

- **Board of Directors**
  - Water Planning and Resources Committee**
  - Budget and Finance Committee**

June 13, 2000 Board Meeting

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**9-6**

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**Subject**

Implementation of the Hayfield/Chuckwalla Groundwater Storage Program and Appropriation of Funds

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**Description**

In June 1998, your Board authorized funding of \$2.2 million for feasibility studies and a demonstration project for the Hayfield/Chuckwalla Groundwater Storage Program (Program), Appropriation No. 15325. The feasibility studies and demonstration project will continue into fiscal year 2000-2001. Approximately 60,000 acre feet of CRA supplies have been delivered into the Hayfield groundwater basin to date under the demonstration project. This Program, along with the other Colorado River conservation, storage, and transfer projects, will assist Metropolitan in meeting the objectives of the October 15, 1999 *Key Terms for Quantification Settlement Among the State of California, IID, CVWD, and MWD* and the May 11, 2000 draft documents, *California's Colorado River Water Use Plan* issued by the Colorado River Board of California.

The Program is located along the CRA adjacent to Metropolitan's Hinds Pumping Plant near Chiriaco Summit in Riverside County. Metropolitan currently owns approximately 8,000 acres in the Hayfield Valley. The valley is underlain by a subterranean aquifer. This aquifer currently contains over 2,000,000 acre-feet of native water with the capacity to store an estimated additional 800,000 acre-feet of CRA water.

This request is for appropriation of an additional \$7.375 million for completion of the following items as shown on [Attachment 1](#):

1. Appropriate \$7,375,000 for Hayfield Valley Land Acquisition/Exchange, environmental documentation as required, water quality sampling analysis, maintenance, monitoring and permitting as needed, preliminary design and additional Chuckwalla Basin feasibility studies;
2. Authorize the General Manager to initiate discussions with Southern California Edison regarding terms and conditions of a Load-shed Agreement;
3. Authorize the General Manager to initiate application to the California Department of Health Services for a source water permit;
4. Authorize storage of an additional 800,000 acre feet of CRA water when available in the Hayfield groundwater basin;
5. Authorize the General Manager to apply to the Department of Water Resources for additional funds available for this Program under California Water Code, Section 12560, et seq. and Proposition 13; and
6. Authorize the General Manager to enter into an interagency agreement with the Coachella Valley Mosquito and Vector Control District for mosquito and midge control near the Hinds Pumping Plant, and other operations and maintenance work as needed.

This appropriation would bring the total appropriation for the Program to \$14.2 million. Staff will return upon completion of preliminary design for appropriation of the additional amount needed for final design, construction and full implementation of the Hayfield Project.

A final Hayfield Project would consist of facilities needed to store and recover water including, 130 acres of spreading basins, 50 to 55 water wells, 10 miles of pipelines, land, and associated power, telecommunications and monitoring facilities. The estimated cost of the Hayfield Project is \$67,650,000 as shown in [Attachment 2](#). Cost estimates for a Chuckwalla Basin Project will be developed during the feasibility study for that proposed project.

**Policy**

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Existing: Pursuant to Section 5108 of the Administrative Code, no expenditure shall be made unless appropriation has been approved by the Board for the purpose intended.

**Board Options/Fiscal Impacts**

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**Option #1**

Approve implementation of the Program and appropriate partial Program funding but defer final design appropriation until the land exchange is completed;

**Fiscal Impact:** \$7,375,000 for Fiscal Years 2000-2003

Deferring final design for the Hayfield Project may result in increased total project costs.

**Option #2**

Approve implementation of the Program and appropriate partial Program funding but defer land purchase and final design on the Hayfield Project and Chuckwalla Basin feasibility studies;

**Fiscal Impact:** \$4,250,000 for Fiscal Years 2000-2003

1. Deferring land purchase and final design for the Hayfield Project may result in increased total project costs.

**Option #3**

Take no action.

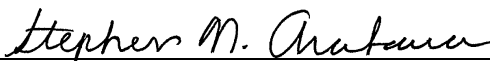
**Fiscal Impact:** \$0

1. Potential lost opportunity of available State General Funds under California Water Code, Section 12560, et seq. and Proposition 13 for this Program;
2. Potential reduced CRA system reliability;
3. Potential lost opportunity to store surplus Colorado River water under California's Colorado River Water Use Plan; and
4. Potential loss of up to \$500,000 per year under a proposed Load-shed Agreement with Southern California Edison.

**Staff Recommendation**

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Option #1.

  
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 Stephen N. Arakawa  
 Acting Manager, Water Resource Management

5/31/2000  
Date

  
 \_\_\_\_\_  
 General Manager

5/31/2000  
Date

[Attachment 1](#)

[Attachment 2](#)

**Table 1**

**Hayfield/Chuckwalla Groundwater Storage Program  
Estimate for Studies and Design**

Item	Quantity	Unit	Unit Cost	Cost Estimate
Hayfield Additional Aquifer Test	1	Lump Sum	\$500,000	\$500,000
Monitoring, maintenance		Lump Sum	\$1,325,000	\$1,325,000
Land Acquisition/Exchange	1	Lump Sum	\$1,500,000	\$1,500,000
Preliminary Engineering, Legal, Admin				\$ 925,000
Land Purchase	7500	Acres	\$150	\$1,125,000
Final Engineering, Legal, Admin				\$4,625,000
Hayfield Project Subtotal				\$10,000,000
Chuckwalla Feasibility Study	1	Lump Sum	\$2,000,000	\$2,000,000
<b>TOTAL</b>				<b>\$12,000,000</b>

**FUNDING REQUEST**

<b>Program Name:</b> Hayfield/Chuckwalla Groundwater Storage Program			
<b>Source of Funds:</b> General Fund			
<b>Appropriation No.:</b> 15325	<b>Board Action No.:</b> 2	<b>Budget:</b> \$9,575,000	
<b>Requested Amount:</b> \$7,375,000	<b>Capital Program No.:</b> N/A		
<b>Total Appropriated Amount:</b> \$9,575,000	<b>Capital Program Page No.:</b> N/A		
<b>Total Program Estimate:</b> \$67,650,000	<b>Program Category:</b> Supply and delivery reliability		

**Table 2****Hayfield Groundwater Storage Project  
Cost Estimate**

<b>Item</b>	<b>Cost Estimate</b>
Hayfield Feasibility Study	\$2,700,000
Monitoring, maintenance	\$1,325,000
Property	\$1,125,000
Property Acquisition Cost	\$1,500,000
Spreading Facilities	\$2,698,000
Water wells	\$29,973,000
Piping	\$10,790,000
Electrical and Controls	\$11,989,000
<b>Subtotal</b>	<b>\$62,100,000</b>
Engineering, Legal, Admin	\$5,550,000
<b>TOTAL</b>	<b>\$67,650,000</b>