



Regulation of Large-Scale Groundwater Extraction in Maine

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MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Protecting Maine's Air, Land and Water

P.L. 2007, Chapter 399: An Act Concerning the Sustainable Use of and Planning for Water Resources: created the Water Resources Planning Committee

“If the proposed activity includes a **significant groundwater well**, the applicant must demonstrate that the activity will not have an undue unreasonable effect on waters of the State, as defined in 38 M.R.S. section 361-A, water-related natural resources and existing uses, including, but not limited to, public or private wells within the anticipated zone of contribution to the withdrawal. In making findings under this subsection, the department shall consider both the direct effects of the proposed withdrawal and its effects in combination with existing water withdrawals.”



DEP Jurisdiction: permit triggers

- Site Location of Development Act (Site Law)
38 M.R.S. §§481 – 490
- Natural Resources Protection Act (NRPA) 38 M.R.S. §§480-A – 480-II



Site Law

- "Development of state or regional significance that may substantially affect the environment"
- Structure. A "structure" means: Buildings, parking lots, roads, paved areas, wharves or areas to be stripped or graded and not to be revegetated that cause a total project to occupy a ground area in excess of 3 acres. Stripped or graded areas that are not revegetated within a calendar year are included in calculating the 3-acre threshold.
- This law and associated rules apply to groundwater extraction facilities that include processing, or bottling. There are a handful of these in the state.



Site Law Standards for Development

- **No adverse effect on the natural environment (38 M.R.S. §484(3)).** The developer has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities.



Site Law §484(3)(F)

In assessing potential impacts from a structure designed for the withdrawal of groundwater, the Department must consider the effects of the proposed withdrawal on waters of the State; water-related natural resources; and existing uses, including, but not limited to, public or private wells within the anticipated zone of contribution to the withdrawal. The Department must also consider both the direct effects of the proposed water withdrawal and its effects in combination with existing water withdrawals (resembles the language in P.L 2007 Chapter 399).



Site Law Regulations Chapter 375

- Subsection 8: In determining whether the proposed development will have an unreasonable adverse effect on ground water quantity, the Department shall consider all relevant evidence to that effect, such as evidence that the quantity of water to be taken from ground water sources will not substantially lower the water table, cause saltwater intrusion, cause undesirable changes in ground water flow patterns, or cause unacceptable ground subsidence.



Applications for approval

- Applications for approval of proposed developments shall include evidence that affirmatively demonstrates that there will be **no unreasonable adverse effect** on ground water quantity, including information such as estimates of the quantity of ground water to be used by the proposed development.
- The Department may, as a term or condition of approval establish **any reasonable requirement** to ensure that there will be no unreasonable adverse effect on ground water quantity.
- The Department may require that wells in the surrounding area be **monitored** to determine the effect of the development on ground water levels.



Long-term monitoring may include:



- Measuring water levels in monitoring wells and at specified surface water locations on a regular basis.
- Establishing minimum flow criteria in nearby streams.
- Establishing alert levels that require more frequent monitoring.
- Prohibiting pumping when surface waters reach certain low-water levels.



Natural Resources Protection Act (NRPA)

38 M.R.S. §§480-A – 480-II

"**Significant groundwater well**" means any well, wellfield, excavation or other structure, device or method used to obtain groundwater that is:

- Withdrawing at least 75,000 gallons during any week or at least 50,000 gallons on any day and is located 500 feet or less from a coastal or freshwater wetland, great pond, significant vernal pool habitat, water supply well not owned or controlled by the applicant or river, stream or brook; or
- Withdrawing at least 216,000 gallons during any week or at least 144,000 gallons on any day and is located more than 500 feet from a coastal or freshwater wetland, great pond, significant vernal pool habitat, water supply well not owned or controlled by the applicant or river, stream or brook.



NRPA § 480D (10)

Significant groundwater well. If the proposed activity includes a significant groundwater well, the applicant must demonstrate that the activity will not have an undue unreasonable effect on waters of the State, water-related natural resources and existing uses, including, but not limited to, public or private wells within the anticipated zone of contribution to the withdrawal. In making findings under this subsection, the department shall consider both the direct effects of the proposed withdrawal and its effects in combination with existing water withdrawals.

(Same language as Site Law §484(3)(F))



Multiple jurisdictions - same permitting standard

The permitting standard quoted in previous slides appears in the Department's **Site Law** (38 M.R.S § 484 (3F)), the **NRPA** (38 M.R.S. §480-D (10)), the **Bulk Water Transport** permitting program at DHHS's Drinking Water Program (22 M.R.S.§ 2660-A, (3D)), and in **LUPC's** statutes (12 M.R.S. § 685-B, (4C)). By including this standard in each of these laws, no matter where a new significant groundwater extraction is proposed in Maine or which regulatory agency deals with the application, it will be required to meet the same regulatory standards to provide groundwater protection. The agencies involved also coordinate with each other to ensure the consistency of these reviews.





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