Statement of Desi Alvarez
Deputy City Manager, City of Downey, California
In support of H.R. 1738
Before the House Committee on Natural Resources,
Subcommittee on Water and Power
July 21, 2009

Introduction

Madame Chair and Honorable Members of the Committee, my name is Desi Alvarez, and I am the Deputy City Manager of the City of Downey, California. On behalf of the City of Downey, I'd like to express our gratitude to Congresswoman Roybal-Allard for introducing this legislation and to Chairwoman Napolitano for co-sponsoring the bill. I'd also like to publicly thank all of the cities that have written letters in support of this project, which is vital to the City of Downey and, we believe, to the region as a whole. I appreciate the opportunity to testify on HR 1738, the Downey Regional Water Reclamation and Groundwater Augmentation Project and to answer any questions you may have.

The proposed legislation is associated with the construction of a water treatment and groundwater storage facility that will dramatically improve water supply and water reliability in Southeast Los Angeles County. The Downey Regional Water Reclamation and Groundwater Augmentation Project will ensure a local, reliable, safe, cost-effective and energy-efficient source of drinking water for five cities and nearly 450,000 people. Eliminating dependence on expensive imported water from the vulnerable Sacramento-San Joaquin Delta is of utmost importance, environmentally and economically, and that is why the City of Downey has proposed to build this regional project. The ability to treat recycled water and store it in the groundwater basin directly enhances the region's drinking water reliability and security. Furthermore, in these tough economic times, this project provides tangible benefits to the region before the project is completed, through the creation of approximately 648 jobs.

Project Need

The Cities of Cerritos, Downey, Norwalk, Pico Rivera, and South Gate are located in the Central Groundwater Basin in Southeast Los Angeles County and rely on water pumped from the Basin to meet the majority of their potable water needs. The combined population of the five cities is approximately 450,000, with a current demand of nearly 50 million gallons of water per day. The cities' reliance on groundwater supply is economically preferable and would be sustainable, except that the amount of water each city can pump in any given year is limited by the sustainable yield of the basin, which limits each city's extraction rights. Since annual potable water demands are currently greater than each city's extraction rights, any increase in water demand will further stress the already tight water situation.

Presently, the difference between the allowable extractions from the Basin and the greater water demands leaves cities dependent on using imported water, the main source being from Northern California through the Sacramento-San Joaquin Delta (Delta), a less than viable long-term

solution for providing water to the region. Increasing populations throughout the Central Groundwater Basin have led to increased water demand overall. Importing Northern California water, which must be moved through the Sacramento-San Joaquin Delta, is an unfavorable option due to the high cost; unreliability as a long-term source of water; excessive carbon footprint and energy usage resulting from pumping water up the 8,000 foot Tehachapi Mountains; and adverse impacts on the ecosystem of the Delta, of which this subcommittee is well aware, based on the proceedings of the CalFed Bay Delta Program.

Thus, the alternative of providing for water needs with a local, sustainable, reliable water supply from highly treated recycled water is highly desirable. This alternative capitalizes on two local and underutilized resources: the dewatered space in the Central Groundwater Basin and the millions of gallons of unused recycled water produced each year by the County Sanitation Districts of Los Angeles County. Treating the locally-produced recycled water and storing it through the use of groundwater injection wells will augment the water supply available to pumpers in the Central Groundwater Basin. It also enhances the quality of the groundwater, as in many cases the extensively treated recycled water has fewer total dissolved solids (TDS) than the water naturally occurring in the Basin. Furthermore, this Project is consistent with the California Water Plan Update, which promotes regional water supply diversification and increased use of recycled water.

Project Description

The Downey Regional Water Reclamation and Groundwater Augmentation Project would provide advanced treatment of recycled water for injection and storage in the Central Groundwater Basin. Product water capacity of the advanced recycled water treatment plant will produce five million gallons per day of net new potable water which would be injected into the groundwater basin for extraction by participating Cities via regular groundwater pumping wells.

The project will be built at the City of Downey's Utilities Yard, selected because it is located near an existing recycled water transmission main, has space available to house the facility, and has an existing five million gallon storage tank which will be dedicated to the project. A new 18-inch influent recycled water pipeline will be constructed (see Figure 1. Project Area Map) to connect the existing recycled water transmission main at Firestone Boulevard and the San Gabriel River to the new treatment plant at the Utilities Yard. The influent pipeline would convey tertiary treated recycled water from the County Sanitation District's Los Coyotes Water Reclamation Plant to the proposed advanced water treatment plant. Physical components of the advanced treatment plant include an influent tank, an inter-process storage tank, pump stations, filters, and strainers and process streams and pipelines (see Table 1. Project Components). The recycled water would be further filtered with microfiltration and ultrafiltration membranes; treated with a reverse osmosis system; and disinfected using ultraviolet light with hydrogen peroxide treatment.

The resulting high-purity reclaimed water would then be introduced into the Central Groundwater Basin through three aquifer storage and recovery wells. Following injection, the stored water would be available for extraction to augment the local water supply.

Project Benefits

The Downey Regional Water Reclamation and Groundwater Augmentation Project has environmental, water security, and economic benefits on a local, regional and national level (summarized in Table 2. Project Benefits). The project is consistent with state and federal objectives that aim to reduce reliance on water imported from the Delta, to promote regional water supply diversification and to increase the use of recycled water. Augmenting the water supply so that local water is more available than imported water reduces reliance on the Delta and "drought-proofs" the local water supply.

The use of local water supplies will also reduce energy consumption and greenhouse gas production because local water, unlike imported water, does not need to be pumped up and over the 8,000 foot Tehachapi Mountains. Another environmental benefit of the project is an improvement in water quality in the San Gabriel River and in the Central Groundwater Basin because the production of ultra-high quality recycled water through treatment with reverse osmosis will result in reduced total dissolved solid contaminant levels. Finally, this project will benefit the local, state, and national economy through the creation of approximately 648 jobs resulting from increased construction (direct), manufacturing (indirect), and consumer spending (indirect) labor (based on the IMPLAN Model Input/Output Data from the Los Angeles County Economic Roundtable).

CONCLUSION

On behalf of the Cities of Cerritos, Norwalk, Pico Rivera, and South Gate, the City of Downey is requesting support for HR 1738, which authorizes funds for the design and construction of a five million gallon-per-day advanced recycled water treatment plant with groundwater storage wells. The Downey Regional Water Reclamation and Groundwater Augmentation Project is essential to ensure the sustainability of the Cities' drinking water supplies. The participating cities and the Southeast Water Coalition actively support this project. The City of Downey has invested significant time and funds in preparation of this project, and is ready to proceed with project implementation, pending completion of final plans and specifications. It is anticipated that the environmental impact report could be completed by the end of September 2010, a construction contract could be awarded by October of 2011, and project close-out could be completed by September 2013.

In light of the numerous economic, environmental, and regulatory benefits the Downey Regional Water Reclamation and Groundwater Augmentation Project affords the Central Groundwater Basin in Los Angeles County, I ask for your continued support of this important legislation.

I thank the committee and you, Madame Chair, for your time and your consideration.

Tables

Table 1. Project Components

Influent Tank	RO System
MF Feed Pump Station and Autostrainers	Advanced Oxidation (UV/H_2O_2) Process
MF System	Product Water Pump Station
Inter-Process Storage Tank	Chemical Storage and Feed Systems
RO Transfer Pump Station and Cartridge Filters	Process Waste Streams
RO Feed Pump Station	Process Pipelines

Table 2. Project Benefits

CATEGORY	BENEFIT
Environmentally Friendly	Reduced energy footprint and effects on the environment vs. other potential water supplies (i.e. imported water)
	Reduced greenhouse gas emissions vs. other potential water supplies (i.e. imported water)
Water Supply Reliability	Long-term water supply reliability ("drought-proof" supply) to the Cities' population
	Protects against potential disruptions in SWP and CR imported water supplies due to earthquakes, mandatory use restrictions, or other emergencies
Water Quality	Reduced TDS levels in the San Gabriel River and Central Groundwater Basin due to production of ultra high quality recycled water via treatment with RO
Sensitivity to SWP and CR Imported Water Supplies	Reduced reliance on SWP and CR imported water
Regional O&M Costs	Reduced pumping costs to purveyors in surrounding area due to increased groundwater levels
Consistency with State and Federal Objectives	Consistent with California Water Plan Update, which promotes regional water supply diversification and increased use of recycled water
	Creation of new jobs from increased direct (construction), indirect (manufacturing), and induced (consumer spending) labor
Regional Objectives	Available to interested purveyors in the Central Groundwater Basin
	Assists regional groundwater replenishment operations by making the Central Groundwater Basin more dependable
	Basis for future groundwater storage projects in the region

Table 3. Summary of Project Costs
(Cost estimates for design and installation of the treatment plant and associated piping are based on a feasibility study completed by Black and Veatch Consulting Engineers in December 2008 and using cost from similar projects.)

Contractual	Cost
• General Conditions	$1.36M
• Overall Site Work and Miscellaneous	$3.51M
• Influent Recycled Wastewater Pipeline	$1.40M
• Influent Tank (Rehabilitation)	$0.33M
• MF Feed Pump Station/Autostrainers	$0.80M
• Chemical Feed Facilities (MF Process)	$0.43M
• MF CIP	$1.46M
• RO CIP	$0.82M
• RO Cartridge Filters	$0.31M
• RO Flash Pumps	$0.70M
• RO Feed Pumps	$1.49M
• RO Membrane Building	$10.24M
• Waste Equalization Tank, Pump Station, and Strainer Backwash Sump	$0.66M
• Inter-Process Storage Tank	$0.84M
• RO Transfer/MF Backwash Pump Station	$0.70M
• Chemical Feed Facilities (RO Process)	$0.34M
• Ultraviolet/Hydrogen Peroxide (UV/H_2O_2) Disinfection	$5.75M
• Product Water Pump Station	$0.90M
• Instrumentation and Control (I&C) Installation	$0.18M
• Pipe Supports	$0.13M
• Miscellaneous Fittings and Small Piping	$0.13M
Subtotal	**$32.48M**
• 15% Contingency	$4.87M
Total	**$37.35M**

Table 4. Project Schedule

Complete Environmental Impact Report	September 2010
Complete Construction Documents	March 2011
Advertise Bid and Award Project	October 2011
Begin Construction	January 2012
Complete Construction	May 2013
Plant Start-Up and Trouble Shooting	August 2013
Project close-out and final reports	September 2013

Figure 1. Project Area Map

CITY OF CERRITOS

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OFFICE OF THE MAYOR
BRUCE W. BARROWS

July 16, 2009

The Honorable Grace Napolitano
Chairwoman, Subcommittee on Water and Power
House Committee on Natural Resources
United States House of Representatives
1234 Longworth House Office Building
Washington, D.C. 20515

Re: H. R. 1738 – Downey Regional Water Reclamation and Groundwater Augmentation

Dear Congresswoman Napolitano:

On behalf of the City of Cerritos, we would like to express our support for HR 1738, the Downey Regional Water Reclamation and Groundwater Augmentation Project. This project will create an energy-efficient, environmentally friendly, highly reliable supplemental water supply serving the cities in the Central Groundwater Basin of Los Angeles County.

The proposed legislation would provide funding for the construction of a water treatment and groundwater storage facility that will dramatically improve water supply and water reliability in the cities of Cerritos, Downey, Norwalk, Pico Rivera and South Gate. Eliminating dependence on expensive imported water from the vulnerable Sacramento-San Joaquin Delta is of utmost importance, environmentally and economically, and that is why the City of Downey has proposed to build this regional project. The ability to treat recycled water and store it in the currently-underutilized Central Groundwater Basin directly enhances the region's drinking water reliability and security. Furthermore, in these tough economic times, this project provides tangible benefits to the region before the project is completed, through the creation of approximately 648 new jobs.

Although the City of Cerritos has had a tertiary water system for many years, this water can only be used for irrigation purposes which is distributed within a closed system to water medians, parks, schools and other public facilities. The proposed Downey Regional Water Reclamation and Groundwater Augmentation Project will process and inject reclaimed wastewater into the aquifer which will meet the standards of the Department of Public Health for drinking water. Therefore, there is no duplication of efforts with regards to the two methods of processing the reclaimed wastewater, as the final products are for two distinctly different uses.

On behalf of the City of Cerritos, we urge your support for HR 1738.

Sincerely,

Bruce W. Barrows
MAYOR

cc Desi Alvarez, City of Downey

City of Downey

FUTURE UNLIMITED

July 16, 2009

Representative Grace Napolitano, Chairwoman
Subcommittee on Water and Power
House Committee on Natural Resources
US House of Representatives
1234 Longworth House Office Building
Washington, D.C. 20515

Re: H. R. 1738 – Downey Regional Water Reclamation and Groundwater Augmentation

Dear Representative Napolitano:

The City of Downey fully supports HR 1738, the Downey Regional Water Reclamation and Groundwater Augmentation Project. This critical project will create an energy-efficient, environmentally friendly, highly reliable supplemental water supply serving the cities in the Central Groundwater Basin of Los Angeles County.

The proposed legislation would provide funding for the construction of a water treatment and groundwater storage facility that will dramatically improve water supply and water reliability in the cities of Cerritos, Downey, Norwalk, Pico Rivera and South Gate. Eliminating dependence on expensive imported water from the vulnerable Sacramento-San Joaquin Delta is of utmost importance, environmentally and economically, and that is why the City of Downey has proposed to build this regional project. The ability to treat recycled water and store it in the Central Groundwater Basin directly enhances the region's drinking water reliability and security. Furthermore, in these tough economic times, this project provides tangible benefits to the region before the project is completed, through the creation of approximately 648 new jobs

As mayor of the City of Downey, I strongly urge your support for HR 1738.

Sincerely,

Dn. Mario A. Guerra

Mario A. Guerra
Mayor

MAG:sdl

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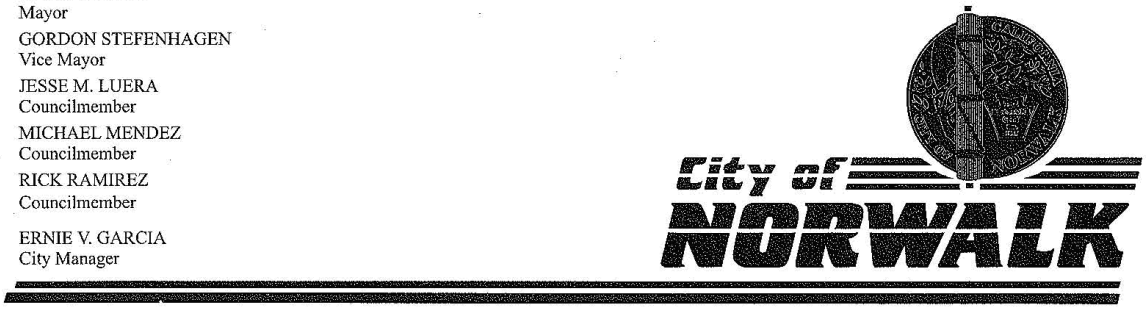

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July 16, 2009

Rep. Grace Napolitano, Chairwoman
Subcommittee on Water and Power
House Committee on Natural Resources
US House of Representatives
1234 Longworth House Office Building
Washington, D.C. 20515

Re: H. R. 1738 – Downey Regional Water Reclamation and Groundwater Augmentation

Dear Rep. Napolitano:

On behalf of the City of Norwalk, I would like to express my support for HR 1738, the Downey Regional Water Reclamation and Groundwater Augmentation Project. This project will create an energy-efficient, environmentally friendly, highly reliable supplemental water supply serving the cities in the Central Groundwater Basin of Los Angeles County.

The proposed legislation would provide funding for the construction of a water treatment and groundwater storage facility that will dramatically improve water supply and water reliability in the cities of Cerritos, Downey, Norwalk, Pico Rivera and South Gate. Eliminating dependence on expensive imported water from the vulnerable Sacramento-San Joaquin Delta is of utmost importance, environmentally and economically, and that is why the City of Downey has proposed to build this regional project. The ability to treat recycled water and store it in the currently-underutilized Central Groundwater Basin directly enhances the region's drinking water reliability and security. Furthermore, in these tough economic times, this project provides tangible benefits to the region before the project is completed, through the creation of approximately 648 new jobs

On behalf of the City of Norwalk, I urge your support for HR 1738.

Sincerely,

Cheri Kelley
Mayor

City of South Gate
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July 16, 2009

Rep. Grace Napolitano, Chairwoman
Subcommittee on Water and Power
House Committee on Natural Resources
US House of Representatives
1234 Longworth House Office Building
Washington, D.C. 20515

Re: H. R. 1738 – Downey Regional Water Reclamation and Groundwater Augmentation

Dear Rep. Napolitano:

On behalf of the City of South Gate, I would like to express my support for HR 1738, the Downey Regional Water Reclamation and Groundwater Augmentation Project. This project will create an energy-efficient, environmentally friendly, highly reliable supplemental water supply serving the cities in the Central Groundwater Basin of Los Angeles County.

The proposed legislation would provide funding for the construction of a water treatment and groundwater storage facility that will dramatically improve water supply and water reliability in the cities of Cerritos, Downey, Norwalk, Pico Rivera and South Gate. Eliminating dependence on expensive imported water from the vulnerable Sacramento-San Joaquin Delta is of utmost importance, environmentally and economically, and that is why the City of Downey has proposed to build this regional project. The ability to treat recycled water and store it in the currently-underutilized Central Groundwater Basin directly enhances the region's drinking water reliability and security. Furthermore, in these tough economic times, this project provides tangible benefits to the region before the project is completed, through the creation of approximately 648 new jobs.

On behalf of the City of South Gate, I urge your support for HR 1738.

Sincerely,

Henry C. Gonzalez
Mayor