QUESTION 17
WATER SUPPLY

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (LETTER DATED JANUARY 14, 2008)

The applicant states that water supply will be provided by the City of Edgewater (Edgewater) in phases I and II and by the City of New Smyrna Beach (NSB) in Phase III. The applicant further mentions that Edgewater has applied for a consumptive use permit (CUP) that takes into account its public water supply service area requirements for this DR1 (page 10-21). Edgewater was issued a CUP on December 11, 2007, that does include an expanded service area for the DRI.

The recently issued St. Johns River Water Management District Consumptive Use Permit includes the proposed service area of Restoration and its associated demand. In addition, the applicant has provided sites for four (4) new potable wells for Edgewater which are also a part of the CUP permit.

The applicant states that it has agreed to provide Edgewater with two sites for potential new water wells (pages 10-7, 10-8, and 17-2). The application for development approval reviewed in October 2006 referenced four well sites (page 17-6). The technical staff report prepared by the District in support of the issuance of Edgewater's CUP relied on the addition of four wells in the DRI project area. The applicant should confirm that four well sites will be provided to Edgewater.

Four well sites will be provided to the City of Edgewater by the Applicant. In addition the Applicant is working with the City of Edgewater in providing sites and funding for the monitoring wells on the Restoration property as required by the SJRWMD CUP.

The applicant advises that NSB has included the necessary water and sewer facilities to service its portion of the project as part of its CUP and updated master utility plan (pages 10-22 and 17-2). NSB was issued a CUP in January 2006, prior to the pre-application charette for this DRI. The November 29, 2006, letter provided by NSB references available water treatment plant and water reclamation facility capacity, not available potable water or reuse water supply. The applicant needs to identify the water source for phase III of the project since NSB's CUP expires prior to implementation of phase III.

This comment is no longer applicable inasmuch as no development approval is requested within the City of New Smyrna Beach Utility Service Area with this revised submittal.

CITY OF EDGEWATER (LETTER DATED JANUARY 11, 2008)

The City's CUP has recently been approved; provide updated data pursuant to said CUP conditions if necessary.

Please see comments from St. Johns River Water Management District above.

CITY OF NEW SMYRNA BEACH (LETTER DATED JANUARY 17, 2008)

Comment 14: **As outlined in our Comment 7.1, in 2007, there was an annual average of 22,765 potable water accounts. The Utilities Commission, City of New Smyrna Beach has a wellfield capacity for 29,667 accounts in 2025. The projects in the service area that are at various levels of approval may bring 6,402 ERUs demanding potable water by 2020. Additionally, the Utilities Commission, City of New Smyrna Beach planned for an increase of average daily demand of only .12 mgd. Therefore, the potable water capacity will likely not be available for the .362 mgd for this project.**

Since the development program now involves the City of New Smyrna Beach during Phase III, the abovementioned analysis is required so that the City has sufficient information to conduct a complete review of the ADA and create a report with recommendations.

The Applicant has noted in other areas of this response the lands located in New Smyrna Beach have been withdrawn from the RI and proposal development plan and program.

VOLUSIA COUNTY GROWTH AND RESOURCE MANAGEMENT (LETTER DATED JANUARY 15, 2008)

Question 17 F. I. and 2., Potable Water Service Provision, p. 17-4: **The DRI ADA application (Question F. 2.) requires that the applicant's response should identify "...required capital improvements, timing, cost, and proposed responsible entity for each phase in which service is unavailable." The applicant has provide the projected demand based on the change to the proposed building program, but not the needed capital improvements, timing, and cost as required by this question.**

There is currently adequate potable water infrastructure available at the southeast corner of the development to accommodate commencement of the project. Extension of existing lines to and through the development will be constructed by the project. Future enhancements to the existing City of Edgewater potable water system are currently being defined and refined by the City of Edgewater. The Applicant has previously expressed and continues its commitment to cooperate with the City in this effort. In that the exact requirements of the City are not yet specifically defined, a specific list of capital improvements is not available. However, we have roughly estimated the potable water infrastructure improvements that will likely occur on-site below:

Water Main Extensions:	$2,400,000.00
New Potable Water Production Wells:	$750,000.00
New Potable Well Monitoring Wells:	$50,000.00
Possible Booster Pump Station:	$450,000.00
	$3,650,000.00

Our expectation is that the watermain extensions and well systems will be completed within 2008 to 2010 and the booster pump station would likely be constructed in approximately 2012 to 2015, if required.

All necessary capital improvements will be completed in conjunction with the City of Edgewater.

Question 17 G., Water Conservation, D. 17-4: **The applicant is commended for its commitment to including water conserving techniques in this project.**

The Applicant is committed to water conservation throughout the DRI project. The commitment to meet or exceed the requirements of most currently practiced energy conservation and Green Building Techniques in both the horizontal development and vertical improvements is further discussed in this DRI/ADA.

Table 17.A-1
Potable/Non-Potable Water Demand for Each Phase of Development
May, 2008

Phase/Land Use	Potable Water Demand (MGD)	Non-Potable Water Demand (MGD)		Total Water Demand (MGD)
		Irrigation	Other	
Phase 1 (2007-2013)				
Single-Family Residential	0.694			0.694
Multifamily Residential	0.161			0.161
Commercial/Retail - General	0.038			0.038
Office	0.030			0.030
Phase 1 Subtotals	**0.923**	**0.810**	**0.000**	**1.733**
Phase 2 (2014-2018)				
Single-Family Residential	0.329			0.329
Multifamily Residential	0.290			0.290
Commercial/Retail - General	0.081			0.081
Office	0.137			0.137
School	0.028			0.028
Phase 2 Subtotals	**0.865**	**0.595**	**0.000**	**1.460**
Phase 3 (2019-2023)				
Multi-family	0.649			0.649
Commercial/Retail - General	0.078			0.078
Office	0.074			0.074
Phase 3 Subtotals	**0.801**	**0.069**	**0.000**	**0.870**
PROJECT TOTALS	**2.589**	**1.474**	**0.000**	**4.063**
Assumptions:				
Potable Water – City of Edgewater				
Irrigation Rates	31	in. per year	2306.3	gpd/acre
	Dev Area (ac)	Irrigable area (ac)	Irrigable %	
Phase 1	1003	351	35	
Phase 2	593	208	35	
Phase 3	85	30	35	
School and Parks Phase 2	99	50	50	

Table 17.B-1
Potable/Non-Potable Water Supply
May, 2008

Phase	On-Site Supply				Off-Site Supply
	Ground-water	Surface Water	Other(Specify)	Total	
Existing					
Phase 1 (2007-2013)				0	
Potable	0.923			0.923	
Non-Potable				0.000	
Irrigation		0.810		0.810	
Other				0.000	
Phase 2 (2014-2018)				0	
Potable	0.865			0.865	
Non-Potable				0.000	
Irrigation		0.595		0.595	
Other				0.000	
Phase 3 (2019-2023)				0	
Potable	0.801			0.801	
Non-Potable				0.000	
Irrigation		0.069		0.069	
Other				0.000	
Project Total	**2.589***	**1.474****		**4.063**	

Notes:
*This water is provided by the City of Edgewater and is expected to be provided via wells sites to be given to the City at which time they will effectively be "off-site".
**Irrigation water to be provided by several sources with reuse stormwater and reclaimed wastewater being the primary sources as discussed in text. Actual breakdown is not available at this time.