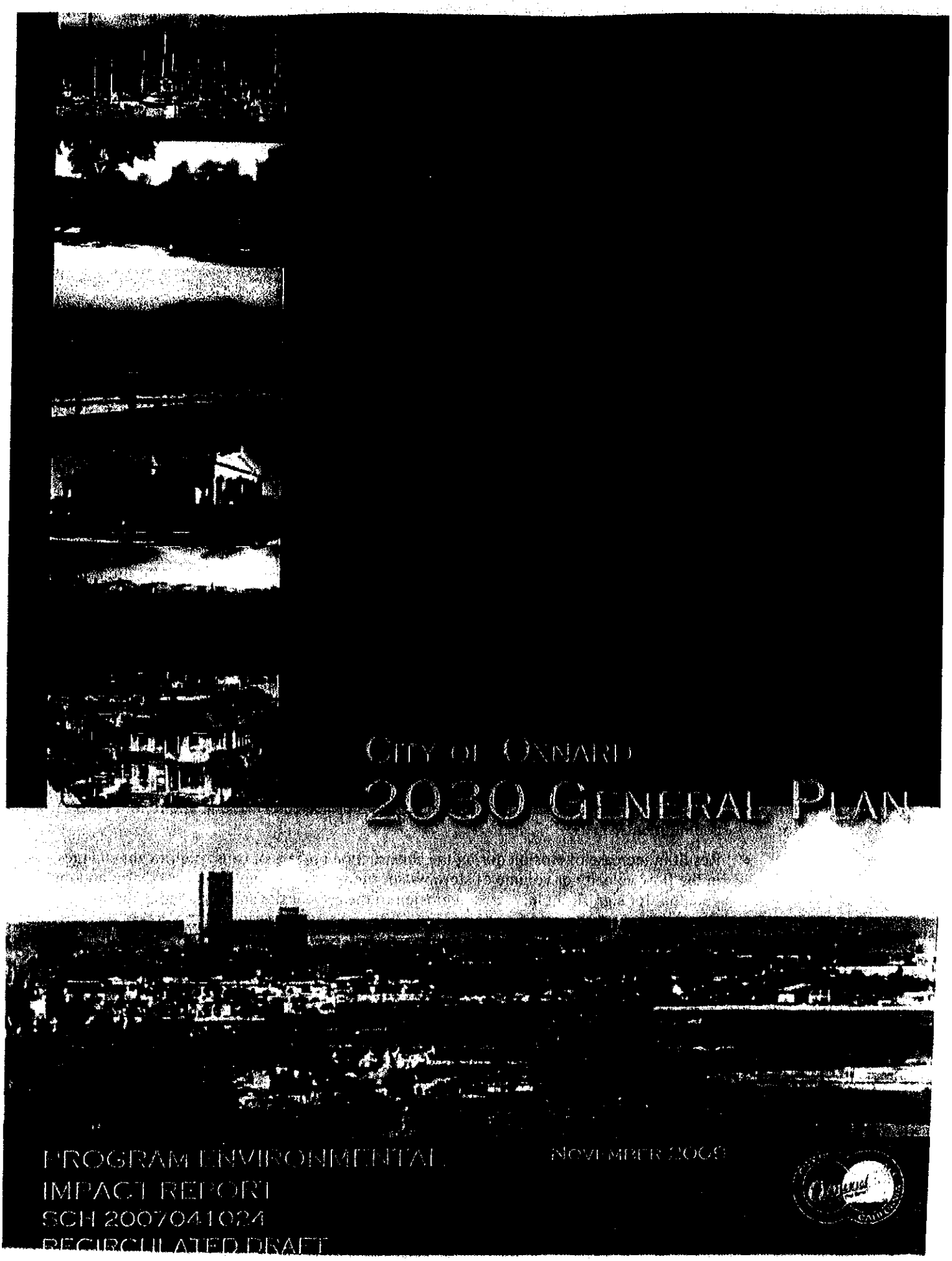
CITY OF OXNARD
2030 GENERAL PLAN
PROGRAM ENVIRONMENTAL
IMPACT REPORT
SCH 2007041024
RECIRCULATED DRAFT
NOVEMBER 2009

Section 4.3 Utilities (Draft PEIR Section)

Impact Methodology

The groundwater and water supply assessment ~~of utilities~~ is based on a water supply/demand analysis prepared for the City that evaluated water supplies and demands developed specifically for growth anticipated under the proposed project. The analysis included reasonably projected water supplies available during normal, single dry and multiple dry water years to the year 2030 and compared them to anticipated water demands for the same time period. This section provides a summary of the water supply and demand projections, with Appendix B (of this recirculated draft PEIR) providing additional detail regarding the sources of available water used in the analysis. ~~a qualitative review of the existing services available to the Planning Area and a determination of whether the Project includes adequate provisions to ensure continued service that meets acceptable standards.~~

Standards of Significance

The Project will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G "Environmental Checklist Form" of the CEQA Guidelines and the City of Oxnard *Thresholds Guide*. The project (or the project alternatives) would result in a significant impact if it would:

- Need new or expanded water supply entitlements that are not anticipated by the current Urban Water Management Plan, with amendments;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
- Exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board (RWQCB);
- Require additional capacity to serve the project's projected demand in addition to existing commitments;
- Result in increase of erosion during the construction process or cause significant changes in the flow velocity or volume of storm water runoff to cause environmental harm and the potential for significant increases in erosion of the project site and surrounding areas;
- Result in an increase of the discharge of storm water from material storage areas, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas;
- Result in an increase of the level of pollutants in storm water runoff from the post-construction activities or cause the impairment of the beneficial uses of receiving waters or areas that provide water quality benefit or cause significant harm on the biological integrity of the waterways and water bodies by the discharge of stormwater;
- Produce solid waste that impedes the City's ability to meet State Law and/or would exceed the permitted capacity of a landfill; or
- Conflict with federal, state, and local statutes and regulations related to solid waste.

Impacts and Mitigation Measures

Impact 4.3-1: The Project could require new or expanded water supplies, facilities, or affect the adequacy of a water supply beyond that anticipated by the current Urban Water Management Plan, the Great Program, and related public works plans and programs.

Impact Summary

Level of Significance Before Mitigation: *Less than Significant*
Required Additional Policies or Mitigation Measures: *None Required*
Resultant Level of Significance: *Less than Significant*

Impact Analysis

The City has a comprehensive Water Management Program that outlines how the City plans to provide an adequate water supply to meet forecasted water demands well into the future. In addition to its internal water management program, the City is working cooperatively with local groundwater managers such as the Fox Canyon Groundwater Management Agency (FCGMA), United Water Conservation District (UWCD), and Calleguas Municipal Water District (CMWD) (Las Posas) on local groundwater management programs as well as CMWD and Metropolitan Water District (MWD) on regional imported water supply issues. Together, these programs are intended to provide a high degree of flexibility to provide a reliable long term water supply under a broad range of known (i.e. projected growth and planned water supply projects) and unknown scenarios (i.e. global climate change). The availability of local groundwater as augmented by existing groundwater management programs (including groundwater recharge through the Freeman Diversion project and the Las Posas Aquifer Storage Project), imported State water, and the City's planned water recycling effort through it's Groundwater Recovery Enhancement and Treatment (GREAT) Program and Augmented M&I Supplemental Water Programs will help to ensure that the City will be able to meet long term water demands.

Table 4-7 provides a Citywide water demand projection that includes all anticipated development within the City through the Year 2030. Based on this projection, the total Citywide water demand will be about 41,040 ~~42,730~~ acre feet per year (AFY) in 2030.

~~TABLE 4-7~~
~~2007 CUMULATIVE WATER DEMAND PROJECTION (AFY)~~

~~Category~~	~~Additions~~	~~Deductions~~	~~Cumulative Total~~
~~a. Existing water demand (2007)~~			~~25,690~~
~~b. Existing P&G demand (2007)~~	~~2,800~~		~~28,490~~
~~c. Specific Plans~~			
~~Ormond Beach (South)~~	~~800~~		
~~Ormond Beach (North)~~	~~545~~		
~~Camino Real Business Park~~	~~116~~		

~~TABLE 4-7~~
~~2007 CUMULATIVE WATER DEMAND PROJECTION (AFY)~~

~~Category~~	~~Additions~~	~~Deductions~~	~~Cumulative Total~~
~~Teal Club~~	~~420~~		
~~Oxnard Village (Wagon Wheel)~~	~~640~~		
~~Sakioka Farms~~	~~1,695~~		
~~Jones Ranch~~	~~825~~		
~~Subtotal~~	~~4,865~~		~~33,355~~
~~d. Other large project areas~~	~~2,135~~		~~35,490~~
~~e. Infill projects~~	~~1,065~~		~~36,555~~
~~f. Additional demand due to redevelopment~~	~~1,200~~		~~37,755~~
~~g. Recycled Water~~		~~(3,225)~~	~~34,530~~
~~h. Brine Loss~~	~~4,200~~		~~38,730~~
~~i. Water Conservation~~			
~~Assume 5 percent~~		~~(2,100)~~	~~36,630~~
~~j. Unaccounted-for water~~			
~~Assume 4 percent~~	~~1,600~~		~~38,230~~
~~k. Allowance for exp. Beyond City~~	~~0~~		~~38,230~~
~~l. Allow changes in unit demands~~			
~~Assume 10 percent of residential~~	~~2,000~~		~~40,230~~
~~m. Contingency~~			
~~Assume 2,500 AFY~~	~~2,500~~		~~42,730~~
~~Total All production 2030~~			~~42,730~~

~~Source: City of Oxnard, 2008~~

TABLE 4-7
ANNUAL WATER DEMAND PROJECTIONS (AFY)

Water Demands	2010	2015	2020	2025	2030
Baseline Demand					
2009 Revenue Metered Demand (a)	28,900	28,900	28,900	28,900	28,900
2009 Non-Revenue Water (b)	2,150	2,150	2,150	2,150	2,150
OVS (Formerly OVMWD) (c)	1,340	1,340	1,340	1,340	1,340
PHWA (d)	1,910	1,910	1,910	1,910	1,910
Proctor and Gamble (e)	2,300	2,800	2,800	2,800	2,800
Subtotal	36,600	37,100	37,100	37,100	37,100
Potential Demand					
Projected Buildout of the 2030 General Plan (f)	550	3,040	5,440	6,600	7,750
10% Contingency for General Plan Amendments (g)	50	300	550	650	750
Subtotal (h)	600	3,340	5,990	7,250	8,500
Demand Reduction Programs					
Demand Management Programs Reduction (i)	(500)	(1,620)	(2,150)	(4,440)	(4,560)
Subtotal	(500)	(1,620)	(2,150)	(4,440)	(4,560)
Total Demand	36,700	38,820	40,940	39,910	41,040

SOURCE: City Planning, 2009 (see Appendix B of this recirculated draft PEIR).
NOTES: Values are rounded to the nearest 10 acre-feet.

a) Baseline water demand for fiscal year 2009. Water demand by existing customers is anticipated to remain fairly stable through 2030. Baseline demand represents 295 HCF/year (City account avg for period 2002-2004 and excludes demands for P&G, PHWA, and agriculture; this period represents a conservative and stable water demand prior to current drought) multiplied by 39,893 (current

TABLE 4-7
ANNUAL WATER DEMAND PROJECTIONS (AFY)

number of accounts). Baseline demand excludes annual demands for Proctor and Gamble, agricultural water for OVMWD, and annual demands for PHWA. These three demands are summarized separately in this table. Data provided by City Planning Department (personal communication, Chris Williamson, August 2009) and City Water Resources (personal communication, Dakota Corey and Tony Emmert, September 2009 – see Appendix B of the recirculated draft PEIR).

b) Non-revenue water = unaccounted-for water. Estimated at 6% of total demand (approximately 35,600 AFY x 6%). Source: personal communication, Dakota Corey, September 2009 – see Appendix B of the recirculated draft PEIR.

c) OVS (formerly OVMWD) customers along East Hueneme Road use approximately 1,972 AFY of UWCD O-H water delivered via the City. Total estimated water use within the OVMWD service area includes approximately 14,982 AF of water annually (based on an average of available data). This includes the water delivered via the O-H Pipeline and OVS pipeline, a mean of approximately 11,150 AFY of groundwater extractions, and approximately 1,860 AFY of water delivered via the UWCD Pumping Trough Pipeline. Data provided by County of Ventura (Watershed Protection District, 2008); UWCD (personal communication, Tony Blankenship, 2009); and City Water Resources (personal communication, Dakota Corey, September 2009 – see Appendix B of this recirculated draft PEIR).

d) PHWA purchases water from the City per the Three Party Agreement; Agreement specifies PHWA suballocation of CMWD water of 3,262.5 AFY. PHWA mean annual purchases from the City was 1,911 AF for period 1999-2008 (source: personal communication, Steve Hickox, September 2009; personal communication, David Birch, September 2009 – see Appendix B of the recirculated draft PEIR). PHWA will begin water demand management programs in 2009 which may decrease water demands.

e) P&G estimated future water demands are approximately 2,800 AFY (UWMP, 2005). Current annual water demand is mean of approximately 2,304 AF for period 2001-2008. Source: personal communication, Dakota Corey, August 2009 – see Appendix B of this recirculated draft PEIR.

f) Annual increase in water demand based on development applications received for known projects. New water demands also include 2030 General Plan buildout, infill, redevelopment, and densification. Values provided by City Planning Department (personal communication, Chris Williamson and Kathleen Mallory, August 2009 – see Appendix B of this recirculated draft PEIR) and based on the following sources: July 2009 City Project List, CA Department of Finance, 2030 General Plan Background Report (2006), Ventura Council of Governments data, and UCSB Forecast.

g) Annual increase in water demand for unknown projects. Can be as high as 10% of new demand for known projects. Source: personal communication, Ken Ortega, September 2009 – see Appendix B of this recirculated draft PEIR.

h) Cumulative total new demand based on the annual values for known and unknown projects.

i) City anticipates the reduction in City-wide water demands via implementing several demand management programs. Estimated reduction is approximately 500 AFY for period 2010-2012, 2% of demand in 2013, 3% of demand in 2014, 4% of demand in 2015, 5% of demand from 2016-2020, and 10% reduction for period 2021-2030.

Table 4-8 provides a summary of water supply sources for the City, projected for the years 2010 through 2030. These projected water supplies include water from both the City's Augmented M&I Supplemental Water and GREAT Programs. With the City's combination of State Water provided through CMWD, groundwater provided by UWCD and existing City wells, and the M&I Supplemental water programs, the City will have a 2010 water supply of about 36,120 ~~40,625~~ AFY. This supply is projected to grow to 43,740 ~~57,725~~ AFY in 2030 with the implementation of both phases of the GREAT Program (recycled water system). ~~This projection assumes a 2030 production capacity of 17,100 AFY (16.95 mgd) for the GREAT Advanced Water Purification Facility (AWPF) facility.~~ As noted above, the initial phases of the GREAT Program and the related Recycled Water Backbone System have been approved by the City, are substantially funded and the City otherwise has plans in place to arrange for the remaining funding, and are pending implementation. In addition, the City is in the process of developing its Recycled Water Master Plan which will address implementation of the City's recycled water management program.

~~**TABLE 4-8**~~
~~**CITY OF OXNARD PROJECTED WATER SUPPLIES**~~

~~Water Supply Sources~~	~~2010~~	~~2015~~	~~2020~~	~~2025~~	~~2030~~
~~CMWD Allocation Delivery(a)~~	~~14,100~~	~~14,100~~	~~14,100~~	~~14,100~~	~~14,100~~
~~UWCD Delivery(b)~~					
~~From Allocation~~	~~6,800~~	~~6,800~~	~~6,800~~	~~6,800~~	~~6,800~~
~~From Credits~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~

~~TABLE 4-8~~
~~CITY OF OXNARD PROJECTED WATER SUPPLIES~~

~~Water Supply Sources~~	~~2010~~	~~2015~~	~~2020~~	~~2025~~	~~2030~~
~~GW Production from City Wells(c)~~					
~~From Baseline Allocation~~	~~820~~	~~820~~	~~820~~	~~820~~	~~820~~
~~From Historical Allocation~~	~~8,415~~	~~8,415~~	~~8,415~~	~~8,415~~	~~8,415~~
~~From Transferred Allocation~~	~~1,490~~	~~1,490~~	~~1,490~~	~~1,490~~	~~1,490~~
~~From Credits~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~
~~M&I Supplemental Water(d) From Existing Program~~	~~4,000~~	~~4,000~~	~~4,000~~	~~4,000~~	~~4,000~~
~~From Augmented Program~~	~~5,000~~	~~5,000~~	~~5,000~~	~~5,000~~	~~5,000~~
~~GREAT Program(e)~~					
~~From exchange with farmers for increased GW pumping rights~~	~~0~~	~~475~~	~~6,975~~	~~6,975~~	~~6,975~~
~~From credits for groundwater recharge/seawater injection barrier~~	~~0~~	~~1,300~~	~~7,300~~	~~7,300~~	~~7,300~~
~~Total (rounded)~~	~~40,625~~	~~42,400~~	~~54,900~~	~~54,900~~	~~54,900~~

~~Source: City of Oxnard, 2008~~
~~Notes: (a) Per 2005 UWMP, City's Tier 1 allocation minus the PHWA reservation.~~
~~(b) This assumes the most conservative availability of City's allocation from UWCD, that the GMA implements the full 25 percent cutback by 2010. The Credits depicted here are those used to meet demand and are not representative of the City's cumulative credit balance with UWCD. No deliveries from the credits are shown because there is sufficient supply to meet demand without using these credits. As of the end of 2005, the City had approximately 7,314 AF of stored credits with UWCD.~~
~~(c) Includes the existing 15 % cutbacks but no future cutbacks in City's allocation. Transferred Allocation includes groundwater allocation from converted agricultural lands and from the OWMWD to date. It assumes the most conservative availability of Transferred Allocation since the Transferred Allocation will increase as private agricultural land is converted to City M&I demand by future development. An estimate of potential transferred allocation is currently being developed. The credits depicted here are those used to meet demand and are not representative of the City's cumulative credit balance with the GMA. No deliveries from the credits are shown because there is sufficient supply to meet demand without using these credits. As of the end of 2006, the City had approximately 12,294 AF of stored groundwater credits with the GMA.~~
~~(d) M&I Supplemental water assumed to be 4,000 AFY until 2010, when it increases to 9,000 AFY with the incorporation of the augmented program.~~
~~(e) Of the 17,500 AFY of expected supply from the Great Program, approximately 6,975 AFY would be delivered to farmers in exchange for their groundwater pumping rights and 7,300 AFY would be used for groundwater recharge or the seawater injection barrier in exchange for increased groundwater pumping rights. The remaining 3,225 AFY of supply would be delivered to M&I users and has been credited to the overall City demands and is this not included in this Table as a supply. Brine loss from the desalters was also included with overall City demands and thus is not included in the table. The first Phase of GREAT Program is projected to be a 3.25 MGD facility (3,300 AFY) and is planned for operation by 2010-2011. The first expansion is recommended to be a 5.2 MGD expansion and the second expansion is recommended to be a 5.5 MGD, for a total 2030 capacity of 18.85 MGD (17,100 AFY). The OS-1 desalter is expected to be on-line in 2009 producing 1.5 MGD or 1,400 AFY. The OS-2 desalter is expected to be on-line in 2011 producing 5.0 MGD.~~

TABLE 4-8
CITY OF OXNARD PROJECTED ANNUAL WATER SUPPLIES (AFY) AND CREDITS

Water Supply Sources (Acre-feet)	2010	2015	2020	2025	2030
Annual Supplies					
Groundwater-City Wells (a)	8,380	8,380	8,380	8,380	8,380
Brine Water Loss (b)	(2,100)	(4,200)	(6,300)	(8,400)	(8,400)
UWCD Allocation (c)	6,800	6,800	6,800	6,800	6,800
CMWD Allocation (d)	11,840	11,840	11,840	11,840	11,840
M&I Supplemental Water (e)	5,000	3,000	1,000	1,000	1,000
GREAT Program Recycled Water Phase 1 M&I (f)	0	2,700	5,050	5,050	5,050
GREAT Program Recycled Water Phase 1 Agriculture Use (f)	0	4,300	1,950	1,950	1,950
GREAT Program Recycled Water Phase 2 (g)	0	7,000	14,000	14,000	14,000
Ferro Pit Program (h)	5,500	1,000	0	0	0
Transferred Allocations (i)	0	1,060	2,290	2,220	2,420
PHWA Program (j)	700	700	700	700	700
Total Annual Supplies	36,120	42,580	45,710	43,540	43,740

TABLE 4-8
CITY OF OXNARD PROJECTED ANNUAL WATER SUPPLIES (AFY) AND CREDITS

Water Supply Sources (Acre-feet)	2010	2015	2020	2025	2030
Groundwater Banked Credits					
Fox Canyon GMA credits (k)	30,000 (AF)				
UWCD credits (k)	7,000 (AF)				
GREAT Program credits at 2,500 AFY minimum x 20 Years (l)	50,000 (AF)				
Subtotal	**87,000 (AF)**				

SOURCE: Kennedy/Jenks, 2009 (see Appendix B of this recirculated draft PEIR).
NOTES: Values are rounded to the nearest 10 acre-feet.

a) Maximum City allocation is 10,470 AFY. Includes the existing cutbacks (Fox Canyon Groundwater Management Agency-GMA, up to 25%) and no anticipated future cutbacks in City's allocation. Source: see Appendix B of the recirculated draft PEIR.

b) Brine Water Loss is the amount of brine reject water (approximately 20% loss) associated with the City's potable water Desalters at Blending Stations No. 1 (BS1) (currently operating at 7.5 mgd product water capacity - 8,400 AFY) and future BS3. BS3 Phase 1 anticipated to be operating by 2013 (7.5 mgd product water capacity) and BS1 Phase 2 (15 mgd product water capacity) projected to be operating by 2017 (according to the City's Fiscal Year 2008-2009 Capital Improvement Plan). BS3 Phase 2 (15 mgd product water capacity) anticipated to be operating by 2021 (personal communication with City Water Division, Tony Emmert, August 2009). However, these dates may be modified as conditions change.

c) This assumes the most conservative availability of City's allocation from UWCD which includes a total of 6,800 AFY for the City and OVMWD. Also assumes that the GMA implements the full 25% cutback by 2010; and no anticipated future GMA cutbacks. The City had approximately 7,000 AF of stored credits with UWCD (personal communication, Curtis Hopkins, August 2009 – see Appendix B of the recirculated draft PEIR).

d) In establishing the reduced allocation of 11,385 AFY for the Oxnard Region, MWD considered the two agencies' actual imported water usage during a baseline period between 2004 and 2006, considered the agencies ' ability to produce local water supplies, and calculated City supply at 11,385 AFY. This reduction in supply is expected to remain in place until the constraints on MWD's supplies are relieved. The City's entitlement also includes sub allocations for P&G (2,800 AFY) and PHWA (3,262.5 AFY). The City is free to use any unused P&G and CMWD sub allocations. Program details provided by City Water Resources (2005 UWMP; personal communication, Tony Emmert, August 2009 – see Appendix B of the recirculated draft PEIR).

e) Through the M&I Supplemental Water Program, the City has received a total of 15,886.7 AF between the years 2005-2008 – approximately 4,000 AFY. However, UWCD may temporarily reduce or suspend deliveries of M&I Supplemental Water when Forebay groundwater levels drop below a certain threshold. For example, UWCD has tentatively suspended deliveries of M&I Supplemental water given the current conditions in the Forebay as of late 2009. Even though deliveries are suspended, M&I Supplemental water credits continue to accumulate. Once the suspended deliveries are reinitiated, it is expected that the accumulated credits will be made available in full in subsequent years. Based on current information, the City anticipates 5,000 AF of M&I Supplemental Water will be available in 2010 and 0 AF in year 2011. As a conservative assumption, the City assumes that on average only 3,000 AFY of M&I Supplemental water credits will be available between the years 2012-2015. As the Camrosa Water District has a contractual first right of refusal of the Conejo Creek Diversion Project water, and has expressed plans to utilize most of this water within its district, the M&I Supplemental Water credits available will reduce to 1,000 AFY as the Camrosa non-potable water system infrastructure continues to develop. Based on the expected future expansion phases of the Camrosa system, this is projected to occur after year 2015.

f) GREAT AWPF Phase 1 (anticipated startup in 2010-2012) would produce a maximum of 6.25 mgd (7,000 AFY net production) (Source: UWMP, 2005; personal communication, Thien Ng, September 2009 – see Appendix B of the recirculated draft PEIR). Combined uses of recycled water from AWPF Phase 1 (M&I and agriculture) does not exceed 7,000 AFY from 2012-2030. City anticipates that recycled water infrastructure will serve 2,450 AFY M&I demands by year 2012, approximately 2,700 AFY of recycled water supply would be delivered to City M&I by 2013, 3,150 AFY by 2016, and 5,050 AFY by year 2020 (Recycled Water Master Plan 2009). City assumes water produced in excess of M&I recycled water demands will be used for groundwater recharge. City assumes GMA will allow credits for 100% of recycled water injected/recharged and 100% of potable water blended with the injected/recharged water (personal communication, Steve Bachman, August 2009 – see Appendix B of the recirculated draft PEIR). It is assumed infrastructure to allow groundwater recharge will be in place by year 2015.

g) This is a projected supply not previously utilized by the City. AWPF Phase 2A (anticipated 2015; based on 2009 Avoided Cost Model) would produce a maximum of an additional 7,000 AFY (net production). AWPF Phase 2B is anticipated to be operating by 2020 and produce a maximum of an additional 7,000 AFY (net production). Dates for these AWPF expansions may be modified as conditions change. AWPF Phase 2A and 2B may provide recycled water to M&I, agriculture, injection barrier, and groundwater recharge projects.

h) This is a projected supply not previously utilized by the City. Includes one-time transfer of 11,000 AF of groundwater credits to the City. City plans to use these transferred credits within the period 2010-2011. City will also obtain 1,000 AFY of credits from 2012-2019. Program details provided by City Water Resources (personal communication, Tony Emmert, September, 2009 – see Appendix B of the recirculated draft PEIR).

i) For agricultural property conversion - assume 1.5 acre-feet per acre per year. The credits depicted here are those used to meet demand and are not representative of the City's cumulative credit balance with the GMA. Transferred allocation values developed by City Planning Department (personal communication, Chris Williamson October 2009 – see Appendix B of the recirculated PEIR). Assumes transfers of 525 AF Teal Club SP; 219 AF Sakioka Farms SP; 69 AF Camino Real SP, 145 AF from the Ormond Beach North SP; and 98 AF Jones Ranch SP by year 2015. Assumes transfer of additional 260 AF Sakioka Farms SP; and additional 150 AF Jones Ranch SP; an additional 338 AF from the North Ormond Beach SP; and 231 AF Ormond Beach South SP by year 2020. Assumes

TABLE 4-8
CITY OF OXNARD PROJECTED ANNUAL WATER SUPPLIES (AFY) AND CREDITS

Water Supply Sources (Acre-feet)	2010	2015	2020	2025	2030

additional 332 AF from Ormond Beach South SP and an additional 148 AF Sakioka Farms SP by year 2030

j) Transfer of 700 AF of GMA groundwater Credits from PHWA to the City as part of the Three Party Water Supply Agreement, December 2002. Program details provided by City Water Resources (personal communication, Tony Emmert, August 2009 – see Appendix B of the recirculated draft PEIR).

k) The Credits depicted here are those used to meet demand and are not representative of the City's cumulative credit balance. Deliveries from the groundwater credits are shown only when there is insufficient supply to meet demand. At the end of 2008, the City had approximately 30,000 AF of groundwater credits with the GMA and 7,000 AF with UWCD. The groundwater credits are intended to be used to offset any reduced availability of imported water, or to mitigate unforeseen cutbacks, catastrophic events, facility failure, etc. The City can use these credits without GMA penalty. Program details provided by City Water Resources, personal communication, Tony Emmert, November 2009; personal communication, Curtis Hopkins, September 2009 – see Appendix B of the recirculated draft PEIR.

L) It is assumed future GREAT Program deliveries will be credited a minimum of 2,500 AFY starting in year 2015.

Additionally, as part of a water supply study ~~assessment prepared for the Oxnard Village Specific Plan Project (City of Oxnard, 2008)~~, prepared for the City's Planning Area (see Appendix B)the availability of water necessary to serve development anticipated as part of the Project was also evaluated for several water year scenarios. **Tables 4-9 through ~~4-15~~ 4-12** provide a comparison of the City's projected supply verses the anticipated demand under normal year weather conditions, single dry year weather conditions, and worst case multiple dry year weather conditions. As shown in these tables, the City will have adequate water supply to meet the projected demand under all scenarios through the year 2030. However, it should be noted, that in the short-term (2010 to 2015), the City will draw on its groundwater credit bank of approximately 37,000 acre feet as an interim supply until the GREAT Program Phase I is completed. Specifically, under normal, dry, and multiple dry year conditions, the cumulative draw on groundwater credits could exceed available credits during the short-term (years 2010 to 2015) and it may be necessary to pump additional groundwater. However, after 2015, there appears to be sufficient surplus water supply to gradually restore the groundwater credit bank.

~~TABLE 4-9~~
~~PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: NORMAL YEAR (AFY)~~

	2010	2015	2020	2025	2030
Supply totals	40,325	42,400	54,900	54,900	54,900
Demand totals	34,260	38,375	41,030	42,230	42,730
Difference	6,365	4,025	13,870	12,670	12,170
Difference as percent of Supply	16%	9%	25%	23%	22%
Difference as percent of Demand	19%	10%	34%	30%	28%

~~TABLE 4-10~~
~~PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: SINGLE DRY YEAR (AFY)~~

	2010	2015	2020	2025	2030
Supply totals	40,325	42,400	54,900	54,900	54,900
Demand totals	34,260	38,375	41,030	42,230	42,730
Difference	6,365	4,025	13,870	12,670	12,170
Difference as percent of Supply	16%	9%	25%	23%	22%
Difference as percent of Demand	19%	10%	34%	30%	28%

TABLE 4-11
PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: MULTIPLE DRY YEARS (2007–2010) (AFY)

	2007	2008	2009	2010
Supply totals	27,066	35,525	40,625	40,625
Demand totals	27,066	28,162	29,258	34,260
Difference	0	7,463	11,367	6,365
Difference as percent of Supply	0%	21%	28%	16%
Difference as percent of Demand	0%	27%	39%	19%

TABLE 4-12
PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: MULTIPLE DRY YEARS (2011–2015) (AFY)

	2011	2012	2013	2014	2015
Supply totals	40,980	41,335	41,690	42,045	42,400
Demand totals	35,083	35,906	36,729	37,552	38,375
Difference	5,897	5,429	4,961	4,493	4,025
Difference as percent of Supply	14%	13%	12%	11%	9%
Difference as percent of Demand	17%	15%	14%	12%	10%

TABLE 4-13
PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO:MULTIPLE DRY YEARS (2016-2020) (AFY)

	2016	2017	2018	2019	2020
Supply totals	42,400	42,400	42,400	42,400	54,900
Demand totals	38,906	39,437	39,968	40,499	41,030
Difference	3,494	2,963	2,432	1,901	13,870
Difference as percent of Supply	8%	7%	6%	4%	25%
Difference as percent of Demand	9%	8%	6%	5%	34%

TABLE 4-14
PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: MULTIPLE DRY YEARS (2021–2025) (AFY)

	2021	2021	2023	2024	2025
Supply totals	54,900	54,900	54,900	54,900	54,900
Demand totals	41,270	41,510	41,750	41,990	42,230
Difference	13,630	13,390	13,150	12,910	12,670
Difference as percent of Supply	25%	24%	24%	24%	23%
Difference as percent of Demand	33%	32%	31%	31%	30%

TABLE 4-15
PROJECTED SUPPLY AND DEMAND COMPARISON SCENARIO: MULTIPLE DRY YEARS (2026–2030) (AFY)

	2026	2027	2028	2029	2030
Supply totals	54,900	54,900	54,900	54,900	54,900
Demand totals	42,330	42,430	42,530	42,630	42,730
Difference	12,570	12,470	12,370	12,270	12,170
Difference as percent of Supply	23%	23%	23%	22%	22%
Difference as percent of Demand	30%	29%	29%	29%	28%

TABLE 4-9
PROJECTED 2030 GENERAL PLAN BUILDOUT WATER SUPPLY AND DEMAND COMPARISON
SCENARIO: NORMAL YEAR (AFY)

	2010	2015	2020	2025	2030
Supply Totals	36,110	42,570	45,930	44,090	44,300
Demand Totals	36,700	38,800	40,920	39,920	41,080
Net Difference	(590)	3,770	5,010	4,170	3,220
Groundwater Debit/Credit	(590)	0	0	0	0
Net Difference to Annual Supply	(2%)	9%	11%	9%	7%
Net Difference to Annual Demand	(2%)	10%	12%	10%	8%
Draw on Credit Bank	2%	0%	0%	0%	0%
Supply vs. Demand with Credits	0	3,770	5,010	4,170	3,220

NOTES: Values are rounded to the nearest 10 acre-feet.

TABLE 4-10
PROJECTED 2030 GENERAL PLAN BUILDOUT WATER SUPPLY AND DEMAND COMPARIISON
SCENARIO: SINGLE DRY YEAR (AFY)

	2010	2015	2020	2025	2030
Supply Totals	36,110	42,570	45,930	44,090	44,300
Demand Totals	36,700	38,800	40,920	39,920	41,080
Net Difference	(590)	3,770	5,010	4,170	3,220
Groundwater Debit/Credit	(590)	0	0	0	0
Net Difference to Annual Supply	(2%)	9%	11%	9%	7%
Net Difference to Annual Demand	(2%)	10%	12%	10%	8%
Draw on Credit Bank	2%	0%	0%	0%	0%
Supply vs. Demand with Credits	0	3,770	5,010	4,170	3,220

NOTES: Values are rounded to the nearest 10 acre-feet.

TABLE 4-11
PROJECTED 2030 GENERAL PLAN BUILDOUT WATER SUPPLY AND DEMAND COMPARISON
SCENARIO: MULTIPLE DRY YEARS (AFY)

	2010	2015	2020	2025	2030
Supply Totals	32,400	42,070	46,930	44,090	44,300
Demand Totals	36,700	38,800	40,920	39,920	41,080
Net Difference	(4,300)	3,270	6,010	4,170	3,220
Groundwater Debit/Credit	4,300	0	0	0	0
Net Difference to Annual Supply	(13%)	8%	13%	9%	7%
Net Difference to Annual Demand	(12%)	8%	15%	10%	8%
Draw on Available Credit Bank	12%	0%	0%	0%	0%
Supply vs. Demand with Credits	0	3,270	6,010	4,170	3,220

NOTES: Values are rounded to the nearest 10 acre-feet.

TABLE 4-12
PROJECTED 2030 GENERAL PLAN BUILDOUT WATER SUPPLY AND DEMAND COMPARISON
SCENARIO: MULTIPLE DRY YEARS 2010 – 2014 (AFY)

	2010	2011	2012	2013	2014
Supply Totals	34,300	29,730	30,810	29,220	29,390
Demand Totals	36,700	37,240	37,780	38,540	38,680
Net Difference	(2,400)	(7,510)	(6,970)	(9,320)	(9,290)
Groundwater Debit/Credit	2,400	7,510	6,970	9,320	9,290
Net Difference to Annual Supply	(7%)	(25%)	(23%)	(32%)	(32%)
Net Difference to Annual Demand	(7%)	(20%)	(18%)	(24%)	(24%)
Draw on Available Credit Bank	6%	22%	26%	46%	86%
Supply vs. Demand with Credits	0	0	0	0	0

NOTES: Values are rounded to the nearest 10 acre-feet

Policies included as part of the Project that address a range of water supply issues are summarized below. For example, policies ICS-1.1 "Maintain Existing Service Levels", ICS-1.2 "Development Impacts to Existing Infrastructure", and ICS-1.3 "Funding for Public Facilities" require the City to plan and ensure that a variety of funding methods (including developer fees, grants, and public facility fees) are used to expand the range of public services and utilities (including water supply infrastructure) consistent with community needs. Also, Policy ICS-11.4 "GREAT Program Implementation" requires the City to continue supporting and implementing this program as a key way to meet the City's long term water supply needs. Policies ICS-11.2 and ICS-11.7 encourage the City to continue its promotion of a variety of water conservation measures (including landscaping and low flow fixtures) as part of all future development. Additionally, Policy ICS-11.12 "Water for Irrigation" encourages the use of non-potable water supplies for landscape irrigation. Policy ICS-11.10 "Water Supply Assessment for All Projects" requires the preparation of water supply studies prior to the approval of future development projects. Additionally, Implementation Measure #59 requires the City to maintain and periodically update water, wastewater, and drainage infrastructure master plans to ensure sufficient levels of infrastructure are planned for and financed in the City.

In February 2008, Governor Schwarzenegger called for a 20 percent reduction in per capita water use statewide by 2020. The State Water Resources Control Board has released a draft statewide implementation plan for achieving this goal (Draft 20x2020 Water Conservation Plan, April 2009) which establishes regional baseline and target per capita water use values by State hydrologic region. The 2020 targeted daily per capita water use value established for the South Coast hydrologic region is 149 gallons per capita per day. The draft plan proposes a series of enforcement mechanisms and financial incentives to facilitate water conservation at the local level. The City is preparing a Conservation Master Plan, due by the end of 2009, which will identify potential demand management measures and potential demand reductions which will help the City meet the gallons per capita per day goals of the 20x2020 plan.

Because of the reductions in water imports from the SWP and unavailability of any new imported water, the City Council, at its January 15, 2008 meeting and again on October 15, 2009, directed staff to implement a policy that requires that large projects be water neutral to the City water system. Project proponents can contribute water rights, water supplies, or financial or physical offsets to achieve this. Typical options open to project proponents to do so include transfers of FCGMA

groundwater allocations to the City, participation in expansions of the City's GREAT Program recycled water system through physical or financial contributions, and participation in water conservation projects that produce measurable sustainable water savings. Several proponents of significant projects have complied with this requirement and several others are currently in negotiations with the City. Small projects, such as single family residential projects or business tenant improvements have been exempted from this requirement, to date. Since the water neutral policy was initiated in January, 2008, City staff have been working out implementation details which are listed below:

- The water neutral policy would apply to CEQA discretionary projects, whether or not they were included in the existing 2020 General Plan or 2005 Urban Water Management Plan. CEQA-exempt projects, such as home renovations or business tenant improvements are exempted.
- Projects subject to the policy should either contribute water supplies or the financial or physical equivalent to offset the full estimated project demand. Water supply would need to be available when the project is operational. The City would condition the project proponent to provide offset for water demand that could not be met by the project's transfer of agricultural groundwater credits, if applicable.
- The City would develop a menu of mitigation opportunities. Options for mitigation may include:
    - Financial contribution toward the GREAT Program's recycled water facilities.
    - Financial contribution toward a City-controlled water conservation project or program that would generate verifiable long-term water savings.
    - Implementation of a developer-initiated water conservation project or program that would generate verifiable long-term water savings.
    - Contribution of any other additional water rights or water supplies.

Because the City requires that new development projects be water neutral, this requirement and the current slow economic conditions would tend to delay or cancel some anticipated development in the near term, and its projected water demand. As a result, water demand estimates between 2010 and 2014 are likely overstated and the draw on groundwater credits will be less than projected.

With implementation of the below mentioned policies and implementation programs, this impact is considered ***less-than-significant.***

Infrastructure and Community Service

Policies and implementation measures designed to ensure that public facilities and services are adequately funded and strategically located through out the Planning Area include the following:

ICS-1.1 Maintain Existing Service Levels
ICS-1.2 Development Impacts to Existing Infrastructure
ICS-1.3 Funding for Public Facilities
ICS-1.4 Infrastructure Conditions of Approval
Implementation Measure #51

Policies and implementation measures designed to minimize this impact through the provision and conservation of water resources and service include the following:

ICS-11.1 Water Quality Management Plans
ICS-11.2 Xeriscaping
ICS-11.3 Evaluating UWMP
ICS-11.4 GREAT Program Implementation
ICS-11.5 Distribution System
ICS-11.6 Sustainability of Groundwater
ICS-11.7 Water Conservation
ICS-11.9 Groundwater Extractions
ICS-11.10 Water Supply Assessment for All Projects
ICS-11.12 Water for Irrigation
Implementation Measure #59
Implementation Measure #60

Required Additional Policies or Mitigation Measures

This impact is considered ***less-than-significant***. No additional mitigation measures are required.
