



## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

November 29, 2005

### **H.R. 1071**

### **Desalination Water Supply Shortage Prevention Act**

*As ordered reported by the House Committee on Resources on November 16, 2005*

#### **SUMMARY**

H.R. 1071 would authorize the appropriation of up to \$200 million over the 2006-2016 period for the Department of Energy (DOE) to subsidize the operating costs of new water desalination projects. Under this bill, DOE would make payments of 62 cents (adjusted annually for inflation) per thousand gallons of desalinated water produced and sold from eligible projects for a period of 10 years. The bill also would authorize the appropriation of a total of \$10 million over the 2006-2016 period for DOE research and development (R&D) on desalination technologies.

Assuming appropriation of the authorized amounts, CBO estimates that implementing this bill would cost \$8 million over the 2006-2010 period and a total of \$201 million after 2010. Enacting H.R. 1071 would have no effect on direct spending or revenues.

H.R. 1071 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments. The bill would benefit water agencies that produce desalinated water by authorizing incentive payments that partially offset their operating costs. Any costs those agencies might face would be incurred voluntarily.

#### **ESTIMATED COST TO THE FEDERAL GOVERNMENT**

The estimated budgetary impact of H.R. 1071 is shown in the following table. The costs of this legislation fall within budget function 270 (energy).

|   | By Fiscal Year, in Millions of Dollars |      |      |      |      |
|---|--|------|------|------|------|
|   | 2006                                   | 2007 | 2008 | 2009 | 2010 |
| <b>CHANGES IN SPENDING SUBJECT TO APPROPRIATION</b> |  |      |      |      |      |
| Subsidy for Desalination Plants <sup>a</sup>        |  |      |      |      |      |
| Estimated Authorization Level                       | 0                                      | 0    | 50   | 50   | 50   |
| Estimated Outlays                                   | 0                                      | 0    | 0    | 0    | 5    |
| Research and Development                            |  |      |      |      |      |
| Estimated Authorization Level                       | 0                                      | 1    | 1    | 1    | 1    |
| Estimated Outlays                                   | 0                                      | *    | 1    | 1    | 1    |
| Total Changes                                       |  |      |      |      |      |
| Estimated Authorization Level                       | 0                                      | 51   | 51   | 51   | 51   |
| Estimated Outlays                                   | 0                                      | *    | 1    | 1    | 6    |

Note: \* = Less than \$500,000.

a. Most of the authorized cost for this activity would occur after 2010.

## **BASIS OF ESTIMATE**

For this estimate, CBO assumes that the bill will be enacted in fiscal year 2006 and that the authorized amounts will be appropriated as necessary to implement the subsidy and R&D programs. The cost estimate assumes that the \$10 million authorized for R&D by DOE would be spread evenly over the 2007-2016 period.

CBO expects that the subsidies authorized by the bill would facilitate the financing of desalination projects. Thus, we anticipate that DOE would obligate funds for the subsidies when a project's financing is arranged, which is likely to occur after sponsors complete the planning and permitting process but before the facility is built. Although several projects are on the drawing boards in California, Florida, Texas, and other states, it is unclear how many projects would secure financing by 2010. Given the lead times needed for planning and permitting a desalination project, CBO expects that DOE would not begin obligating funds for the subsidies until 2008.

Most of the projects currently under consideration would range in size from about 10 million to 25 million gallons per day, with output likely range from 50 percent to 90 percent of the design capacity. At 62 cents per thousand gallons (adjusted annually for inflation), CBO estimates the cost of subsidizing a project with a daily capacity of 25 million gallons for 10 years would total about \$50 million. For this estimate, CBO assumes that three such

projects would be approved over the 2008-2010 period, one in each of those fiscal years. CBO estimates that the remaining \$50 million in subsidies would be obligated after 2010.

DOE would not make any payments from this subsidy program until a plant actually produced and sold desalinated water. Because the construction and initial testing of such facilities typically takes two or three years, most of the outlays for this program would occur after 2010.

## **INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT**

H.R. 1071 contains no intergovernmental or private-sector mandates as defined in UMRA and would impose no costs on state, local, or tribal governments. The bill would benefit water agencies that produce desalinated water by authorizing incentive payments that partially offset their operating costs. Any costs those agencies might face would be incurred voluntarily.

### **ESTIMATE PREPARED BY:**

Federal Costs: Kathleen Gramp

Impact on State, Local, and Tribal Governments: Lisa Ramirez-Branum

Impact on the Private Sector: Craig Cammarata

### **ESTIMATE APPROVED BY:**

Peter H. Fontaine

Deputy Assistant Director for Budget Analysis