



MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

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July 10, 2003

Michael Waxer
Carmel Development Company
P.O. Box 450
Carmel, CA 93921

**Subject: Monterra Ranch Mutual Water Company - Annual Water Monitoring
Program Reports for Reporting Year 2001 and Water Year 2002**

Dear Michael:

At the Monterey Peninsula Water Management District (District) Board meeting on June 16, 2003, the above-referenced Monterra Ranch Mutual Water Company (MRMWC) annual water monitoring program reports were presented. During discussion of this item, several questions were raised by Board directors regarding the information in the reports, and the approval of the reports was deferred until additional questions and clarifications from staff and Board are received. Accordingly, we are requesting responses on the comments listed below. Because the 2002 report is essentially an update of the 2001 report with the same format, all page references below are to the 2002 report, dated April 8, 2003.

General Comments

1. The reports are titled *Water Well Evaluation for Reporting Year XXXX*. However, the information required for the reports goes beyond water well evaluations, and the reports would more appropriately be titled *Annual Water Monitoring Program Report for Water Year XXXX*, consistent with Condition #15 of the permit (**Enclosure 1**). Note that beginning with the 2002 annual reporting period, the District switched to Water Year (i.e., October 1 through September 30) as the annual reporting period, to be consistent with the State Water Resources Control Board annual reporting period, and the period that other types of hydrologic data are recorded. Please acknowledge this comment.
2. As described in Condition #15 of the permit, MRMWC is required to submit an *Annual Water Distribution System Report* along with the *Annual Water Monitoring Program Report* each year. Note that the *Annual Water Distribution System Report* is

a single-page form sent to MRMWC each year on District letterhead that requests the reporting of the production/delivery/connection data in a summary fashion only, while the *Annual Water Monitoring Program Report* is the document that comprehensively reviews and analyzes the production/delivery/connection data, as well as other hydrologic monitoring data (i.e., water quality, water levels, well yields, etc.). In practice for the 2001 and 2002 reporting periods, we have received from MRMWC three separate reports at three separate times for each of these years. As a means to reduce confusion, ensure data consistency, and facilitate review of the data, we request that in the future, a copy of the *Annual Water Distribution System Report* be included with and referenced in the larger *Annual Water Monitoring Program Report*. With the recent change in reporting period to coincide with the Water Year, these reports will be due by the end of November each year. Therefore, the reports for Water Year 2003 will be due no later than November 30, 2003. Please acknowledge this comment.

3. None of the MRMWC submittals for the Water Year 2002 reporting period included a reporting of metered sales for each water user in the MRMWC system, as required by Condition #15. Please provide this information. Note that this information was required to be recorded only on a bi-monthly basis as per Condition #11. That condition was structured to meet the former billing practice of the California-American Water Company. Obviously, monthly data is preferable and it is our understanding that this information is available on a monthly basis for the MRMWC system. In addition, please describe the basis for the billing structure and provide a copy of a MRMWC water bill for a typical market-rate home.
4. Review of the *Annual Water Monitoring Program Reports* would be significantly facilitated by the inclusion of a basic summary table to track ongoing well production, reverse osmosis (RO) treatment plant production, brine disposal, deliveries, losses, etc. An example summary table compiled by District staff is provided as Enclosure 2. Please acknowledge this comment.
5. Referring to Enclosure 2, it was noted that total well production increased approximately 77 acre-feet (af) from RY 2001 to WY 2002 ($166.4 - 89.3 = 77.1$ af). Concern was expressed at the June 16, 2003 Board meeting that if the trend in increasing total well production continues, the MRMWC system will approach or exceed its production limit (i.e., system capacity) of 203.1 afy (acre-feet per year). Please comment on the future anticipated trend in total well production, given the recent production increases.
6. Again referring to Enclosure 2, of the 166.4 af of total well production in WY 2002,

27.8 af was produced for potable use through the RO treatment plant. It is our understanding that the remaining amount of 138.6 af was used for non-potable purposes, such as irrigation and construction. Please provide an accounting of water use for each of the non-potable uses. Specifically, how much water was used for golf course irrigation, non-golf course irrigation, construction, etc., for WY 2002? If metered figures are not available for WY 2002 for each of the non-potable use types, please provide an estimate for each use based on the best information available.

Specific Comments

7. Page 1, Executive Summary Please provide a summary of the status of development at Monterra Ranch, as required by Condition #15. This summary should include the current number of connections and percentages of projected buildout for each type of water use (i.e., inclusionary units, single-family units, ranch lots, caretaker units, gatehouse, member suites, club house and recreation center, equestrian center, miscellaneous non-residential connections).
8. Page 2, Executive Summary Well production values reported here and elsewhere in the report are shown in kilogallons per day (kgpd). At the expense of adding the extra digits, for future reporting purposes please provide such values in gallons per day (gpd), to be consistent with previously submitted system documentation, such as shown on Enclosure 3, the "Buildout Potable Water Demand" estimate that was provided as Exhibit C to the MRMWC permit amendment application dated January 20, 2000. Please acknowledge this comment.
9. Page 3, Table 1 As indicated in Footnote 7 to this table, the "long-term average conditions" for rainfall are for the period of record from January 1996 to August 2002. This period includes an additional year, i.e., RY 1997, and it is not clear why that year was not included in the table. Also, it is not clear why this period was selected to represent long-term average conditions. Please acknowledge this comment.
10. Page 3, Table 1 The average annual rainfall is given here as 21.73 inches per year (in/yr). However, this is approximately 35% greater than the 16.0 in/yr mean annual rainfall adopted by Anderson-Nichols¹ for the Monterra Ranch area, and 24% greater than the 17.5 in/yr calculated by Logan². For the Cañada Woods North portion of the

¹ Anderson-Nichols & Co., Inc., 1985. *Monterra Ranch Water Supply Study*. Report prepared for MPWMD, see pages 25, 28 and 31.

² Logan, John, 1984. *A Water Supply for Monterra: Addendum*. Report prepared for Monterra Ranch, November 1984.

Monterra Ranch area, mean annual precipitation is also cited as about 17.5 in/yr by Questa Engineering³. For the Cañada Woods water balance (including the Cañada Woods North area of Monterra), Todd Engineers⁴ based their analysis on average annual rainfall between 16 and 17 in/yr. Accordingly, please comment on the validity of the 21.73 in/yr figure as representative of the long-term average annual rainfall for the Monterra Ranch area.

11. Page 3, Table 1 Average annual evapotranspiration (actual) is shown here as 15 in/yr, or 69% of the 21.73 in/yr average annual rainfall. However, Anderson-Nichols¹ selected 80% as the evapotranspiration rate for the Monterra area. More recently, Todd Engineers⁴ estimated from 81% (for 17 in/yr rainfall) to 86% (for 16 in/yr rainfall) for actual evapotranspiration (including interception losses) for Cañada Woods. Please comment on this discrepancy.
12. Page 3, Table 1 Average annual runoff is shown here as 2.2 in/yr, or 10% of average annual rainfall. For the Cañada Woods area, Todd Engineers⁴ estimated 0.7 to 1.0 in/yr, equal to 4 to 6% of their 16 to 17 in/yr average annual rainfall estimate. Please comment on this discrepancy.
13. Page 3, Table 1 The average annual ground-water recharge is shown here as 720 af/yr. This value is 80% greater than the 400 af/yr estimate provided by Anderson-Nichols¹ for the 1,900-acre area assumed to contribute ground-water recharge (i.e., Subareas 1 and 2). Please comment on this discrepancy.
14. Page 3, Table 1 Over the 1,900 acres assumed to contribute ground-water recharge, the 720 af/yr annual ground-water recharge estimate equates to an annual recharge rate of 0.38 acre-feet per acre (af/ac). However, this rate is approximately 68% greater than the 0.22 af/ac rate that was adopted for the Cañada Woods North area by Questa Engineering⁵. The 0.38 af/ac figure is also significantly greater than the 0.12 af/ac figure computed from the overall water balance estimate prepared by Todd Engineers⁴ for Cañada Woods (198 af recharge / 1,609 ac area = 0.12 af/ac). Please comment on this discrepancy.

³ Questa Engineering Corporation, 1996. *Wastewater Feasibility Study for Cañada Woods North*. See page 3. July 8, 1996 report included as Technical Appendix V to Certified Final Environmental Impact Report for Cañada Woods North, December 1996.

⁴ Todd Engineers, 1996. *Water Balance for Cañada Woods North Project*. Appendix F to Certified Final Environmental Impact Report for Cañada Woods North, December 1996. See pages 1 to 4 and Table 5.


⁵ Questa Engineering Corporation, 1996. *Water Supply Report for Cañada Woods North*. See page 8. July 9, 1996 report included as Technical Appendix IV to Certified Final Environmental Impact Report for Cañada Woods North, December 1996.

15. Page 3, Table 1 Based on the information presented in items 10 through 15 above, please re-evaluate and comment on the appropriateness of the calculations leading to annual and average ground-water recharge in this table.
16. Figure 1, after Page 3 This figure has no scale and no north arrow. Please acknowledge this comment.
17. Page 4, Well Capacity and Production Summary Well production capacity is discussed here and tabulated in Table 2. With the exception of the HW-1/HW-2 system, it appears that the well production capacity figures are based on analyses conducted by John Logan in 1999. This is not in conformance with Condition #15 which requires that the *Annual Water Monitoring Program Reports* include an updated determination of the system's production capacity. The updated determination should include consideration of the actual (not theoretical) operational capacities, in gallons per minute, of each active well in the system. Please acknowledge this comment.
18. Page 4, Well Capacity and Production Summary The second sentence under this topic indicates that there are currently substantial unmetered uses associated with dust control and construction activities. It is unclear why there are unmetered uses within the MRMWC system. Such unmetered uses complicate or make it impossible to accurately assess potential water losses in the system. Please explain.
19. Page 10, Individual Well Discussion, HW-1 & HW-2 It is indicated here that an unpublished water well production evaluation has been conducted for HW-1 and HW-2 by Questa Engineering to determine the appropriate sustained pumping rate. Please provide a copy of this evaluation, as it relates to the updated determination of production capacity described in Condition #15.
20. Page 13, Market-Rate Homes It is noted here that four of the eleven market rate homes used water at a rate above the projected water use rate of 0.62 afy. Please indicate if a water audit program has been initiated for the MRMWC system, and if so, please report on the status of that program to date.
21. Page 14, Inclusionary Homes It is noted here that the inclusionary homes have not been charged for water through WY 2002, but billing is planned to begin in 2003. Please indicate the current status of the billing program and describe the basis for the billing structure. In addition, please provide a copy of a MRMWC water bill for a typical inclusionary home.

Mr. Michael Waxer
July 10, 2003
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Please provide your written responses to the above comments no later than **Friday, August 1, 2003**. Should you have any questions, please contact me at 658-5650 or Joe Oliver (technical contact) at 658-5640. Thank you for your prompt attention to this matter.

Sincerely,



Fran Farina
Acting General Manager

Enclosures

cc: Joe Oliver, Andy Bell, Darby Fuerst, MPWMD
David Laredo, District Counsel

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FINAL

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
CONDITIONS OF APPROVAL FOR AMENDMENT OF MONTERRA RANCH
MUTUAL COMPANY
WATER DISTRIBUTION SYSTEM PERMIT

JANUARY 30, 1996

LAST REVISED MARCH 20, 2000

1. The creation of the Monterra Ranch Water Distribution System was approved by the Monterey Peninsula Water Management District (MPWMD) Board on February 26, 1990, and became final on February 28, 1991. The application to amend the Monterra Ranch Water Distribution System permit that was received by the District on May 22, 1995, lists the name of the system as the "Monterra Ranch Mutual Water Company". Accordingly, all future reference and correspondence regarding this system shall be in the name of the Monterra Ranch Mutual Water Company (MRMWC).
2. Upon final approval of this permit amendment, the system capacity (well production volume) for the MRMWC system shall be *203.1* acre-feet per year (AFY) as measured by flow meters at each well source. The expansion capacity limit (number of authorized connections) for the MRMWC shall be *286 connections for the combined Monterra Ranch and Cañada Woods North properties (as per the demand projections provided in "Exhibit C" of the January 20, 2000 permit amendment application). [revised March 20, 2000]*
3. Hanover-Monterra Investors II executed an agreement on January 10, 1992, with the California-American Water Company (Cal-Am), to operate and manage the Monterra Ranch water supply system. Metered monthly production and delivery for the MRMWC shall be reported separately from the balance of the Cal-Am system.
4. Hanover-Monterra Investors II executed an agreement (undated but in 1991), with Cal-Am to provide for an emergency intertie between the two systems. For the purpose of the current application amendment with the MPWMD, "emergency" shall mean any water outage with the potential for a health or safety hazard, as determined by the Director of Environmental Health in compliance with Monterey County Code Section 10.72.020(F). Transfer of water through emergency interties between Cal-Am and the MRMWC shall be metered and documented. Use of an emergency intertie for a period of time exceeding fifteen consecutive days shall be reviewed by the MPWMD General Manager, and a determination as to whether or not the continued use of the intertie constitutes an emergency as defined, shall be made. This determination shall be reported to the MPWMD Board at the next regular Board meeting.

5. Water transferred from the Cal-Am system through an emergency intertie with the MRMWC system must be replaced within six months from the first day of water transfer. Any water so transferred must be replaced with an equal quantity of water conforming to Title 22 of the "California Domestic Water Quality and Monitoring Regulations". If in the event that water has not been replaced in kind within six months from the first day of transfer, MRMWC shall pay to the MPWMD a Use Fee for the quantity of water not replaced, at a rate of 150 percent of the average cost of water produced by the MRMWC system for the six month period preceding the emergency. The cost of water produced will include all costs to pump, purify, and distribute the brackish water underlying Monterra Ranch, as well as the costs to transport and dispose of the associated brine waste.
6. Use of emergency interties to the MRMWC system shall only be operated under emergency conditions as defined above, at which time notification shall be provided to the MPWMD General Manager, and the Monterey County Director of Environmental Health. Where emergency circumstances do not allow for advance written notification, such notification shall be provided in writing as soon as possible thereafter.
7. The MRMWC program to conserve water consists of water use limitations in the Declaration of Restrictions of the Monterra Ranch subdivision, including the use of drought tolerant landscaping. MPWMD requirements for installation of low flow plumbing fixtures to reduce average per-unit consumption shall be enforced. The MRMWC water conservation program shall be reviewed annually for compliance at the time of the Annual Water Distribution System Report.
8. A system-wide leak detection inspection of the MRMWC system shall be conducted annually, and identified leaks shall be repaired with the goal of maintaining production system losses (unaccounted water use) at seven (7) percent or less of annual production. This condition shall be subject to annual review by the MPWMD General Manager.
9. *MRMWC shall measure water levels a minimum of once a month in each active production and monitoring well. For each inactive production and monitoring well, water levels shall be measured a minimum of twice annually, and the times of measurement shall include the anticipated annual high and low water levels at each site. These data shall be transmitted annually to the MPWMD in August along with the Annual Water Distribution System Report. Active wells shall not be pumped for 24 hours prior to water level measurement. The reference elevation of the measuring point at each well shall be surveyed and recorded. [revised March 16, 1998]*
10. The MRMWC shall install and maintain water meters on each production facility. Monthly production records shall be kept for each production facility. These records shall be submitted annually in August along with the Annual Water Distribution System Report.
11. The MRMWC shall bi-monthly (i.e., every two months) record metered sales for each water user in the system.

12. The MRMWC shall conduct a ground water quality sampling program once every year and transmit the results in August along with the Annual Water Distribution System Report. At a minimum, each active production well shall be sampled annually in October and analyzed by a state certified water quality laboratory to include the following parameters: Calcium, Sodium, Magnesium, Potassium, Bicarbonate, Sulfate, Hydrogen Sulfide, Chloride, Ammonia Nitrogen, Nitrate, Iron, Manganese, Total Dissolved Solids, Specific Conductance, pH, and water temperature. The first annual sampling and analysis shall be conducted in October 1995.
13. The MPWMD shall require, and each unit shall install, water closets with a capacity of 1.6 gallons or less, and shower heads with a maximum flow of 2.5 gallons per minute for new construction and remodels served by the MRMWC. In addition, all new construction shall install on-demand hot-water systems, drought-tolerant landscapes, and drip irrigation where appropriate.
14. No water meter connections to the MRMWC system may be set until a water connection permit has been secured from the District for each connection. Connection charges will be applied at 18.67 percent of the unfactored total connection charge, as per MPWMD Rule 24 F. Connection charges shall be calculated based on water demand estimates using the MPWMD's water demand methodology.
15. MRMWC shall implement a comprehensive water production, delivery, and hydrogeologic monitoring program. This program will require the submittal of an Annual Water Monitoring Program Report in August, along with the Annual Water Distribution System Report. The monitoring program report shall cover the previous year from July 1 through June 30. The first report will be due in August 1996, regardless of the actual development status of the project. This report, at a minimum, will include the reporting of, and the analysis and interpretation of, monitoring data described in Condition Numbers 8, 9, 10 and 11 above. This report will include the status of development at the Monterra Ranch, a analysis of water consumption by individual lots for each type of use, and updated projections of future water usage at the Monterra Ranch. This report will also include an analysis of ground water quality trends, and an updated determination of the production capacity of the MRMWC system. This report will be subject to review and approval by the District Board.
16. If information contained in the Annual Water Monitoring Program Report indicates the occurrence of adverse impacts in the form of reduction in well yields, degradation of water quality, or substantial declines in water levels, additional conservation measures shall be undertaken in the form of more stringent water conservation, water reclamation, and recycling for nonpotable uses.
17. The MRMWC shall annually pay to the MPWMD, by August 15 of each year, the sum of one thousand dollars (\$1,000) to partially defray the cost associated with the review of monitoring facilities and environmental documentation provided by the MRMWC. The first payment will become due on August 15, 1996, regardless of the actual development

status of the project.

18. On February 20, 1991, Hanover-Monterra Investors II executed an indemnification agreement with the MPWMD indemnifying the MPWMD from any claims, demands, or expenses of any nature or kind arising from, or in any way related to, the adequacy of the water supply for the MRMWC. This indemnification agreement shall remain in effect upon approval of this permit amendment, and shall bind and benefit MPWMD, its successors and assigns, and Hanover-Monterra Investors II, its successors and assigns.
19. The current well production capacity during the month of maximum demand from existing on-site wells has been tested and proved to be 146,000 gallons per day (GPD), with the largest producing well out of service. This is almost twice the volume required to meet the Phase 1 (i.e., 125 connections) maximum month demand estimate (i.e., 82,316 GPD). New wells shall be completed and tested until the projected maximum demand month production capacity (in GPD) from all on-site wells is increased to a total of 246,640 GPD with the largest producing well out of service. Pumping tests to determine design yields of production wells shall, at a minimum, consist of constant-rate tests of not less than 72 hours. The results of well completions and testing shall be submitted to the MPWMD for approval prior to issuance of final approval for this permit amendment. *By approval of the January 20, 2000 permit amendment application, this condition has been satisfied. [revised March 20, 2000]*
20. Prior to issuance of final approval for this permit amendment, the applicant shall obtain written approval from the Monterey County Health Department (MCHD), and if required by that agency, the California Regional Water Quality Control Board (RWQCB), as to the method of disposing of water treatment plant brine concentrate. *Written approval from the MCHD has been received (see letter of March 20, 2000); therefore this condition has been satisfied. [revised March 20, 2000]*
21. Prior to issuance of final approval for this permit amendment, the applicant shall obtain all applicable permit approvals from the MCHD, and the state of California Department of Health Services (CDHS), regarding operation of the water supply and treatment system for the MRMWC. For less than 200 connections, the applicant shall comply with conditions of the MCHD water supply permit and desalination system permit. For greater than 200 connections up to a maximum of 286 connections, the applicant shall comply with conditions of the CDHS water supply permit, and the MCHD desalination system permit. *[revised March 20, 2000]*
22. The permit amendment to be granted herein is subject to revocation in the event the MRMWC does not comply with provisions set forth in each condition above. These conditions supersede all previous permit conditions for the MRMWC system.

Summary of Production, Delivery and Connection Data from Monterra Ranch Mutual Water Company Annual Water Monitoring Program Reports: 1996-2002

Production (acre-feet)	RY 1996	RY 1997	RY 1998	RY 1999	RY 2000	RY 2001	RP 2001	WY 2002
Total Well	1.53	1.23	10.46	12.83	17.89	89.30	101.95	166.40
Total RO Plant Production	---	---	---	11.72	15.22	22.92	31.89	27.77
RO Brine Conc. Production	---	---	---	1.10	2.67	3.84	5.22	3.90
RO Plant % of Well ([RO + Brine]/Well)	---	---	---	100%	100%	30%	36%	19%
Brine Reject % (Brine/RO)	---	---	---	9%	18%	17%	16%	14%
Delivery (acre-feet)								
Total Metered Consumption	---	---	---	10.46	14.24	20.38	28.33	26.21
Consumption % Loss (RO-Consump./RO)	---	---	---	11%	6%	11%	11%	6%
Active Connections								
Residential -- inclusionary homes	---	---	42	42	42	---	42	42
Residential -- market rate homes	---	---	---	1	3	---	11	11
Irrigation	---	---	2	2	2	---	2	2
Non-residential/commercial	---	---	---	1	3	---	3	6
Construction - temporary	---	---	---	---	---	---	9	7
Total	---	---	44	46	50	0	67	68
Delivery/Connection (acre-feet/connection)								
Residential -- inclusionary homes	---	---	0.18	0.23	0.28	---	0.30	0.30
Residential -- market rate homes	---	---	---	---	0.46	---	0.40	0.60
Irrigation	---	---	0.17	0.05	0.08	---	0.26	0.21
Construction - temporary	---	---	---	---	---	---	0.06	0.14
Sales Office	---	---	---	0.14	0.88	---	0.48	0.22
Golf course clubhouse	---	---	---	---	0.01	---	3.84	3.83
Golf course maintenance building	---	---	---	---	---	---	0.31	0.31
Golf course 13th fairway bathroom	---	---	---	---	---	---	---	0.02
Golf course 16th fairway bathroom	---	---	---	---	---	---	---	0.04
Mid-gate guard house	---	---	---	---	---	---	---	0.91

NOTES:

1. RY refers to Reporting Year from July 1 to June 30 of year shown. RP refers to the 15-month Reporting Period from July 1, 2000 to September 30, 2001.
2. WY refers to Water Year from October 1 to September 30. In 2002, the reporting system was switched to WY to conform with hydrologic data reporting.
3. RY 1998 represents the first year that the 42 inclusionary housing units were occupied.
4. RY 1999 -- 0.34 acre-feet (0.11 million gallons) was subtracted from reported well production as this volume was for M-13 well testing.

BUILDOUT POTABLE WATER DEMAND

1/10/00

Revised 1/12/00

Previous Projections for Monterra Ranch
(Prior to Cañada Woods North)

Customer Demand (MRP)

		<u>AFY</u>
42 Incl Housing Units	@ 0.24 AFY	10.08
274 Single Family Units	@ 0.50 AFY	137.00
9 Ranch Lots	@ 0.70 AFY	6.30
36 Caretaker Units	@ 0.12 AFY	4.32
Misc.Non Residential Uses		<u>5.30</u>
Total Customer Demand:		163.00 AFY
		Or: 145500.00 GPD

Well Demand (MRP)

Yearly	163.00 / (0.93 x 0.85)	206.20 AFY
	(7% system losses/15% treatment plant losses)	
Average Day	145,500 / (0.93 x 0.85)	184,060 GPD
Max Month	1.34 x 184,060	246,640 GPD

Current Projections for Monterra Ranch Properties and Cañada Woods North

Customer Demand Monterra Ranch Properties

Connections:

		<u>AFY</u>
42	Inclusionary Housing Units	@ 0.24 AFY 10.08
162	Single Family Units	@ 0.50 AFY 81.00
	W/ 162 Caretaker Units	@ 0.12 AFY 19.44
9	Ranch Lots	@ 0.70 AFY 6.30
	W/ 9 Caretaker Units	@ 0.12 AFY 1.08
	W/ 9 Senior Units	@ 0.12 AFY 1.08
1	Gatehouse	@ 0.15 AFY 0.15
10	Misc.Non-Residential Connections	@ 0.30 AFY 3.00
(Maintenance, Irrigation, & Sales Office)		
Total Customer Demand:		122.13 AFY
224 Connections		Or: 109,023 GPD

Customer Demand Cañada Woods North

Connections:

		<u>AFY</u>
34	Single Family Units	@ 0.50 AFY 17.00
	W/ 17 Caretaker Units	@ 0.12 AFY 2.04
5	Employee Units	@ 0.24 AFY 1.20
8	Member Suites	@ 0.24 AFY 1.92
3	Club House and Recreation Center	9.80
	W/ 4 Member Suites	@ 0.24 AFY 0.96
1	Maintenance Center	@ 1.00 AFY 1.00
1	Equestrian Center	@ 1.50 AFY 1.50
10	Misc. Non-Residential Connections	@ 0.30 AFY 3.00
(Maintenance, Irrigation, & Sales Office)		
Total Customer Demand:		38.42 AFY
62 Connections		Or: 34,297 GPD

Well Demand Monterra Ranch Properties & Cañada Woods North

Yearly:	(122.13 + 38.42) / (0.93 x 0.85)	203.10 AFY
	(7% System losses & 15% Treatment Plant Losses)	
Average Day:	143,320 / (0.93 x 0.85)	181,303 GPD
Max/Month:	1.34 x 181,303	242,946 GPD