
Massachusetts Issues Draft Policy for the Development of Desalination Projects

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In July 2007, the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA) issued for public comment a draft policy on the development of desalination projects (the Draft Policy), along with related siting and monitoring protocols to establish project performance standards and minimum requirements (the Draft Protocols). Under the Draft Policy, desalination project proponents will need to satisfy an array of environmental protection and water and energy conservation requirements before obtaining all required permits. EOEEA will accept comments on the Draft Policy and Draft Protocols until August 10, 2007.

EOEEA developed the Draft Policy and Draft Protocols—in consultation with a working group composed of state and federal agencies, consultants, project developers and nonprofit groups—in response to an increased interest in developing desalination projects in the Commonwealth. The Draft Policy is a logical outgrowth of the [Massachusetts Water Policy of 2004](#), which urged “a clear policy direction for preferred types of water supply development that cause the least environmental impact,” such as desalination. Similar to the Massachusetts Water Policy, the Draft Policy establishes a preference for implementing water conservation measures before developing any new water supply sources. In this regard, the Draft Policy emphasizes that desalination project development should occur only after communities meet the applicable Commonwealth Water Conservation Standards and all other existing supply sources are put to maximum use. EOEEA also intends the Draft Policy and Draft Protocols to provide better predictability in the permitting process for desalination projects.

Draft Policy Principles

Under the Draft Policy, EOEEA states that the proponent of any desalination project should:

- demonstrate compliance with Commonwealth Water Conservation Standards in the community to be served;
- show that other existing water supply practices and sources have been maximized (e.g., via wastewater reuse, stormwater recharge and infiltration/inflow removal);
- explore all other viable sources of water supply, such as additional storage capacity;
- minimize environmental impacts through appropriate siting (e.g., locating intakes and

discharges away from ecologically important areas) and minimizing disruption to affected surface and groundwaters;

- minimize energy consumption;
- co-locate with power or wastewater treatment plants to derive benefit from related discharges (e.g., capture heat from those discharges and use them to dilute project-generated brine discharges);
- consider sizing projects to provide regional benefits (provided that such benefits are not outweighed by problems associated with larger intakes and discharges); and
- adhere to the state’s Smart Growth Principles and follow “tenets of sustainable development.”

Scope of Draft Protocols

The Draft Policy requires project proponents to perform data collection to establish baseline conditions and predict and document impacts, and to implement measures to avoid or minimize impacts. To assist project proponents in complying with this requirement, the Draft Protocols set forth specific performance goals for siting, designing and operating intakes and discharges, as well as minimum requirements for baseline and long-term monitoring and modeling. For example, the Draft Protocols promote the use of substratum (i.e., [beneath coastal sediments](#)) intake systems to eliminate entrainment and impingement; discharges that meet ambient receiving water quality salinity (at the point and time of discharge); specific baseline and long-term monitoring of fish, shellfish, benthic invertebrates, ambient water quality, hydrology and ocean depth (bathymetry); and modeling of plumes and withdrawals.

Other Permitting Requirements

When enacted, the Draft Policy and Draft Protocols will not supersede existing requirements; project proponents also are required to meet all applicable permitting requirements. The Draft Protocols list 30-some potentially applicable legal requirements; as a result, the project development team should consult with experienced counsel early in the project planning process.

In this regard, project proponents should be cognizant of EOEEA’s new Greenhouse Gas (GHG) Emissions Policy, which may require assessment and mitigation of emissions from desalination (and other) projects; the requirements of the Ocean Sanctuaries Act, which may restrict siting options; and the proposed Massachusetts Ocean Act (S.B. 529), which, if passed, would replace the Oceans Sanctuaries Act and potentially establish additional requirements or restrictions on the construction of desalination projects.

For more information on the GHG Emissions Policy, see our July 25, 2007, [email alert](#).

For more information on the origins of the Massachusetts Ocean Act, see our April 14, 2005, [email alert](#).

Conclusion

As technology improves and Massachusetts communities continue to stress potable water supplies, desalination is expected to become a more common strategy that is used by communities and commercial project developers to meet water demands. The development of a statewide policy may influence the extent to which such a strategy may be viable. Because of the potentially significant financial, environmental and social impacts of the Draft Policy and Draft Protocols, entities with affected interests should closely track and participate in the process now underway to develop the final versions of these documents.

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