

APPENDIX I

Water Supply Assessment

**City of Sacramento
SB 610/SB 221 Water Supply Assessment/Certification Form**

This form may be used to complete water supply assessments for projects located in an area covered by the City's most recent Urban Water Management Plan.¹

Project: Delta Shores Planned Unit Development

Date: August 28, 2008

Project Applicant: M & H Realty Partners.

Applicant Contact: David Beauchamp, Water Resources Analyst - PBS&J

Phone Number: 916.782.7275

E-mail: dsbeauchamp@pbsj.com

Address: 1410 Rocky Ridge Drive, Roseville, CA 95661

Project Applicant to fill in the following:

1. Does the project include:

Type of Development	Yes	No
A proposed residential development of 500 or more dwelling units		
A shopping Center employing more than 1,000 persons or having more than 500,000 square feet?		
A Commercial Office building employing more than 1,000 persons or having more than 250,000 square feet?		
A proposed hotel or motel, or both, having more that 500 rooms		
A proposed industrial, manufacturing, or processing plant or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area		
A mixed use project that includes one or more of the projects specified above	YES	
A project that would demand an amount of water equivalent to, or greater than, the water required by a 500 dwelling unit project		

If the answer is no to all of the above, a water supply assessment is not required for the project.

2. Is the projected water demand for the project location included in the City's 2005 Urban Water Management Plan, adopted November 14, 2006?

¹ Note: Please do not use this form if the projected water demand for your project area was not included in the City's latest Urban Water Management Plan. To review the City's Urban Water Management Plan, please visit: <http://www.cityofsacramento.org/utilities/urbanwater/index.html>

Yes: **X** _____

No: _____

If the answer is no, you cannot use this form. Please refer to the requirements of SB 610 for preparing a water supply assessment.

3. Please fill in the project demands below:

Delta Shores* Land Use and Water Demand Summary						
	Acres	DU/acre	Dwelling Units	Water Demand Factor	Average Day Demand (gpd)	Average Acre-Foot Annually
Residential Uses						
High Density Residential^a						
Town Homes/ Attached	64.4	26.99	1738	230 gpd ^e	399,740	448
Mixed-Use Residential	19.9	9.40	187	230 gpd ^e	43,010	48
Medium Density Residential ^a	178.0	14.00	2492	350 gpd ^e	872,200	977
Low Density Residential						
Single Family (5,000 - 7000 sq.ft.lots)	136.9	4.93	675	520 gpd ^e	351,000	393
<i>Subtotal</i>	399.2		5,092		1,665,950	1,866
Commercial^b						
Regional Center	127.4	76.4 acres of water use		2759 gpd/ac	210,898	236
<i>Subtotal</i>	127.4				210,898	236
Parks						
Community Park	26.6			3.89 af/ac/yr ^f	104	104
Neighborhood Parks (8) + (1) mini park	35.1			3.89 af/ac/yr ^f	137	137
Water Feature and Detention Basin ^h	26.8			4.51 af/ac/yr ^f	121	121
Open Space + Trails	28.0			No Irrigation Demand	~	~
Wetland Restoration	27.8			No Irrigation Demand	~	~
<i>Subtotal</i>	144.5				361	362
Public Uses						
Schools	19.9	11.94 Indoor ^c 200 school days		2.5 af/ac/yr ^f	48,633	30
		7.96 Outdoor ^d 200 school days		3.89 af/ac/yr ^f	50,448	31
Community Center	2.6	1.56 Indoor ^c 260 days		2.5 af/ac/yr ^f	4,888	4
		1.04 Outdoor ^d 260 days		3.89 af/ac/yr ^f	5,070	4
<i>Subtotal</i>	22.5				109,040	69
Infrastructure/Quasi Public						
Roadways	84.4	8.44 Street Landscaping ⁱ		3.89 af/ac/yr ^f	29,324	33
Utility Areas	4.1			No Irrigation Demand	~	~
<i>Subtotal</i>	88.5				29,324	33
Subtotal: Land Uses with Water Demands	722.2				1,985,888	2,534
Subtotal: Non-Irrigated Areas ^g	59.9				~	~
TOTALS	782.1				1,985,888	2,534

Notes:

*Project area was included in the City of Sacramento Urban Water Management Plan, Adopted November 14, 2006.

Dwelling Units (DU)

a: High density residential (21+ DU/acre) from Placer County Water Agency IRWP, October 2005.

b: Assumes 60% of gross acreage developed for commercial uses corresponding water demand was assumed for net acreages; Placer County Water Agency (PCWA), Draft Integrated Water Resources Plan, (Brown and Caldwell, 2005).

c: 40% of schools property irrigated areas; PCWA Draft Integrated Water Resources Plan, (Brown and Caldwell, 2005).

d: 60% of total school area water demand; PCWA Draft Integrated Water Resources Plan, (Brown and Caldwell, 2005).

e: Water demand factors from Nolte Engineering with West Yost & Associates, Proposed Water Demand/Wastewater Generation Report, 1994 - Demand values updated in 2005 for SB 610 Water Supply Assessment Analysis;

f: Jim Peifer, Senior Engineer, City of Sacramento Department of Utilities Memorandum to PMC Consultants, December 21, 2005.

g: Non-Irrigated Areas comprise Public Facilities, Roads, Rights-of-Way without landscaping, Open Spaces and Trails.

h: Water feature annual fill requirement based on Evaporation Pan calculation for Sacramento Water Balance. $ET_{0.80} = ET_{pan}$ (Leaching Factor = 0%; Distribution Uniformity = 100%)

i: Assumes 10% of roadway landscaping with irrigation demands.

Source: PBS&J, August 2008

4. Required Elements of Water Supply Assessment (Government Code § 10910)
A. Water supply entitlements, water rights or water service contracts (Gov't Code § 10910(d)):

The City's water supply entitlements, water rights and water service contract are identified and discussed in the Urban Water Management Plan, Chapters 4, 5 and 6.

All infrastructure necessary to deliver a water supply to the project is in place, excepting any distribution facilities required to be constructed and financed by the project applicant: Yes: X No:

- B. Identification of other sources of water supply if no water has been received under City's existing entitlements, water rights or water service contracts (Gov't Code § 10910(e)):

Not applicable.

- C. Information and analysis pertaining to groundwater supply (Gov't Code § 10910(f)):

Addressed by Urban Water Management Plan, Chapters 4, 5 and 6.

Verification of Water Supply

(for residential development of more than 500 dwelling units)

Based on the City's most recent Urban Water Management Plan, are there sufficient water supplies for the project during normal, single dry and multiple dry years over a 20 year period?

Yes:

No:

By: 

Jim Peifer

Title: Senior Engineer

Date: 8/29/08

This box to be filled in by the City

Distribution:

Applicant

Community Development Department (Org: 4913) – Shelly Amrhein
Utilities Department (Org: 3332) - Capital Improvements (Jim Peifer)