



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

MITT ROMNEY
Governor

KERRY HEALEY
Lieutenant Governor

ELLEN ROY HERZFELDER
Secretary

ROBERT W. GOLLEDGE, Jr.
Commissioner

**WATER MANAGEMENT POLICY
FOR PERMIT AND PERMIT AMENDMENT APPLICATIONS AND 5-YEAR REVIEWS**

Effective Date: April 2, 2004

WMA Policy #: BRP/DWM/DW/P04-1

Program Applicability: Water Management Act Program (310 CMR 36.00)

Approved by: Cynthia Giles, Assistant Commissioner, Bureau of Resource Protection

SUMMARY

The Department adopts this Policy to protect the waters of the Commonwealth and to better achieve the goal of balancing competing water uses. In considering all Water Management Act permitting decisions, including permit and permit amendment applications, 5-year compliance reviews of existing permits, and other permit modifications, DEP will:

- Impose water conservation and reporting standards.
- Use site screening criteria to identify where new sources or increases from existing sources would likely have significant flow impacts and therefore require a more rigorous review including an evaluation of need and alternatives to any increase in volume.
- Require that proposals for new or increased withdrawals include evaluation of ways to offset proposed withdrawals by reducing out of basin flow or increasing water returned to the basin.
- Deny requests for new or increased withdrawals that cannot be mitigated and will cause a significant impact.

BASIS FOR THE POLICY

The guiding principles for this Policy are the goals set out in the Water Management Act, including the directive to ensure a balance among competing water withdrawals and uses and the statutory factors DEP is required to consider.¹ This policy: 1) requires more protection of our stressed water resources through implementation of conservation standards and other measures

¹ See Chapter 21G, sections 3 and 7.

This information is available in alternate format. Call Debra Doherty, ADA Coordinator at 617-292-5565. TDD Service - 1-800-298-2207.

affecting nonessential water uses, 2) prevents conditions from getting worse by using higher standards to evaluate all proposed increases in water use, and 3) requires increased withdrawals to evaluate the feasibility of mitigating impacts through offsets in water management elsewhere and implement those that are feasible, commensurate with the degree of stress in the basin and impact of the withdrawal.

For purposes of this Policy, the Department adopts the stressed basin determinations contained in the WRC Report, *Stressed Basins in Massachusetts* (approved December 13, 2001). The Report evaluated hydrologic stress on flow, and developed a classification of high, medium, and low stressed basins or those defined as unassessed.

SAFE YIELD

The principal basis for controlling permitted water withdrawals under the Water Management Act is the concept of safe yield. Safe yield is the volume of water that can be removed from surface or groundwater without unreasonable damage to the water resource.

Implicit in the statutory definition of safe yield is the recognition that surface water and groundwater are one hydrologic unit, and that groundwater withdrawals have the potential to impact the natural function of storage/groundwater discharge to a stream as base flow during the low flow period. The statutory definition further recognizes drought as a probability, which incorporates the complexity of natural variability of streamflow as measured in magnitude, frequency, duration, timing and rate of change, upon which safe yield withdrawals are to be based. DEP is therefore proposing regulations to replace the regulatory definition of safe yield with the statutory definition, so that the statutory purpose is better achieved and the regulations better aligned with available science and the stated purpose of the statute.

For purposes of this Policy, the definition of safe yield shall be the statutory definition:

"Safe yield", the maximum dependable withdrawals that can be made continuously from a water source including ground or surface water during a period of years in which the probable driest period or period of greatest water deficiency is likely to occur; provided, however, that such dependability is relative and is a function of storage and drought probability.²

STANDARDS AND CONDITIONS

The following standards and conditions will be included as appropriate in all permitting decisions, including the issuance of new permits, permit amendments, 5 Year Reviews of existing permits, or other permit modifications. (See the Department's Guidance on this Policy for more details on implementation.)

² MGL, Chapter 21G, Section 2, Definitions

- Cap on per capita per day residential water use (no more than 65 gallons per capita for high and medium stress basins, no more than 80 gallons per capita for low stress and unassessed basins).
- Limits on unaccounted for water (no more than 10% for high and medium stress basins, no more than 15% for low stress and unassessed basins).
- Summer limits on withdrawals (limit varies based on prior use).
- Streamflow thresholds that trigger mandatory limits on nonessential outdoor water use, including but not limited to lawn and landscape irrigation.
- Standard and consistent reporting requirements.
- Streamflow monitoring.

REVIEW OF PERMIT OR PERMIT AMENDMENT APPLICATIONS

Permit or permit amendment applications adding new sources, or permit applications seeking increased authorized withdrawal volumes from new or existing sources will be evaluated using the Site Screening Process, which is described in more detail in the Department’s Guidance in “Site Screening Process for Siting a New or Expanded Source of Public Water” available at www.state.ma.us/dep/brp/wtrm/sitescr.htm. The Site Screening Process, a method that uses a desktop screening tool to evaluate the likelihood of impact of a withdrawal on nearby streams, will also be applied to evaluation of the withdrawal impacts from increasing capacity from existing wells and the withdrawal impacts associated with system-wide increases from existing sources without change in source capacity. Where significant flow impact is indicated, the Department will more rigorously review the permit or permit amendment application, including more detailed instrumentation for pump test design, needs assessment, alternatives analysis, and implementation of offsets. (See the Department’s Guidance on this Policy for more details on implementation.)

COMPENSATING FOR NEW OR INCREASED WITHDRAWALS

When new sources or increases in withdrawal volumes are proposed, the Department will evaluate whether additional conditions and offsets are necessary to achieve the appropriate balance between competing water uses. These conditions are likely to include operational restrictions, submission of management plans describing how the system will manage its sources to protect system integrity during periods of operational restrictions, and offsets for any new or increased withdrawals. Where new or increased withdrawals will have significant impacts that cannot be adequately mitigated, DEP will communicate to the applicant early in the process that approval is unlikely. (See the Department’s Guidance on this Policy for more details on implementation.)

APPLICABILITY

This Policy will be applied to all permitting decisions, including permits, permit amendments, and permit modifications resulting from the 5 Year Review of existing permits. Conditions that do not apply directly to permittees that are not public water supplies will be modified as appropriate to achieve the purposes of the policy in a manner that is appropriate for the permittee. The Department reserves the right to use its discretion to vary from the standards and conditions outlined in this policy when there is a public health and safety issue, environmental emergency or as otherwise appropriate.