

Programs Regulating Impacts of Groundwater Extraction

**Department of Environmental
Protection**

Disclaimer

Summaries of Statutes, Rules, and processes in this presentation are for the purpose of discussion only and should not be relied on for interpretation of the rules or statutes, determination of jurisdiction, limitation or applicability of review criteria, or any other purpose other than stated above.

Specific Programs

- **Site Location of Development Act**
- **Natural Resources Protection Act**
- **Borrow Pit and Quarry Programs**

Site Location Act

- Large industrial, commercial, and residential subdivisions
- Developments of twenty or more acres
- Developments with three or more acres cleared and not revegetated
- Metallic mineral mining
- Oil terminals
- Offshore oil and gas exploration

Intent of review

The Board recognizes the importance of maintaining an adequate supply of groundwater for drinking purposes. The Board also recognizes that the depletion of groundwater resources can result in the intrusion of salt water...and can affect the hydrologic characteristics of surface water bodies...resulting in adverse effects on their assimilative capacity and recreational use, as well as on certain wildlife habitats. Additionally, new wells can cause a lowering of the groundwater supply to the point where existing wells run dry....

Department Rules Chapter 375.8(A)

Review Criteria

The Department must find that there will be no unreasonable adverse effects resulting from

- Changes in groundwater level
- Saltwater Intrusion
- Changes in groundwater flow patterns
- Subsidence due to groundwater withdrawal

(See Department Rules Chapter 375.8(B)(1))

Application and Review Process

- Applicant makes initial contact with the Department
- Scoping of proposed development and scheduling of pre-application meeting
- Pre-application process
- Pre-submission review
- Application accepted for processing and distributed to review agents
- Review comments and applicant's responses distributed
- Licensing staff writes and issues permit, with conditions if necessary

Review Process

- If developments draw water from off-site utility, no detailed review is generally necessary
- Most residential developments using on-site water submit information from MGS well database to demonstrate adequate water supply

Review Process

- Developments with public water supply wells submit evidence of approval by Drinking Water Program
- Not all drinking-water wells supplying more than one residence need DWP approval
- DEP staff determine need for additional review based on proposed use and proximity to natural resources and other wells

Review Process

- Certain developments require large volumes of water for irrigation, for bottling, as cooling water, or for other purposes
- These developments are usually conducting pumping tests to determine well yield and other relevant characteristics
- DEP staff identify areas of concern prior to pump test, review data for evidence of impact, and define monitoring requirements, if necessary

Natural Resources Protection Act

- Regulates activities including dredging and other soil disturbance, draining and dewatering, placement of fill, and construction, repair, or alteration of permanent structures adjacent to coastal wetlands, great ponds, rivers, streams, or brooks, and certain freshwater wetlands and peatlands (38 MRSA §§480-C(1) and (2)).

Natural Resources Protection Act

- In practice, “adjacent to” is defined as seventy-five feet or less from the resource
- Regulated activities **do not** include groundwater withdrawal
- Standards require that the “activity will not unreasonably interfere with the natural flow of any surface or subsurface waters” (38 MRSA §480-D(4))

Natural Resources Protection Act

- Applicants must notify the water utility whenever “the resource subject to alteration or the underlying ground water is utilized by a water company, municipality or water district as a source of supply” (38 MRSA §480-E(2))
- This requirement does not appear to include small public water systems

Borrow Pit and Quarry Programs

- Gravel pits of five or more acres
- Quarries of one acre or more
- Expansion of grandfathered excavations by these areas
- Potential groundwater quantity impacts from excavation below water table and dewatering
- Review criteria and process generally similar to those under Site Location