



- Board of Directors
Communications and Legislation Committee

10/11/2011 Board Meeting

8-7

Subject

Express support for H.R. 2664 (Napolitano, D-CA) - Reauthorization of Water Desalination Act of 2011

Description

United States Representative Grace Napolitano has introduced legislation that reauthorizes funding for brackish groundwater desalination research. Introduced as H.R. 2664, the “Reauthorization of Water Desalination Act of 2011” ([Attachment 1](#)), the bill authorizes the Department of Interior (Interior) to operate demonstration facilities and implement a \$35-million research program over the next five years. Objectives of the research include increasing national water supplies by improving groundwater desalination technology and reducing costs. Potential benefits to Metropolitan and its member agencies include access to valuable research and grant opportunities.

Background

Brackish groundwater desalination is an important water supply resource for Southern California. Metropolitan supports brackish and ocean water development through Local Resource Program incentive programs and has invested more than \$95 million in member agency projects. In 2010, the region produced 100,000 acre-feet of desalinated and recovered groundwater supplies. The 2010 Integrated Resources Plan includes groundwater desalination as a core local supply as well as a potential buffer supply. Groundwater desalters also help clean up groundwater basins and improve the region’s overall salinity balance by removing salt from the water supply.

Barriers to brackish groundwater desalination include energy use, brine disposal, and related costs. Groundwater desalting technologies, such as reverse osmosis, are energy intensive and generate concentrated brine. Brine disposal in inland areas can limit development, requiring costly solutions such as brine lines. While coastal desalters may have the option of using nearby ocean outfalls, potential changes to California’s discharge regulations could impact overall disposal costs. Improved desalination and brine disposal minimization technologies could help increase brackish groundwater supply development in the region and reduce costs of such supplies.

To support desalination research, Congress enacted the Water Desalination Act of 1996. The 1996 Act authorized Interior to engage in various types of desalination studies, economic analyses, and demonstration projects. It also authorized \$50 million over five years to carry out the research and manage related facilities. Over 130 projects have been funded under the Act, including 38 in California and several studies by Metropolitan member agencies. Consistent with the 1996 Act, in 2004 Interior was authorized to construct and operate the Brackish Groundwater National Desalination Research Facility (BGNDR) in New Mexico. The BGNDR facility is now operational with active demonstration studies and research.

Legislative Analysis

The legislation reauthorizes Interior to operate brackish groundwater desalination research facilities and to perform related studies and demonstration projects. It dictates the following activities:

- Integrate renewable energy technologies with desalination technologies. This is identified as a priority in the legislation.
- Conduct research into new and improved desalination technologies.
- Demonstrate cost-effective and environmentally sound methods for brine reduction and disposal.
- Foster research partnerships with states, universities, public agencies, and other stakeholders.
- Implement a public outreach program.

H.R. 2664 reauthorizes Interior's funding levels for research activities at \$7 million per year from 2012 to 2016. This amounts to \$35 million over the next five years. Interior may also enter into contracts or agreements with other entities to assist in managing its research activities.

Impacts to Metropolitan

The legislation provides much needed funding for brackish groundwater desalination research. Metropolitan and its member agencies would benefit in the short-term from opportunities to participate in demonstration projects and related studies. Longer-term benefits include potential reductions in energy requirements, new desalination technologies, lower costs, improved brine disposal methods, and increased public acceptance of groundwater desalination. Similar goals were identified in Metropolitan's 1999 Salinity Management Plan, as well as in the Bureau of Reclamation's 2009 Southern California Brine-Concentrate Management Study.

Staff Recommendation

Based on the potential benefits to Metropolitan and the region, staff recommends support for H.R. 2664.

Policy

This action is supported by the following board-approved policies:

By Minute Item 48449 dated October 12, 2010, the Board adopted the 2010 Integrated Resources Plan Update.

By Minute Item 47049 dated April 10, 2007, the Board authorized Metropolitan's regional facilitator role to address local projects.

By Minute Item 44356, dated February 13, 2001, the Board adopted Brackish and Seawater Desalination Policy Principles.

By Minute Item 43512, dated April 13, 1999, the Board authorized the General Manager to implement the Salinity Action Plan

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, where it can be seen with certainty that there is no possibility that the proposed action in question may have a significant effect on the environment, the proposed action is not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed action is not subject to CEQA pursuant to Sections 15378(b)(2) and 15061(b)(3) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination and authorize the General Manager to express Metropolitan's support for H.R. 2664.

Fiscal Impact: No direct impact. Metropolitan and its member agencies could benefit from grant funding or entering partnerships for demonstration projects. Matching funds would be required for any grants or partnerships Metropolitan participates in.

Business Analysis: The research activities proposed in H.R. 2664 have the potential for removing barriers to groundwater desalination implementation by decreasing costs and increasing public acceptance.

Option #2

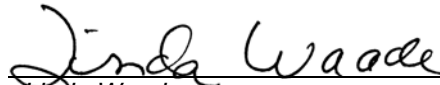
Take no position on H.R. 2664 at this time.

Fiscal Impact: No direct impact

Business Analysis: Metropolitan and the member agencies may miss opportunities to participate in groundwater desalination research projects. Expanded regional implementation of groundwater desalination may be delayed if research into improved treatment and disposal technologies is not funded.

Staff Recommendation

Option #1


Linda Waade
Deputy General Manager, External Affairs

10/3/2011
Date


Jeffrey Knightlinger
General Manager

10/3/2011
Date

Attachment 1 – H.R. 2664

Ref# ea12614529

112TH CONGRESS
1ST SESSION

H. R. 2664

To reauthorize the Water Desalination Act of 1996, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 27, 2011

Mrs. NAPOLITANO introduced the following bill; which was referred to the Committee on Natural Resources, and in addition to the Committee on Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To reauthorize the Water Desalination Act of 1996, and
for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Reauthorization of
5 Water Desalination Act of 2011”.

6 **SEC. 2. WATER DESALINATION ACTIVITIES.**

7 (a) IN GENERAL.—The Secretary of the Interior (re-
8 ferred to in this section as the “Secretary”) shall operate,
9 manage and maintain facilities to carry out research, de-

1 velopment, and demonstration activities to develop tech-
2 nologies and methods that promote brackish groundwater
3 desalination as a viable method to increase water supply
4 in a cost-effective manner.

5 (b) OBJECTIVES; ACTIVITIES.—

6 (1) OBJECTIVES.—The Secretary shall conduct
7 demonstration projects—

8 (A) to develop new water and energy tech-
9 nologies with widespread applicability; and

10 (B) to create new supplies of usable water
11 for municipal, agricultural, industrial, or envi-
12 ronmental purposes.

13 (2) ACTIVITIES.—In operating, managing, and
14 maintaining the facilities under subsection (a), the
15 Secretary shall carry out—

16 (A) as a priority, the development of re-
17 newable energy technologies for integration with
18 desalination technologies—

19 (i) to reduce the capital and oper-
20 ational costs of desalination;

21 (ii) to minimize the environmental im-
22 pacts of desalination; and

23 (iii) to increase public acceptance of
24 desalination as a viable water supply proc-
25 ess;

1 (B) research regarding various desalination
2 processes, including improvements in reverse
3 and forward osmosis technologies;

4 (C) the development of innovative methods
5 and technologies to reduce the volume and cost
6 of desalination concentrated wastes (including
7 the disposal of desalination concentrated
8 wastes) in an environmentally sound manner;

9 (D) an outreach program to create part-
10 nerships with States, academic institutions, pri-
11 vate entities, local public agencies, and other
12 appropriate organizations to conduct research,
13 development, and demonstration activities, in-
14 cluding the establishment of rental and other
15 charges to provide revenue to help offset the
16 costs of operating and maintaining the facility;
17 and

18 (E) an outreach program to educate the
19 public on—

20 (i) desalination and renewable energy
21 technologies; and

22 (ii) the benefits of using water in an
23 efficient manner.

24 (c) AUTHORITY OF SECRETARY.—The Secretary may
25 enter into contracts or other agreements with, or make

1 grants to, appropriate entities to manage, operate, or oth-
2 erwise carry out this section, including an agreement with
3 a local or regional academic institution or a consortium
4 of institutions to manage research activities.

5 (d) REAUTHORIZATION.—Section 8 of the Water De-
6 salination Act of 1996 (42 U.S.C. 10301 note; Public Law
7 104–298) is amended—

8 (1) in subsection (a), in the first sentence, by
9 striking “2011” and inserting “2016”; and

10 (2) in subsection (b), by striking “\$25,000,000
11 for fiscal years 1997 through 2011” and inserting
12 “\$2,000,000 for each of fiscal years 2012 through
13 2016”.

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