use tributyltin (TBT) paint on boat hulls.

- k. Discharge untreated sanitary waste to an onsite septic system or holding tank.
- 1. Additional BMP's for boat yards and marinas shall be followed according to those listed in "Best Management Practices for Marinas and Boatyards".

## **ARTICLE V – DEFINITIONS**

## Agriculture

The production, keeping or maintenance for sale or lease, of plants and/or animals, including but not limited to: forages and sod crops; grains and seed crops; dairy animals and dairy products; poultry and poultry products; livestock; fruits and vegetables; and ornamental and greenhouse products. Agriculture does not include forest management and timber harvesting activities.

## Aquifer

A permeable geologic formation, either rock or sediment, that when saturated with ground water is capable of transporting water through the formation.

## **Best Management Practice**

Procedures designed to minimize the impact of certain activities or land uses on ground water quality and quantity.

## **Buffer Strip**

Vegetated buffer strips are natural, undisturbed strips of vegetation or planted strips of closegrowing vegetation adjacent to developed areas. As storm water travels over the buffer area, vegetation (or mulch) slows the runoff and traps particulate pollution.

## **Code Enforcement Officer**

A person appointed by the municipal officers to administer and enforce these ordinances.

## **Commercial Use**

The use of lands, buildings, or structures, other than a "home occupation", defined below, the intent and result of which activity is the production of income from the buying and selling of goods and/or services, exclusive of rental of residential buildings and/or dwelling units.

## Construction

Includes building, erecting, moving or any physical operations on the premises required for construction. Excavation, fill, paving and the like shall be considered part of construction.

## Drinking Water Standards, Primary and Secondary

Standards for drinking water as stated in the 'State of Maine Rules Relating to Drinking Water' with the Maine Department of Human Services.

**Excavation** (see construction)

#### Fill (see construction)

## **Floor Drain**

An opening in the floor that leads to the ground and/or is not permitted under other State, Federal, or local regulations; work sinks that lead to such drains are included.

## **Ground Water**

The water contained within the interconnected pores, cracks or fractures located below the water table of a confined or unconfined aquifer.

## **Hazardous Material**

Any gaseous, liquid or solid materials or substances designated as hazardous by the Environmental Protection Agency and/or the Maine Department of Environmental Protection. This specifically includes petroleum products.

#### **Hazardous Waste**

Any substance identified under Chapter 850, Identification of Hazardous Wastes, of the rules of the State of Maine, Department of Environmental Protection, effective date July 1, 1980, including revisions or amendments thereto, and any radioactive waste material. This means any solid, liquid, or gas residue, including but not limited to spent fuel assemblies prior to processing, remaining after the primary usefulness of the radioactive material has been exhausted and containing nuclides that spontaneously disintegrate or exhibit ionizing radiation.

## **Home Occupation**

An occupation or profession which is customarily conducted on or in a residential structure or property and which is 1) clearly incidental to and compatible with the residential use of the property and surrounding residential uses; and 2) which employs no more than two (2) persons other than family members residing in the home.

#### **Industrial Waste**

Wastes resulting from the processes employed in industrial manufacturing, trade, or business establishments.

## Inert Fill

Material placed on or into the ground as fill that will not react chemically with soil, geologic material, or groundwater.

## **Mining or Mineral Extraction**

Any operation within a twelve (12) month period which removes more than one hundred (100) cubic yards of soil, topsoil, loam, sand, gravel, clay, rock, peat, or other like material from its natural location and to transport the material removed, away from the extraction site.

## Mulch

A composted or man-made material used to help stabilize open, exposed areas of soil. This nutrient-rich substrate is used in control prevention plans to re-establish vegetation in cleared areas.

## **Non-Conforming Use**

Use of buildings, structures, premises, land or parts thereof which is not permitted in the district in which it is situated, but which is allowed to remain solely because it was in lawful existence at the time this Ordinance or subsequent amendments took effect.

Paving (see construction)

## **Public Water System**

"Public Water System" means any publicly or privately owned system of pipes, structures and facilities through which water is obtained for or sold, furnished or distributed to the public for human consumption. A public water system must serve at least 25 service connections used by year-round and/or seasonal residences. The term "public water system" is also any collection, treatment, storage or distribution pipes, structures or facilities under the control of the supplier of water. The "public water system" is used primarily in connection with such a system, and any collection or pretreatment storage facilities not under that control that are used primarily in connection with such a system. The system does not include the portion of service pipe owned and maintained by a customer of the public water system.

## Road

A route or track consisting of a bed of exposed mineral soil, gravel, asphalt, or other surfacing material constructed for or created by the repeated passage of motorized vehicles.

## Salt or Sand/Salt Piles (covered)

Storage of salt or sand/salt mix intended for municipal, commercial or other use except for homeowner sidewalks, steps, or driveways beneath a roof or other structure capable of preventing precipitation from reaching the salt or sand/salt.

## Salt or Sand/Salt Piles (uncovered)

Storage of any amount of salt or sand/salt, for any purpose, without a roof or other structure capable of preventing precipitation from reaching the salt or sand/salt.

## **Service Connection**

A physical pipe connection to the water distribution system that serves one end user or customer.

## Solid Waste

Discarded solid material with insufficient liquid content to be free flowing. This includes but is not limited to rubbish, garbage, scrap materials, junk, refuse, inert fill materials and landscape refuse.

## Structure

Anything built for the support, shelter or enclosure of persons, animals, goods or property of any kind, together with anything constructed or erected with a fixed location on or in the ground,

exclusive of fences, and poles, wiring and other aerial equipment normally associated with service drops as well as guying and guy anchors. The term includes structures temporarily or permanently located, such as decks, patios, and satellite dishes.

It does not include driveways but does include paved parking areas.

## Subsurface Wastewater Disposal System

A collection of treatment tank(s), disposal area(s), holding tank(s) and pond(s), surface spray system(s), cesspool(s), well(s), surface ditch(es), alternative toilet(s), or other devices and associated piping designed to function as a unit for the purpose of disposing of wastes or wastewater on or beneath the surface of the earth. The term shall not include any wastewater discharge system licensed under 38 MRSA Section 414, any surface wastewater disposal system licensed under 38 MRSA Section 414, any surface wastewater disposal system licensed under 38 MRSA Section 414, any surface wastewater disposal system licensed under 38 MRSA section 413, Subsection 1-A, or any public sewer or sewerage system. The term shall not include a wastewater disposal system designed to treat wastewater which is in whole or in part hazardous waste as defined in 38 MSRA Chapter 13, subchapter 1.

## **Timber Harvesting (Logging Operations)**

The cutting and removal of trees from their growing site, and the attendant operation of cutting and skidding machinery but not the construction or creation of roads. Timber harvesting does not include the clearing of land for approved construction.

## **Transfer Station; Recycling Facility**

Facility designed for temporary storage of discarded material intended for transfer to another location for disposal or re-use; facility which processes discarded material for re-use.

## **Utility Corridor**

Right-of way, easement, or other corridor for transmission wires, pipes or other facilities for conveying energy, communication signals, fuel, water, wastewater, etc.

## Waste Disposal, Industrial/Commercial - (see industrial waste)

## Wastewater

Any combination of water-carried wastes from institutional, commercial and industrial establishments, and residences together with any storm, surface or ground water as may be present.

## Wellhead

The specific location of a well (a hole or shaft dug or drilled to obtain water) and/or any structure built over or extending from a well.

## **Wellhead Protection Area**

An area, consisting of 2 zones, delineated according to Article I, Section C of the Ordinance.

## Well, Abandoned

A shaft, casing, tile, hole, or pipe placed, drilled, or dug in the ground for the extraction or monitoring of ground water that has not been used for a period of two consecutive years.

## Well, Existing or New

A shaft, casing, tile, hole, or pipe placed, drilled, or dug in the ground for extraction, injection or monitoring of ground water.