

# MAG 208

## Water Quality Management Plan Amendment

For the Expansion of the  
Sundance Wastewater Treatment Plant  
Buckeye, Arizona

**Prepared for:**

*Town of Buckeye*  
100 North Apache  
Buckeye, Arizona 85326  
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**Revised: August 2005**



**Engineering Firm:  
RBF Consulting**

Engineer: Michael Worlton, P.E.  
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**RBF JN: 45-102159**



## TOWN OF BUCKEYE

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December 14, 2004

Ms. Lindy Bauer, Environmental Program Coordinator  
Maricopa Association of Governments  
302 N. 1<sup>st</sup> Avenue, Suite 300  
Phoenix, AZ 85003

Re: Sundance Water Reclamation Facility

Dear Ms. Bauer:

The Town of Buckeye is responsible for the operation, maintenance, and closure of the Sundance Water Reclamation Facility located in the Town of Buckeye, Arizona. The estimated cost of the new facility's operation and maintenance is \$450,000 per year. The Town of Buckeye will collect operation and maintenance costs from individual users through monthly service fees.

The total estimated closure costs for the Sundance Water Reclamation Facility is \$900,000. The Town of Buckeye is financially capable of meeting this cost. Closure costs will be collected over the life of the facility through monthly service fees from the individual users. There are no post-closure costs expected for this facility.

Sincerely,

Town of Buckeye

*Ron Brown for RB*

Ron Brown  
Financial Director



## TOWN OF BUCKEYE

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December 14, 2004

Ms. Brenda Day  
Maricopa Association of Governments  
302 North 1<sup>st</sup> Avenue, Suite 300  
Phoenix, Arizona 85003

**Subject: Sundance MAG 208 AMENDMENT – BUCKEYE, ARIZONA**

Dear Ms. Day:

The Town of Buckeye is submitting a 208 Amendment for the Buckeye Planning Area. In accordance with the MAG 208 Water Quality Management Plan, we are officially requesting that you initiate the amendment process to consider the service area that the Sundance Water Reclamation Facility would serve.

We look forward to working with you and appreciate your assistance to facilitate the MAG approval process for this 208 Amendment.

Sincerely,  
Town of Buckeye

A handwritten signature in cursive script, appearing to read "C Reynolds".

Carroll Reynolds  
Town Manager

Cc: Michael Worlton, RBF Consulting

**208 AMENDMENT CHECKLIST**

Section 208 Clean Water Act

40 CFR Part 130.6

REQUIREMENT	PROVIDE BRIEF SUMMARY ON HOW REQUIREMENTS ARE ADDRESSED	ADDRESSED ON PAGE:
<p><b><u>AUTHORITY</u></b></p> <p>Proposed Designated Management Agency (DMA) shall self-certify that it has the authorities required by Section 208(c)(2) of the Clean Water Act to implement the plan for its proposed planning and service areas. Self-certification shall be in the form of a legal opinion by the DMA or entity attorney.</p>	<p>MAG is the Designated Planning Agency that has the authority as required in CWA 208(a)(2)(B). The Town of Buckeye is the Designated Management Agency for the Buckeye Municipal Planning Area.</p>	<p>1 (Please refer to Appendix C of the MAG 208 Water Quality Management Plan, October 2002)</p>
<p><b><u>20-YEAR NEEDS</u></b></p> <p>Clearly describe the existing wastewater (WWT) treatment facilities:</p> <ul style="list-style-type: none"> <li>- Describe existing WWT facilities.</li> </ul>	<p>The Town of Buckeye currently operates the Sundance WWTP, a 1.2 MGD wastewater treatment plant within the Town of Buckeye planning area. The Sundance WWTP is currently planned to have a build out capacity of 3.6 MGD. The proposed service area is within the Town's planning area.</p>	<p align="center">2</p>
<ul style="list-style-type: none"> <li>- Show WWT certified and service areas for private utilities and sanitary district boundaries if appropriate.</li> </ul>	<p>There are no private utilities or sanitary districts within the planned area for this facility. The previously approved MAG 208 for Blue Horizons will be deleted since this amendment includes Blue Horizons.</p>	<p align="center">5 &amp; 6</p>
<p>Clearly describe alternatives and the recommended WWT plan:</p> <ul style="list-style-type: none"> <li>- Provide POPTAC population estimates (or (COG-approved estimates only where POPTAC not available) over 20-year period.</li> </ul>	<p>The Town of Buckeye is projected to grow to 102,223 people by 2024. The service area is projected to include 17,630 residential units at ultimate build out.</p>	<p align="center">3 &amp; 4</p>
<ul style="list-style-type: none"> <li>- Provide wastewater flow estimates over the 20-year planning period.</li> </ul>	<p>Estimated flows range from 2.4 MGD at Phase IB to 8.9 MGD at ultimate build-out.</p>	<p align="center">9</p>
<ul style="list-style-type: none"> <li>- Illustrate the WWT planning and service areas.</li> </ul>	<p>The service area for the proposed expansion of the SWWTP is located within the Town of Buckeye Planning Area. The service area includes areas bounded by Camelback Road, Perryville Road, RID Canal, Dean Road, McDowell Road and Tuthill Road.</p>	<p align="center">Appendix A</p>

- Describe the type and capacity of the recommended WWT plant.	A treatment facility with biological treatment process will provide BOD removal, nitrification and denitrification, aerobic sludge digestion, sludge dewatering, and sludge disposal strategy. The plant will be equipped with odor control, which includes covers and odor scrubbing equipment. The ultimate capacity of the facility will be 8.9 MGD.	4
- Identify water quality problems, consider alternative control measures, and recommend solution for implementation.	No water quality problems are anticipated. Effluent will be A+ quality. Effluent will meet all limits established by the NPDES Permit, reuse permit, and recharge permit.	5
- If private WWT utilities with certified areas are within the proposed regional service area; define who (municipal or private utility) serves what area and when. Identify whose sewer lines can be approved in what areas and when?	There are no private utilities within the proposed service area. The Verrado WWTP service area is adjacent to the Sundance WWTP service area and will not overlap at any time.	5
- Describe method of effluent disposal and reuse sites (if appropriate).	Effluent from the SWWTP will be disposed of in two manners: 1) Direct reuse of reclaimed wastewater for public green areas including golf courses, 2) Discharge of reclaimed wastewater to the BID canal and 3) Groundwater Recharge to basins or wells	6
- If Sanitary Districts are within a proposed planning or service area, describe who serves the Sanitary Districts and when.	There are no sanitary districts within the proposed planning or service areas.	5
- Describe ownership of land proposed for plant sites and reuse areas.	The land for the plant is owned by Buckeye Land and Managed by Buckeye Land Management Inc. Once construction of the facility is accepted, the Town of Buckeye will obtain full ownership of the facility.	2
- Address time frames in the development of the treatment works.	The project will be divided up into phases. It is anticipated that the construction of phase 1 expansion will be completed by 2010. Future expansions are anticipated, bringing the ultimate capacity to 8.9 MGD. Design of these improvements will begin when 70% of the plant capacity has been reached as calculated by measured flows from the collection system. Construction will begin when 80% of the plant capacity has been reached.	9

<p>- Address financial constraints in the development of the treatment works.</p>	<p>Financing of the phase I expansions to the SWWTP are discussed in the original Sundance MAG 208, and will be provided through BLMI. Phase 2 and 3 expansions will be the responsibility of the Town of Buckeye. All phase I improvements will be publicly bid and eligible for reimbursement through one or more CFDs that BLMI may choose to implement. It is expected that other developers will share costs with BLMI for the design and construction of the Sundance phase I WWTP expansion. Once the phase I expansions are complete, the plant will be self supported and the Town will assume financial responsibility for construction of future phases. The Town of Buckeye will be responsible for the operation and maintenance of the SWWTP whether the Town publicly bids the operation and maintenance services or directly hires qualified and licensed operators. User fees will be collected by the Town of Buckeye to fund operation and maintenance over the life of the SWWTP.</p>	<p>8</p>
<p>- Describe how discharges will comply with EPA municipal and industrial stormwater discharge regulations (Section 405, CWA).</p>	<p>All storm water will be contained onsite and there will be no offsite storm water discharge.</p>	<p>5</p>
<p>- Describe how open areas &amp; recreational opportunities will result from improved water quality and how those will be used.</p>	<p>The reuse of effluent will safely enhance the golf course while minimizing use of groundwater for irrigation.</p>	<p>5</p>
<p>- Describe potential use of lands associated with treatment works and increased access to water-based recreation, if applicable.</p>	<p>Not applicable.</p>	<p>Not applicable.</p>
<p><u>REGULATIONS</u></p> <p>- Describe types of permits needed, including NPDES, APP and reuse.</p>	<p>Permits required are NPDES, APP, reuse, recharge, air quality, architectural, building, approval to construct, approval of construction, sludge disposal, sludge hauling and annual operating permit from MCESD.</p>	<p>6</p>
<p>- Describe restrictions on NPDES permits, if needed, for discharge and sludge disposal.</p>	<p>The quality of the effluent will meet requirements of the Clean Water Act.</p>	<p>5</p>
<p>- Provide documentation of communication with ADEQ Permitting Section 30 to 60 days prior to public hearing regarding the need for specific permits.</p>	<p>PACE (Pacific Advanced Civil Engineering, Inc.) is working on securing a significant amendment to the existing Sundance APP (Aquifer Protection Permit). This amendment will increase the permitted flow to 2.4 MGD. The permit information was obtained from the ADEQ website and a copy is included in Appendix C.</p>	<p>6</p>

<p>- Describe pretreatment requirements and method of adherence to requirements (Section 208 (b)(2)(D), CWA).</p>	<p>It is not anticipated that the SWWTP will have any industrial users, therefore no pretreatment will be required. However, in the future if it is anticipated that the service area will have industrial users then each prospective industrial user will be required to be in compliance with all pretreatment requirements dictated by the Town of Buckeye and all federal pretreatment requirements as provided in 40 CFR Part 403 and enforced by Arizona Department of Environmental Quality. The ability for prospective industrial users to comply with both federal and local regulations will be evaluated on a case-by-case basis.</p>	<p>6</p>
<p>- Identify, if appropriate, specific pollutants that will be produced from excavations and procedures that will protect ground and surface water quality (Section 208(b)(2)(K) and Section 304, CWA).</p>	<p>Storm Water Pollution Prevention Plan (SWPPP) will be provided.</p>	<p>7</p>
<p>- Describe alternatives and recommendation in the disposition of sludge generated. (Section 405 CWA)</p>	<p>Sludge will be dewatered and either disposed of at an approved landfill or applied to approved agricultural land. Sludge hauler and sludge disposal agreements will be obtained. Sludge will be of such a quality that it may be used for agricultural purposes.</p>	<p>7</p>
<p>- Define any non-point issues related to the proposed facility and outline procedures to control them.</p>	<p>Not applicable.</p>	<p>Not applicable.</p>
<p>- Describe process to handle all mining runoff, orphan sites and underground pollutants, if applicable.</p>	<p>Not applicable.</p>	<p>Not applicable.</p>
<p>- If mining related, define where collection of pollutants has occurred, and what procedures are going to be initiated to contain contaminated areas.</p>	<p>Not applicable.</p>	<p>Not applicable.</p>
<p>- If mining related, define what specialized procedures will be initiated for orphan sites, if applicable.</p>	<p>Not applicable.</p>	<p>Not applicable.</p>
<p><b>CONSTRUCTION</b></p> <p>Define construction priorities and time schedules for initiation and completion.</p>	<p>The project will be divided up into phases. It is anticipated that the construction of phase 1 expansion will be completed by 2010. Construction of phase II expansion is not estimated to begin until 2013. Future expansions are anticipated, bringing the ultimate capacity to 8.9 MGD. Design of these improvements will begin when 70% of the plant capacity has been reached as calculated by measured flows from the collection system. Construction will begin when 80% of the plant capacity has been reached.</p>	<p>8</p>

<p>Identify agencies who will construct, operate and maintain the facilities and otherwise carry out the plan.</p>	<p>The Northeast Buckeye Developers will bid the design and expansion of the SWWTP. Construction will be accomplished under the resultant contract from this bidding process. The winning bidder will be responsible for the construction of the facility. The timing of construction of each phase will be dependent upon the increases in population and the resultant wastewater flows. In general, design of each new phase must begin when 70% of the plant capacity has been reached. Construction of each phase must begin when 80% of the plant capacity has been reached. The Town will take ownership of the plant after the completion of each new phase. BLMI is in the process of contracting for another 1.2 MGD expansion of the SWWTP. BLMI also has an agreement in place for a third 1.2 MGD expansion. The town of Buckeye will be responsible for the construction.</p>	<p>7</p>
<p>Identify construction activity-related sources of pollution and set forth procedures and methods to control, to the extent feasible, such sources.</p>	<p>Pollutants associated with construction activities are anticipated to be limited to solid waste, inert materials, and residual construction materials all of which will be properly disposed of after construction activities are complete.</p>	<p>7</p>
<p><u>FINANCING AND OTHER MEASURES NECESSARY TO CARRY OUT THE PLAN</u></p> <p>- If plan proposes to take over certificated private utility, describe how, when and financing will be managed.</p>	<p>Not applicable.</p>	<p>Not applicable.</p>
<p>- Describe any significant measure necessary to carry out the plan, e.g., institutional, financial, economic, etc.</p>	<p>The phasing of the expansion will depend upon the demand placed by commercial and residential developments.</p>	

<p>- Describe proposed methods(s) of community financing.</p>	<p>Financing of the phase I expansions to the SWWTP are discussed in the original Sundance MAG 208, and will be provided through BLMI. Phase 2 and 3 expansions will be the responsibility of the Town of Buckeye. All phase I improvements will be publicly bid and eligible for reimbursement through one or more CFDs that BLMI may choose to implement. It is expected that other developers will share costs with BLMI for the design and construction of the Sundance phase I WWTP expansion. Once the phase I expansions are complete, the plant will be self supported and the Town will assume financial responsibility for construction of future phases. The Town of Buckeye will be responsible for the operation and maintenance of the SWWTP whether the Town publicly bids the operation and maintenance services or directly hires qualified and licensed operators. User fees will be collected by the Town of Buckeye to fund operation and maintenance over the life of the SWWTP.</p>	<p>8</p>
<p>- Provide financial information to assure DMA has financial capability to operate and maintain wastewater system over its useful life.</p>	<p>The Northeast Buckeye Developers, led by Pulte Homes, The Town of Buckeye and Buckeye Land Management have the financial capacity to operate the facility.</p>	<p>Appendix B</p>
<p>- Provide a timeline outlining period of time necessary for carrying out plan implementation.</p>	<p>It is anticipated that the construction of the phase I expansion will be completed by 2010. Construction of phase II expansion is not estimated to begin until 2013. The additional phases will be completed as dictated by growth in the area. Based on existing growth patterns, ultimate build out is anticipated to occur in 2022.</p>	<p>8</p>
<p>- Provide financial information indicating the method and measures necessary to achieve project financing. (Section 201 CWA or Section 604 may apply.)</p>	<p>See financial statements in Appendix B.</p>	<p>Appendix B</p>
<p><b>IMPLEMENTABILITY</b></p>		
<p>Describe impacts and implementability of Plan:</p> <p>- Describe impacts on existing wastewater (WW) facilities, e.g., Sanitary district, infrastructure/facilities and certificated areas.</p>	<p>The Town of Buckeye currently operates the Sundance WWTP, a 1.2 MGD wastewater treatment plant within the Town of Buckeye planning area. The Sundance WWTP is currently planned to have a build out capacity of 3.6 MGD. The proposed service area is within the Town's planning area.</p>	<p>9</p>
<p>- Describe how and when existing package plants will be connected to a regional system.</p>	<p>Not applicable.</p>	<p>Not applicable.</p>
<p>- Describe the impact on communities and businesses affected by the plan.</p>	<p>There will be no impacts on communities or businesses anticipated.</p>	<p>9</p>

- If a municipal wastewater (WWT) system is proposed, describe how WWT service will be provided until the municipal system is completed: i.e. will package plants and septic systems be allowed and under what circumstances. (Interim services)	Service already provided by the Sundance Wastewater Treatment Plant.	
<b><u>PUBLIC PARTICIPATION</u></b>		
- Submit copy of mailing list used to notify the public of the public hearing on the 208 amendment. (40 CFR, Chapter 1, Part 25.5)	All public notifications will be satisfied through MAG. Additional notifications will be made if required by the Town.	10
- List location where documents are available for review at least 30 days before public hearing.	All public notifications will be satisfied through MAG. Additional notifications will be made if required by the Town.	10
- Submit copy of the public notice of the public hearing as well as an official affidavit of publication from the area newspaper. Clearly show the announcement appeared in the newspaper at least 45 days before the hearing.	All public notifications will be satisfied through MAG. Additional notifications will be made if required by the Town.	10
- Submit affidavit of publication for official newspaper publication.	All public notifications will be satisfied through MAG. Additional notifications will be made if required by the Town.	10
- Submit responsiveness summary for public hearing.	All public notifications will be satisfied through MAG. Additional notifications will be made if required by the Town.	10

## 1.0 Executive Summary

The Maricopa Association of Governments (MAG) is the Designated Planning Agency with the authority, required by Section 208 (a)(2)(B) of the Clean Water Act, to amend the Water Quality Plan for the Maricopa County Planning Area. The Town of Buckeye is requesting an amendment to the MAG 208 Water Quality Management Plan (MAG 208 Plan) for the Sundance Wastewater Treatment Plant (SWWTP), which is currently identified for a 3.6 MGD treatment capacity. This amendment calls for an expansion of the SWWTP, with a total of 8.9 MGD treatment capacity, and effluent reuse at proposed open areas, discharge to the Buckeye Irrigation District (BID) Canal or groundwater recharge. The service area for this plant is located within the Buckeye Planning Area (see Exhibit A – Sundance WWTP Amendment). This amendment includes Blue Horizons and, therefore, rescinds the previously approved MAG 208 for Blue Horizons.

Expansion of the SWWTP will be financed by a group of developers led by Pulte Homes (North East Buckeye Developers). These developers will bid and finance the work to complete the SWWTP. Once construction is complete, the Town of Buckeye will own the facility. The Town may publicly bid the operation and maintenance services or directly hire qualified and licensed operators. Sources of wastewater will be domestic and commercial. No pretreatment will be provided.

This Clean Water Act (CWA) 208 Amendment application contains the required information on the proposed construction and operation of the SWWTP. The volumes treated and discharged will increase over time as the capacity of the plant is increased. Future expansions are anticipated, bringing the ultimate capacity to 8.9 MGD. Design of these improvements will begin when 70% of the plant capacity has been reached as calculated by measured flows from the collection system. Construction will begin when 80% of the plant capacity has been reached.

The CWA Section 208 Checklist on the preceding pages provides a summary of the amendment application requirements and the proposed improvements addressing these issues.

## **2.0 Authority**

MAG is the Designated Planning Agency with the authority required by Section 208 (a)(2)(B) of the Clean Water Act to amend the Water Quality Plan for the Maricopa County Planning Area. MAG has authority to implement the plan for the proposed planning and services areas as outlined in this application.

The proposed facility is to be located within the planning area for the Town of Buckeye.

## **3.0 20-Year Needs**

### **3.1 Description of the Existing Sundance Wastewater Treatment Plant (SWWTP)**

The Town of Buckeye currently operates the 1.2 MGD SWWTP Facility. The SWWTP is located east of Dean Road and north of the RID canal. Expansion of this facility to 3.6 MGD is outlined in the 2001 MAG 208 Plan Amendment. The SWWTP is proposed to serve the portion of the study area located north of the RID canal to Camelback Road. The existing service area and the proposed service area are shown in Exhibit A – Sundance WWTP Amendment. A 15-inch sewer trunk line is within one mile of the proposed service area. (See Exhibit A – Sundance WWTP Amendment).

### **3.2 Description of the Proposed Wastewater Treatment Plant**

#### **3.2.1 Site Location and Property Ownership**

The proposed location of the SWWTP expansion is within the southwest quarter of Section 13 in Township 1 North, Range 3 West of the Gila and Salt River Base and Meridian, Town of Buckeye, Maricopa County, Arizona (see Buckeye Planning Area Map, Appendix A). The service area includes areas bounded by Camelback Road on the North, RID Canal on the South, Perryville Road on the East and Dean Road on the West. The facility location and service area are located within the Buckeye Planning Area.

Town of Buckeye East Buckeye Wastewater Master Plan, May 2004, prepared by RBF Consulting, indicates expansions to the existing collection system and Wastewater treatment facilities. The proposed SWWTP is discussed in detail in the East Buckeye Wastewater Master Plan. This plan contains wastewater flow rates that are not approved by MCESD.

Currently, the property is owned by Buckeye Land LLC. Once construction of each phase is complete and accepted by the Town of Buckeye, the SWWTP and property will be owned by the Town of Buckeye.

#### **3.2.2 Topographic Conditions**

The existing ground within the proposed SWWTP service area slopes generally to the southeast at an approximate slope of 0.0081 ft/ft. The proposed service area consists of rural residential, planned residential, commercial centers, general commerce and designated land uses.

The following major roadways intersect the proposed service area: I-10, Camelback

Road, Indian School Road, Thomas Road, McDowell Road, Van Buren Street, Yuma Road, Dean Road, Airport Road, Tuthill road, Jack Rabbit Trail & Perryville Road. According to the FEMA map number 04013C2045 G, the SWWTP is not in a floodplain. It is located in the Zone X flood area which is the area of 500-year flood; area of 100-year flood with average depths of less than 1 foot or with drainage area less than 1 square mile; and area protected by levees from 100-year flood. A flood area map showing the SWWTP site is included in Appendix A.

**3.2.3 Population Estimates and Flow Projections**

The Department of Economic Security (DES) Population Statistics Unit prepares official population estimates and projections for the State of Arizona. The DES projects the population of Buckeye for the 20-year planning period to reach 102,223. It is anticipated that the SWWTP will accommodate a portion of this population.

The proposed SWWTP will have a service area as shown in the Buckeye Planning Area Map in Appendix A. The existing SWWTP was proposed to serve a total of 3.6 MGD or 10,286 dwelling units. The proposed expansion of the SWWTP service area would serve an additional 15,161 equivalent dwelling units. The total number of equivalent dwelling units projected to be served by the SWWTP is 25,446 equivalent dwelling units.

The flow projections were based on land use maps, planned and proposed development information and existing development and parcels maps. The land use categories within the SWWTP service area consist of commercial center, general commerce, planned community, planned residential, rural residential and special use. The allowable land use densities were established by the Town staff and are described in Table 3.1 Land Use Densities. A distribution of the population projections for the SWWTP service area is shown in Exhibit B in Appendix A.

**Table 3.1 Land Use Densities**

<b>Land Use</b>	<b>Density</b>
Planned community	4 du/ac
Planned Residential	4 du/ac
Rural Residential	1 du/ac

A more detailed description of the population projections is provided in the East Buckeye Wastewater Master Plan prepared by RBF Consulting, which is attached in Appendix C.

**3.2.4 Estimated Wastewater Flow**

The projected wastewater flows from the expanded SWWTP service area are summarized in Table 3.2. In addition to these flows, The SWWTP will also receive a minimal amount of flow from the arsenic treatment facility at the Sundance-Sonora water storage tank. Exhibit B shows the flow summary and the land use and developments for the proposed service area.

**Table 3.2** Flow Summary for the area serviced by the proposed SWWTP

<b>Description</b>	<b>Equivalent Dwelling Units</b>	<b>Flow (gal/unit/day)</b>	<b>Average Daily Flow (gpd)</b>
Future DU	12,607	325	4,097,275
Existing DU	720	325	234,000
Rancho Sonora	476	325	154,700
<b>Subtotal</b>	<b>13,803</b>		<b>4,485,975</b>
Outside Parcels Future DU	2,919	325	948,675
Outside Parcels Existing DU	908	325	295,100
<b>Subtotal</b>	<b>3,827</b>		<b>1,243,775</b>
Sundance Build out Design Capacity			3,600,000
Sundance build out capacity	9,054	325	
Excess Sundance Capacity*			-400,307
<b>Total</b>	<b>17,630</b>		<b>8,929,443</b>

\* This is because the number of lots approved was less than the projected number of lots.

### 3.2.5 WWTP Description

The first phase of the Sundance WWTP consists of a Sequential Batch Reactor (SBR) system, with average flow capacity of 1.2 MGD. Further phasing will be determined by growth within the service area for the SWWTP. Phases 1B and 1C will also consist of a SBR system. The existing facilities will be upgraded in phase 2. In phase 3 an additional 1.7 MGD Modified Ludzack Ettinger (MLE) expansion will be added. The capacity, at full build-out, of the WWTP will be 8.9 MGD, based on sizing requirements per Maricopa County where total residential EDUs are multiplied by 325 gallons per unit per day. The proposed treatment process will provide BOD removal, nitrification and denitrification, aerobic or anaerobic sludge digestion, sludge dewatering, and sludge disposal strategy. Since bidding for the design and construction of the SWWTP has not yet begun, specific design parameters have not yet been determined. Details of the treatment process are therefore not included in this report. The construction plan will be reviewed and approved by Maricopa County Environmental Services Department (MCESD) and the Town of Buckeye prior to construction. This will include a start-up plan for the facility.

#### 3.2.5.1 Effluent Disposal and Quality Requirements

Effluent from the SWWTP is currently being reused at the Sundance golf course. This effluent is stored in a lake and is pumped to the golf course for irrigation purposes. A 20-inch low-pressure effluent line with a capacity of 7.6 MGD is currently being constructed to carry effluent from the SWWTP to the Buckeye Irrigation District (BID) Canal. The effluent line will be pressurized to meet the current demand of 8.9 MGD. Other alternatives for effluent disposal may include: 1) direct reuse for irrigation of green areas, 2) Discharge into the BID Canal, and 3) Groundwater Recharge. Such a strategy helps to conserve water resources available to the Town of Buckeye.

Effluent may be reused on local golf courses. This would require a distribution system including pumping, transmission and storage. All reclaimed water to be directly reused will comply with the Reclaimed Wastewater Reuse Permit, AAC Title 18 Chapter 9 Article 7 and will qualify as Class A+ Reclaimed Water as provided by AAC Title 18 Chapter 9 Article 3. Direct reuse will provide numerous recreational opportunities and aesthetic enhancements without the need for groundwater pumping to irrigate these improvements. The cost to initiate and maintain a reclaimed water distribution program can be offset by the implementation of hook-up fees and usage rates to private entities.

Another potential effluent management strategy is to recharge the groundwater aquifer. An alternative to direct reuse may be needed because the demand for reclaimed water fluctuates throughout the year. The effect of a recharge basin is to retard the rate of draw down in the aquifers being pumped. Change in draw down can be minimized as wells increasingly pump more recharged water rather than native groundwater. All reclaimed water to be recharged will comply with the Reclaimed Wastewater Recharge Permit, AAC Title 18 Chapter 9 Article 7 and will qualify as Class A+ Reclaimed Water as provided in AAC Title 18 Chapter 9 Chapter 3.

Effluent from the SWWTP may also be discharged to the BID canal. An agreement has been made between the Town of Buckeye and the Buckeye Water Conservation & Drainage District (BWCDD) to discharge the effluent from the SWWTP to the BID canal. A copy of the agreement can be found in Appendix C. This reclaimed water will be utilized for irrigation purposes. The effluent utilized in this manner will comply with AAC Title 18 Chapter 9 Open Access Guidelines, A+ quality reclaimed water guidelines, NPDES Permit, and the Reclaimed Wastewater Reuse Permit. Effluent reuse will be the primary disposal method. Discharge will only occur if suitable recharge and reuse areas cannot be found.

Several options for effluent disposal have been described with the intention to emphasize the benefits of direct reuse and recharge. However, the feasibility of groundwater recharge as an option for effluent disposal is a function of soil characteristics and underlying geology of the area. Issues such as water logging and possible adverse impacts control the viability of using recharge basins to dispose of the effluent. The effluent from the Sundance WWTP will be reused for public green areas including golf courses, and any excess effluent will be discharged to the BID canal. Such alternatives may be necessary if reclaimed effluent supply exceeds demand.

### **3.2.5.2 Storm Water Discharge**

Storm water discharges associated with the SWWTP are not anticipated. The facility will retain onsite all storm water runoff generated by storms up to and including the 100-year, 2-hour storm. Therefore there will be no storm water discharges from the SWWTP up to and including the 100-year, 2-hour event.

### **3.3 Sanitary Districts, Private Utilities, and WWTP Service Areas**

The location of the SWWTP and its service area are shown on the Buckeye Planning Area Map included in Appendix A. There are no existing wastewater treatment facilities, sanitary districts, or certified service areas that would be impacted by the

WWTP or discharge. The Verrado WWTP service area is adjacent to the Sundance WWTP service area, but the service areas will not overlap at any time (see Appendix A, Exhibit A). This amendment includes Blue Horizons and, therefore, rescinds the previously approved MAG 208 for Blue Horizons.

### 3.4 Summary of Alternatives

In order to accommodate anticipated growth within the proposed service area, the Town of Buckeye must find some method for treatment of wastewater and the subsequent disposal of the reclaimed wastewater. Due to the location and capacity of the existing SWWTP, the only viable option is expansion of the facility.

The Town would like to have as many possibilities for effluent disposal as possible. Each of the following alternatives may be used alone or in combination with other alternatives.

The proposed alternatives are as follows:

- Reuse of reclaimed wastewater for public green areas including golf courses.
- Discharge of reclaimed wastewater to the BID canal.
- Groundwater Recharge to basins or wells.

### 3.5 Permitting Requirements

The required permits from ADEQ and ADWR will be obtained in the Town of Buckeye's name. The Sundance WWTP will require the following permits or approvals:

**Table 3.3: Listing of Regulatory Reviews, Plans, Approvals, Permits and Certifications**

Requirement	Regulatory Agency
Approval to Construct	Maricopa County Environmental Services Department
Annual Operating Permit	Maricopa County Environmental Services Department
Approval of Construction	Maricopa County Environmental Services Department
*Aquifer Protection Permit	Arizona Department of Environmental Quality
Reclaimed Wastewater Recharge Permit	Arizona Department of Water Resources
*Reclaimed Wastewater Reuse Permit	Arizona Department of Environmental Quality
*Arizona Pollutant Discharge Elimination System (AZPDES) Permit	Arizona Department of Environmental Quality
*Sludge Disposal Agreement	Arizona Department of Environmental Quality
Air Quality Permit	Maricopa County Air Quality Department (MCAQD)
208 Amendment	Town of Buckeye, MAG Water Quality Advisory Committee, MAG Management Committee, MAG Regional Council, State WQMWWG, ADEQ, EPA
Grading Permit	Town of Buckeye
Architectural Approval	Town of Buckeye, Pulte Homes.
Building Permit	Town of Buckeye

\* The existing SWWTP has received permits for 3.6 MGD capacity. The SWWTP design consultant for future expansion will secure approval for additional capacity.

### 3.6 Pretreatment Requirements

It is not anticipated that the SWWTP will have any industrial users, therefore no pretreatment will be required. However, in future if it is anticipated that the service area

will have industrial users then each prospective industrial user will be required to be in compliance with all pretreatment requirements dictated by the Town of Buckeye and all federal pretreatment requirements as provided in 40 CFR Part 403 and enforced by Arizona Department of Environmental Quality. The ability for prospective industrial users to comply with both federal and local regulations will be evaluated on a case-by-case basis.

### **3.7 Sludge Management**

Class B sludge is currently being generated at the SWWTP. This sludge is currently land applied at Arlington Farms, north of the Gila River. It is anticipated that this sludge will include arsenic flocs once the arsenic treatment facility is installed at the Sundance-Sonora storage tank. This arsenic floc may also be pumped and hauled to a landfill since it meets Class B sludge standards. Sludge produced from the expanded facility will also be class B sludge, and may be used for agricultural purposes. There is not an end user for this product at this time; however, the options for sludge disposal will remain open. The sludge may also be delivered to a landfill for disposal.

## **4.0 Construction, Operation, and Maintenance**

### **4.1 Construction Responsibility**

The existing 1.2 MGD plant was financed by BLMI. The Northeast Buckeye Developers will bid the design and expansion of the SWWTP. Construction will be accomplished under the resultant contract from this bidding process. The winning bidder will be responsible for the construction of the facility. The timing of construction of each phase will be dependent upon the increases in population and the resultant wastewater flows. In general, design of each new phase must begin when 70% of the plant capacity has been reached. Construction of each phase must begin when 80% of the plant capacity has been reached. The Town will take ownership of the plant after the completion of each new phase. BLMI is in the process of contracting for another 1.2 MGD expansion of the SWWTP. BLMI also has an agreement in place for a third 1.2 MGD expansion. The town of Buckeye will be responsible for the construction.

### **4.2 Operation and Maintenance Responsibility**

The Town of Buckeye will be responsible for the operation and maintenance of the facility. The Town may publicly bid the operation and maintenance services or directly hire qualified and licensed operators.

### **4.3 Sources of Construction Pollution**

Construction of the SWWTP expansion will not be a pollution intensive activity. Anticipated pollutants may include dust from construction activities, construction-related solid waste, and inert material. New construction will be conducted under an Air Quality Permit from MCAQD as well as the AZPDES storm water general permit, and will comply with the provisions of the permit. Any wastes generated during construction will be properly managed and disposed of at an appropriate facility. Measures will be taken during construction activities to prevent the potential pollution of storm water runoff.

## 5.0 Financing

### 5.1 Financing Plan

The May 7<sup>th</sup> 2001 MAG 208 Amendment for the SWWTP calls for a build out capacity of 3.6 MGD. Financing of the phase I expansions to the SWWTP are discussed in the original Sundance MAG 208, and will be provided through BLMI.

Phase 2 and 3 expansions will be the responsibility of the Town of Buckeye. All phase I improvements will be publicly bid and eligible for reimbursement through one or more CFDs that BLMI may choose to implement.

### 5.2 Financing Capacity to Construct

It is expected that other developers will share costs with BLMI for the design and construction of the Sundance phase I WWTP expansion. Due to existing plant operations, the Town may decide to manage construction to reduce problems with disruption. Upon completion of each phase, ownership of the plant will be transferred to the Town of Buckeye. The Town of Buckeye will provide funding for the build out of the SWWTP. A group of developers have acquired land necessary to fully construct the SWWTP to 8.9 MGD. A summary of the proposed financial responsibility is outlined in Table 5.2.

**Table 5.2:** Proposed financial responsibility

Proposed Capacity (MGD)	Financial Responsibility
3.6	Per Approved 208 Amendment
5.3	Town of Buckeye

### 5.3 Financing Capacity to Operate

The Town of Buckeye will be responsible for the operation and maintenance of the SWWTP whether the Town publicly bids the operation and maintenance services or directly hires qualified and licensed operators. User fees will be collected by the Town of Buckeye to fund operation and maintenance over the life of the SWWTP. Once the phase I expansions are complete, the plant will be self supported and the Town will assume financial responsibility for construction of future phases. It is anticipated that the construction of the phase I expansion will be completed by 2010. Construction of phase II expansion is not estimated to begin until 2013. The December 14, 2004 letter from the Buckeye Financial Director to MAG regarding Town of Buckeye financial capability for the plant is included at the front of this document.

## 6.0 Impacts and Implementation

### 6.1 Implementation Plan

This application identifies an additional service area for the SWWTP. Table 6.1 summarizes the phasing for plant expansion, capacity and the total plant capacity for each phase.

**Table 6.1** Phasing Plan.

Phase	Capacity	Total Plant Capacity
1A (Existing)	1.2	1.2
1B	1.2	2.4
1C	1.2	3.6
2	3.6	7.2
3	1.7	8.9

The design of each additional phase must begin when 70% of the plant capacity has been reached. Construction of each phase must begin when 80% of the plant capacity has been reached. Ultimate capacity of the SWWTP will be 8.9 MGD.

### 6.2 Impacts of the Proposed Plan

The implementation of the SWWTP is not anticipated to have any impact on adjacent municipalities, existing service areas, sanitary districts, communities, or businesses. The discharge, reuse, or recharge is not anticipated to increase a noticeable insect population or odor.

## 7.0 Public Participation

MAG is responsible, with the cooperation with the Town of Buckeye, for ensuring that the required public participation requirements are followed as outlined in 40 CFR 25. The following are minimum requirements:

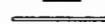
- Submittal of a mailing list used to notify the public of the public hearing.
- Listing of locations where documents are available for review at least 30 days prior to the public hearing.
- Publication of public notice of the public hearing with information on time, date, subject, and location of public hearing at least 45 days prior to the public hearing.
- Submittal of an affidavit of publication for official newspaper publication.
- Submittal of a responsiveness summary for public hearing.

# **Appendix A**

## **Maps**

# Exhibit A - Sundance WWTP Amendment

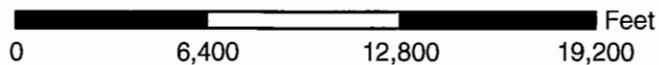


-  Re-use Line
-  Reuse Area
-  Buckeye Streams
-  Railroad
-  3 Mile Buffer around the Service Area
-  Existing Trunk Sewer
-  Proposed Service Area
-  Effluent Line to BID Canal
-  Existing Service Area
-  Wastewater Treatment Plant (WWTP)

Verrado Service Area

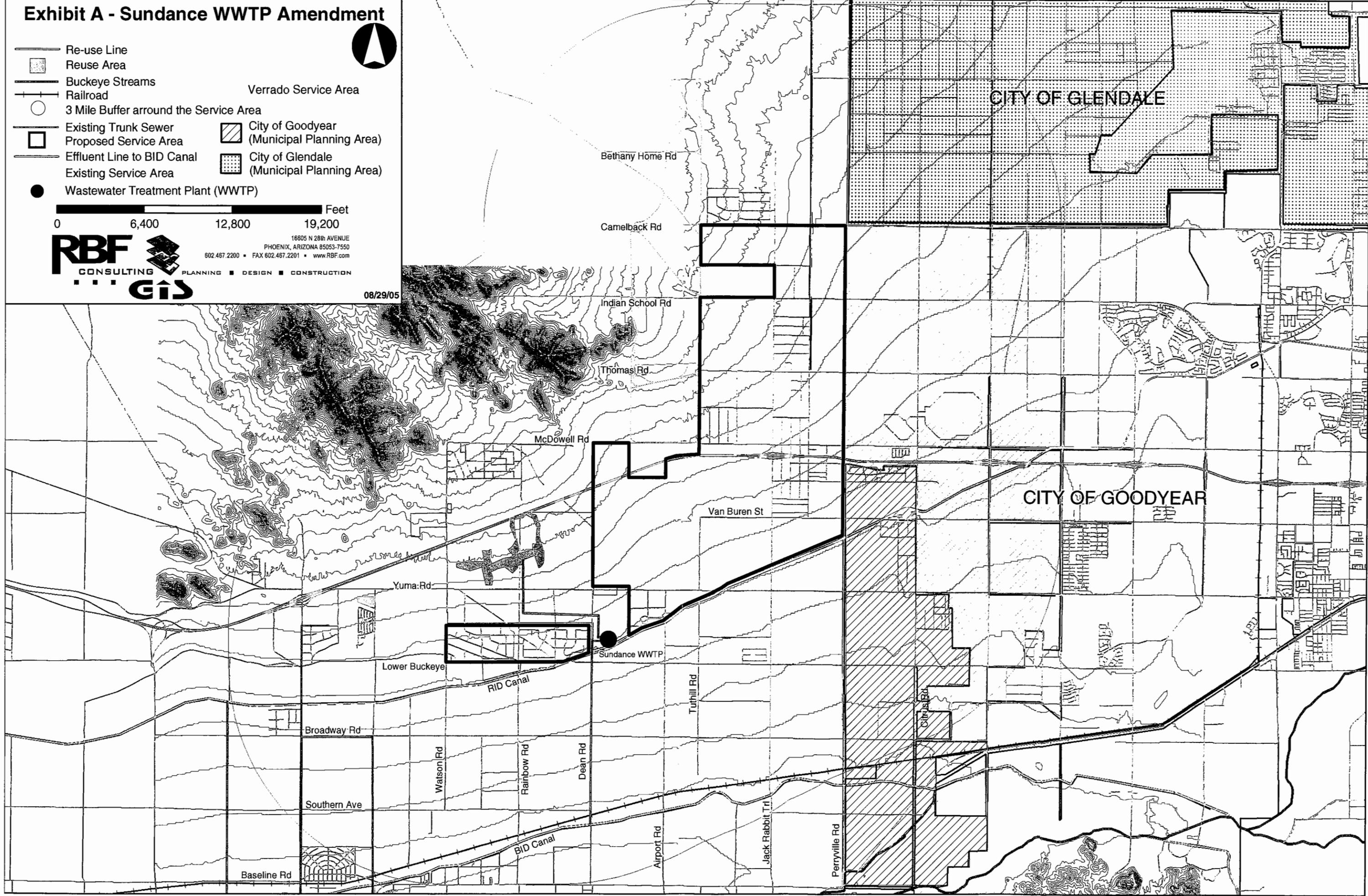
 City of Goodyear (Municipal Planning Area)

 City of Glendale (Municipal Planning Area)



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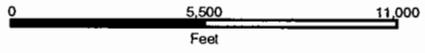


**Exhibit B**  
**Flow Summary for the proposed service area**  
**Land Use & Developments**

-  Proposed Service Area
-  Exception Area
-  Existing SWWTP Service Area

- 100 - Future Dwelling Units
- 100 - Existing Dwelling Units
- 100 - Commercial Acres
-  Existing Homes (Assume 10% of Landuse)
-  Railroad
-  Canals & Rivers

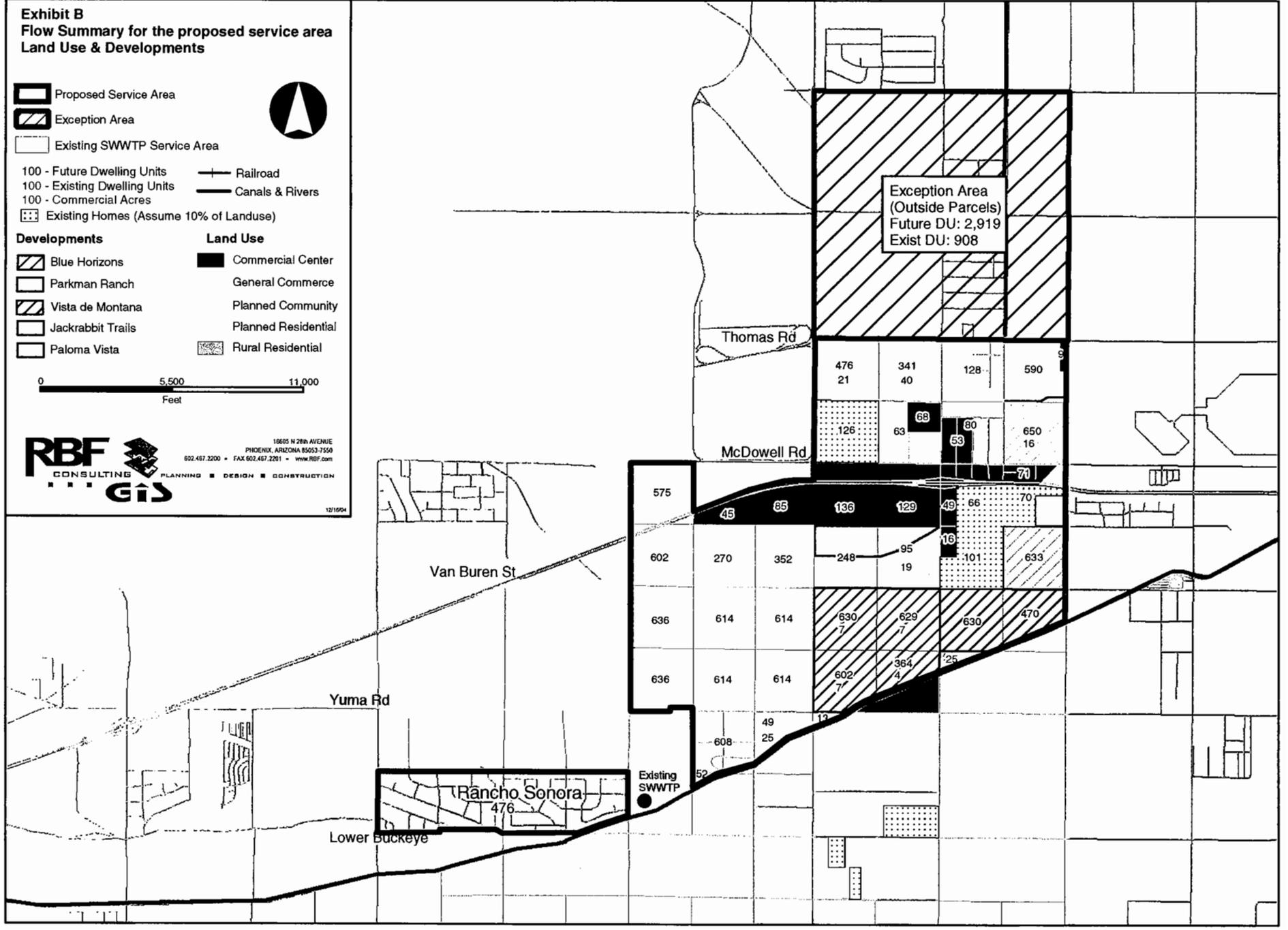
- Developments**
-  Blue Horizons
  -  Parkman Ranch
  -  Vista de Montana
  -  Jackrabbit Trails
  -  Paloma Vista
- Land Use**
-  Commercial Center
  -  General Commerce
  -  Planned Community
  -  Planned Residential
  -  Rural Residential

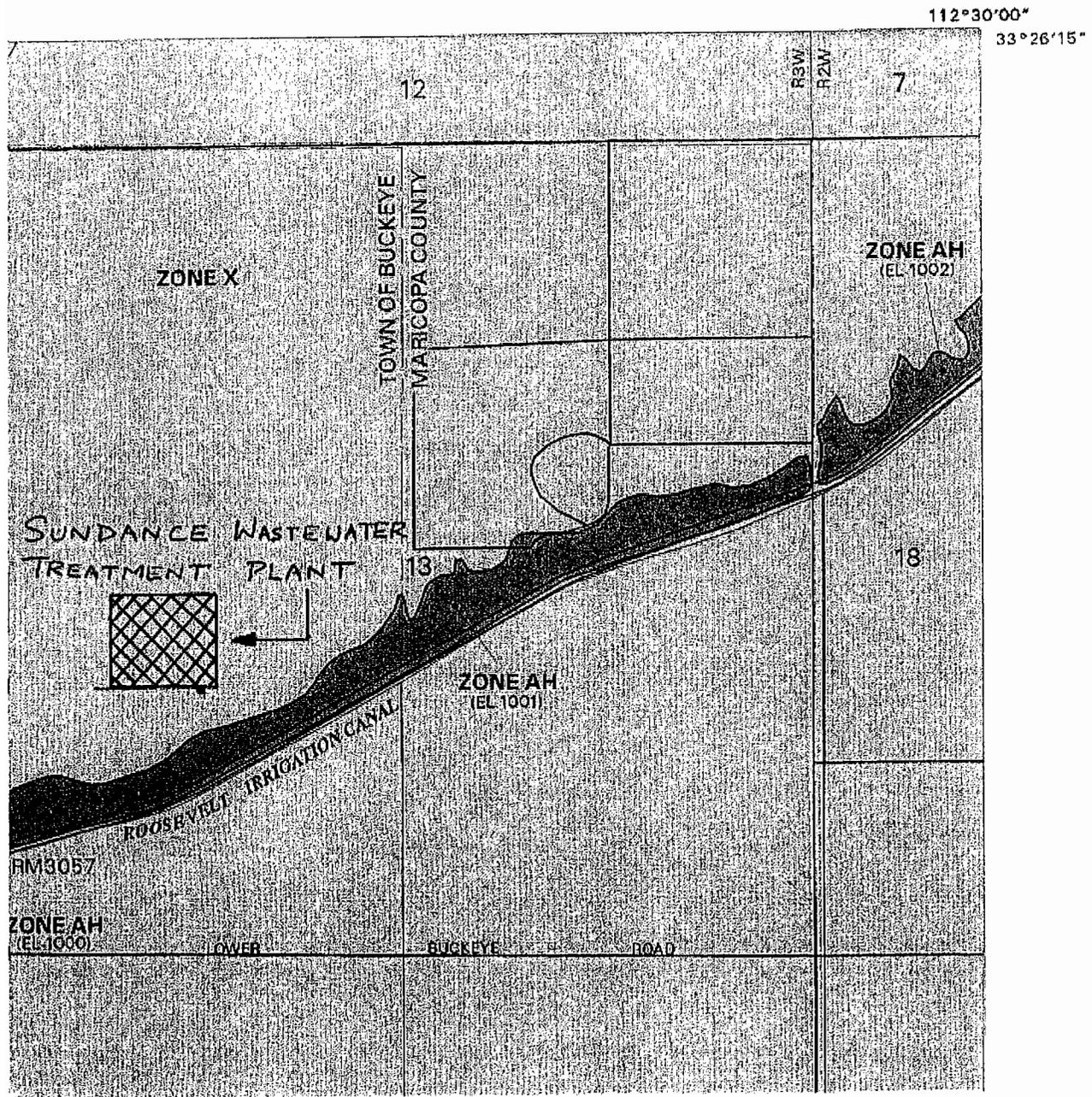


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12/19/04





# LEGEND

## SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A** No base flood elevations determined.
- ZONE AE** Base flood elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

## FLOODWAY AREAS IN ZONE AE

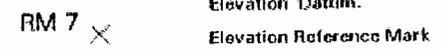
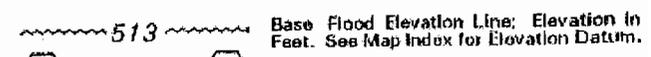
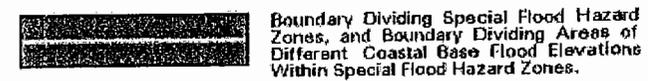
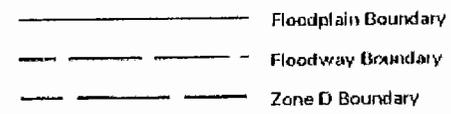
- OTHER FLOOD AREAS**
- ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

- OTHER AREAS**
- ZONE X** Areas determined to be outside 500-year floodplain.
- ZONE D** Areas in which flood hazards are undetermined.

## UNDEVELOPED COASTAL BARRIERS



Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.



**Appendix B**  
**Financial Information**

**Pulte Homes Annual Report**



## FINANCIAL HIGHLIGHTS

<i>(\$000's omitted, except per share data)</i>	2003	2002	2001 (a)	2000	1999
<b>Consolidated Results</b>					
Revenues	\$9,048,926	\$7,471,819	\$5,389,261	\$4,246,977	\$3,768,223
Income from continuing operations	617,322	444,601	302,425	218,384	178,287
Net income	624,634	453,645	301,393	188,513	178,165
Per share data: (b)					
Earnings per share—basic:					
Continuing operations	5.05	3.68	3.08	2.64	2.06
Net income	5.11	3.75	3.07	2.28	2.06
Earnings per share—assuming dilution:					
Continuing operations	4.91	3.60	3.00	2.59	2.03
Net income	4.97	3.67	2.99	2.24	2.03
Cash dividends per share	.11	.08	.08	.08	.08
Total assets	\$8,063,352	\$6,872,087	\$5,710,893	\$2,886,483	\$2,487,351
Senior notes and subordinated notes	2,150,972	1,913,268	1,722,864	666,296	508,690
Debt-to-capital ratio	38.42%	40.94%	44.80%	35.19%	32.48%
Shareholders' equity	\$3,448,123	\$2,760,426	\$2,276,665	\$1,247,931	\$1,093,319
Return on average shareholders' equity	20.58%	18.18%	18.11%	16.58%	17.69%
Book value per share	\$ 27.55	\$ 22.58	\$ 19.22	\$ 15.01	\$ 12.64
Number of employees	10,800	9,200	9,400	5,200	5,000
<b>Domestic Homebuilding Results</b>					
Revenues	\$8,701,661	\$7,167,915	\$5,274,660	\$4,168,516	\$3,689,255
Pre-tax income	998,822	719,010	514,675	383,255	306,130
Settlements (units)	32,693	28,903	22,915	19,799	19,569
Net new orders (units) (c)	34,989	30,830	22,163	19,844	19,367
Backlog (units)	13,952	10,605	8,678	5,477	5,432
Total markets, at year end	44	44	43	41	41
Active communities, at year end	535	460	440	396	388
Average selling price	\$ 259	\$ 242	\$ 225	\$ 206	\$ 187
Gross profit margin from home sales (d)	20.6%	19.4%	19.1%	18.0%	17.0%

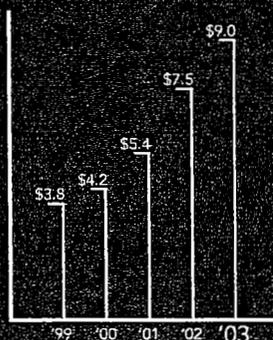
(a) Del Webb operations were merged effective July 31, 2001.

(b) All share and per share amounts have been restated to retroactively reflect the two-for-one stock split announced on December 11, 2003 and effected January 2, 2004.

(c) Total net new orders for the years ended December 31, 2003 and 2001, do not include 1,051 units and 3,953 units, respectively, of acquired backlog.

(d) Domestic Homebuilding interest expense, which represents the amortization of capitalized interest, has been reclassified to home cost of sales.

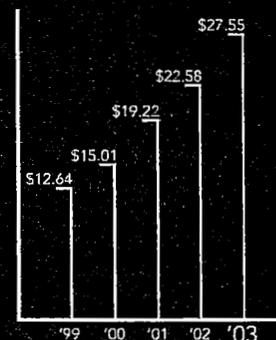
**Revenues**  
Dollars in Billions



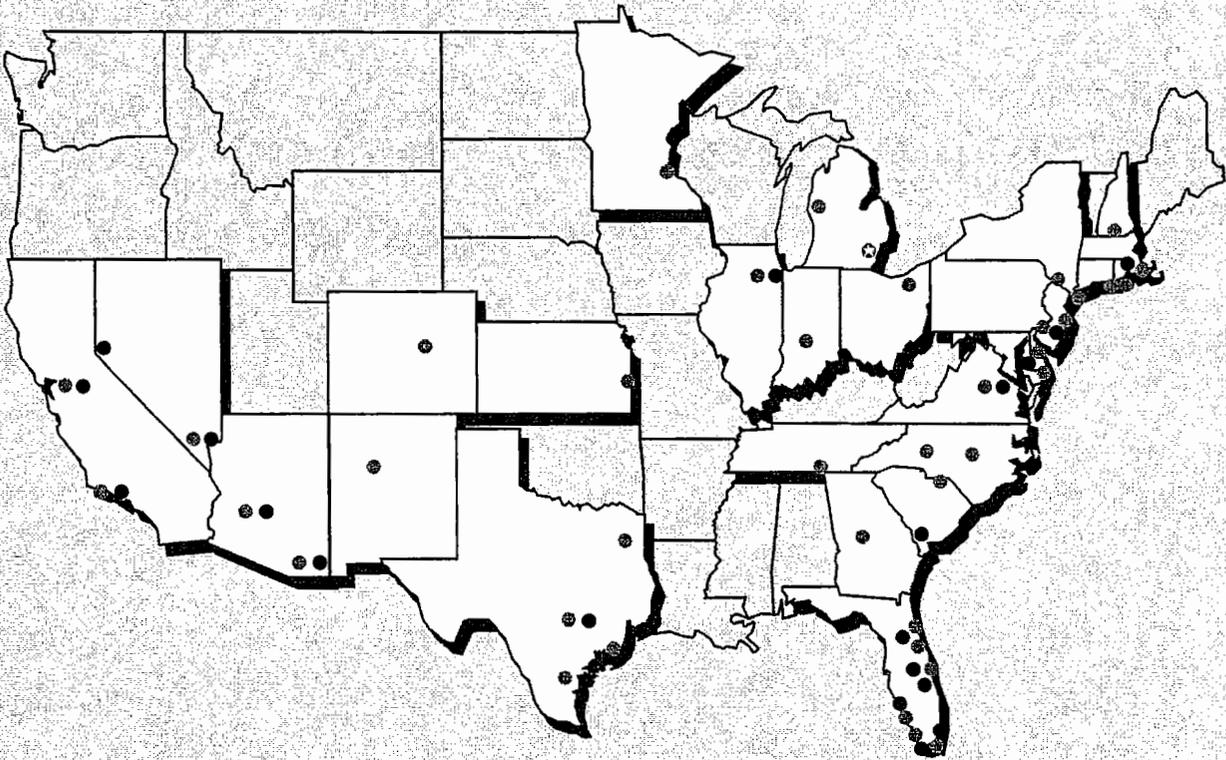
**Earnings Per Share, Assuming Dilution, from Continuing Operations**  
In Dollars



**Book Value Per Share**  
In Dollars



## MARKETS SERVED BY



● Pulte Homes ● Del Webb ● Divosta

### *Pulte Homes*

## COMPANY PROFILE

For more than 50 years, Pulte Homes has been helping individuals, couples and families build a better life. Today, the Company's operations span more than 40 markets throughout the United States. Through its Del Webb brand, the Company is the country's leading builder of Active Adult communities. In building more than 370,000

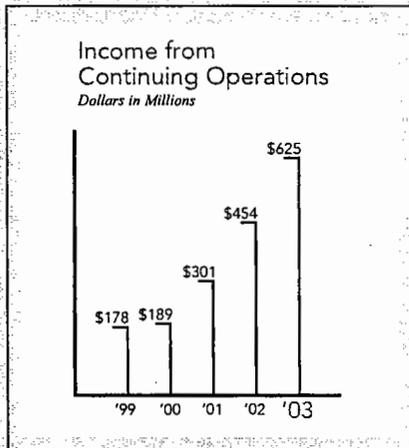
homes in its history, Pulte Homes has been honored as "America's Best Builder," and named Builder of the Year 2002. Providing excellent customer service and offering a wide variety of loan products, Pulte Mortgage LLC, Pulte Homes' national mortgage company, meets the financing needs of Pulte Homes' customers throughout the country.

Whether it's a first-time buyer or a growing family, Pulte Homes' commitment to quality is reflected in the way it builds homes, demonstrated in the way it treats customers and evident in the 11,000 employees who provide customers with exceptional value and a buying experience that exceeds their expectations.

Letter to

PULTE HOMES SHAREHOLDERS, CUSTOMERS, ASSOCIATES AND BUSINESS PARTNERS:

At points during the past year, we conducted the modern-day equivalent of a whistle stop tour, visiting Pulte offices across the country. Spending time with the talented people who run our business gives us tremendous confidence for its continued success. The intelligence, energy and passion these individuals bring to the business every day are among Pulte's greatest competitive strengths.



The purpose of these visits was to ensure alignment throughout the organization with the four key business initiatives we have established to drive improved operating and financial performance: market share

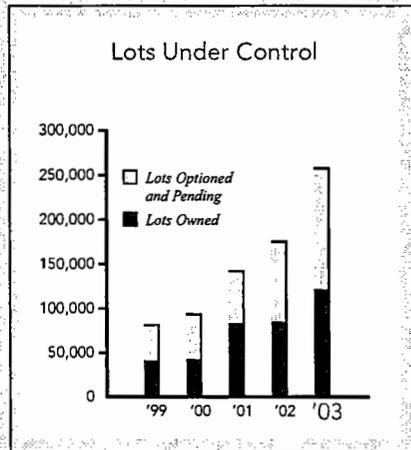
expansion through segmentation, operational excellence, people development and financial discipline. We'll provide details about these initiatives in a minute, but for now, understand that they are enabling Pulte Homes to get bigger and, more importantly, better as a company.

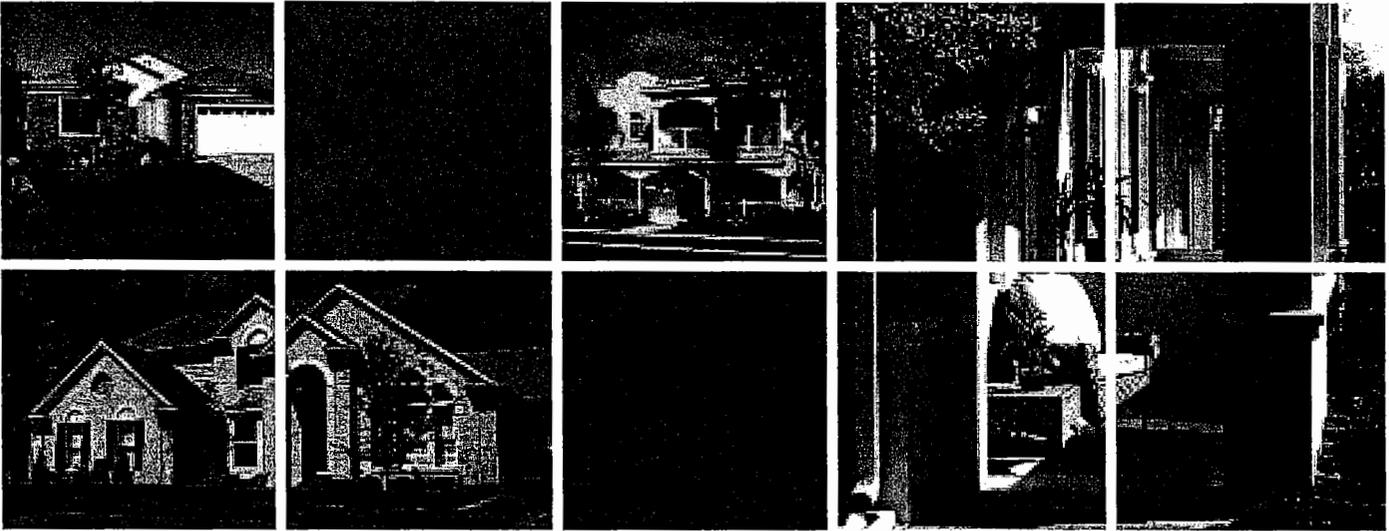
In terms of getting bigger, 2003 consolidated revenues increased 21 percent to a record \$9.0 billion. In terms of getting better, income from continuing operations was \$617 million, as compared to \$445 million in 2002. Adjusting for the two-for-one stock split we implemented effective January 2, 2004, earnings per share from continuing operations for 2003 increased 36 percent to \$4.91, while book value per share increased 22 percent to \$27.55. For the year, our return on equity surged more than 200 basis points to 21 percent. The growing strength of our operations enabled us to raise the dividend rate by 150 percent to \$0.20 per share annually.

The biggest driver of performance was our domestic homebuilding operations where settlement and land sale revenues for the year increased 21 percent to \$8.7 billion. Domestic closings for the year gained 13 percent to a

record 32,693 homes, while we ended 2003 with a record backlog of 13,952 homes, valued at \$4.1 billion.

We also ended 2003 with a land pipeline of 257,000 lots under control (47 percent owned, 53 percent optioned and pending), which is vital given the scarcity of this key resource. It cannot be overstated that the supply of land in this country is becoming increasingly constrained. In market after market, the land entitlement process has become so restrictive as to severely limit the supply of land upon which new homes can be built. Obviously, for a homebuilder there is no more critical resource than land, which is why we view our ability to control and entitle our large land position as an important competitive advantage.



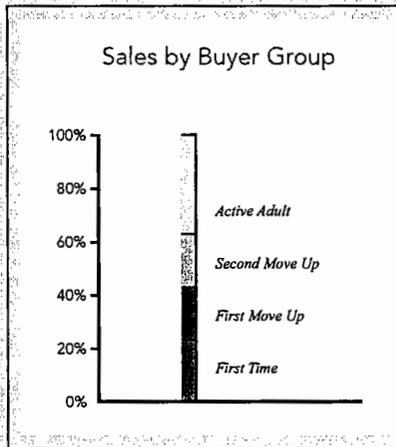


Our financial services operations also delivered a strong performance in 2003, as pretax income rose to a record \$69 million. Higher homebuilding volumes and an increase in our mortgage capture rate to 83% were the key drivers as we originated a record 28,655 mortgages, valued at \$5.0 billion. Our mortgage operations are extremely profitable, but even more important they are critical to ensuring that the house closes on the date promised and, in turn, to delivering an overall unmatched home buying experience.

While our domestic operations continue to realize accelerating gains, our International operations are moving at a slower pace. Pretax income of \$3.3 million was down from the prior year; so while we are making money, returns remain well below our expectations. As such, we have commenced a process to evaluate various long-term strategic alternatives with regard to our International operations.

Overall, 2003 was a tremendous year with a lot to be proud of, but it's past. Our challenge and opportunity is to build on that success to make Pulte Homes even better, and likely bigger, in 2004 and beyond. As we will explain, achieving better operating performance requires successful implementation of our four key business initiatives.

According to industry experts, housing demand should remain robust as annual household formations average 1.2 million and immigration adds upwards of one million people per year. There will be interim periods of stronger or weaker demand influenced by mortgage rates, employment and



consumer confidence, but overall, housing demand is expected to remain stable. Within a stable demand environment, growth is about expanding market share. In other words, since the pie is not getting bigger, we have to find ways of grabbing a larger slice.

In this battle for market share, Pulte Homes possesses some unique competitive advantages. First is our segmentation strategy. We are the only national builder serving all

major buyer groups: first time, first move up, second move up and active adult. We have actually identified 11 different Target Consumer Groups (TCG), each with its own distinct set of wants and needs. Through our diversified product line, Pulte can serve the biggest universe of potential customers. Serving one TCG can be more efficient in the short run, but over time it severely limits a company's ability to grow. Even if a company could capture 100 percent of a segment, it may be serving only 30 percent of a market. To our way of thinking, it just doesn't make sense to leave all those buyers for someone else to serve.

Embedded in our segmentation strategy is extending our leadership position in serving the active adult (age 55 and better) segment through our Del Webb brand. We have covered a lot of ground in the 30 months since completing the merger with Del Webb. All of the Webb communities operating at the time of the merger achieved record performance in 2003 in terms of unit sales and/or pretax earnings. We also announced 10 new Webb-branded communities that helped drive record active adult sales. Even more exciting, over 20 new Webb-branded communities could be announced in 2004, including new market penetrations in Colorado, Connecticut, Michigan, New Jersey and Virginia.



Overall, 2003 was a tremendous year with a lot to be proud of, but it's past. Our challenge and opportunity is to build on that success to make Pulte Homes even better, and likely bigger, in 2004 and beyond.

At approximately 50 million people, active adults comprise the largest customer group in the country today. They also represent the fastest growing segment, forecast to reach almost 80 million people by the year 2020. More affluent than any demographic group in history, active adults are an incredibly stable buyer group, with 50 percent purchasing homes for cash. Like a champion surfer, the Webb brand is set to ride the active adult wave for years to come.

Beyond our segmentation model, we maintain another critical edge in the market share battle—quality. Reaping the benefits of a journey begun over a decade ago, Pulte Homes ranked first in 12 of the 20 markets where our customers were surveyed in the J.D. Power and Associates 2003 Customer Satisfaction Study. History is very clear on this point: better quality attracts customers, supports premium pricing and reduces future service costs and risks.

Unique to our industry, we are also discovering that our reputation for quality and customer satisfaction facilitates access to and entitlement of critical land positions. Through success in delivering an unmatched customer experience, our goal is to build a brand that rivals recognized quality leaders such as Lexus, Ritz Carlton and FedEx. We will take this a step further. As the industry leader, we have an obligation to raise the bar on quality and to deliver an outstanding home and home buying experience. After all, our customers are trusting us with what is likely the largest single purchase of their lifetime.

As we deliver more homes, we need to drive more of every revenue dollar to our bottom line, which is what our second initiative, Operational Excellence, is all about. Over the past five years, pretax margins in our domestic homebuilding operations have expanded by 300 basis points through a combination of higher prices, improved product mix and operational efficiencies.



12 of our divisions ranked highest in customer satisfaction in the J.D. Power and Associates 2003 New Home Builder Customer Satisfaction Study. The divisions ranking highest in their respective markets were Dallas/Fort Worth (tie), Houston, Las Vegas, Minneapolis/St. Paul, San Francisco Bay Area, Phoenix, Raleigh/Durham, Sacramento (tie), Southern California (tie), Tampa (tie), Tucson and Palm Beach.

Although difficult to quantify, we estimate there may be 200 to 300 basis points of additional pretax margin to be captured by being smarter in how we run the business. From how our houses are designed and built, to advanced supply chain management and a greater focus on overhead leverage, we can take costs out of the system.

Under the banner of operational excellence, we are also advancing a number of innovative building practices to strengthen our leadership position in the industry:

- In 2004, Pulte Home Sciences (PHS) will open its first commercial production plant located in Manassas, Virginia. Through efficient manufacturing of concrete basement wall sections, floor decks, structural insulated panels (SIPs) and steel stud interior walls, PHS can erect an enclosed shell of a home in as little as five days. The goals of PHS are to deliver a better quality home, faster and at comparable or reduced costs to traditional building practices.
- In 1998, we acquired DiVosta and Company, a Florida-based builder that delivers unmatched quality, with an industry-leading 47-day build cycle. We are now exporting DiVosta's best practices on scheduling and efficient building to other Pulte markets

across the country, including parts of Southern California, where we took 50 days out of the building cycle. Ongoing implementation of the DiVosta system further reduced that construction time by an additional five days, taking our build times to 50 days.

- In January 2004, Pulte announced a joint venture with Pratte Development to provide material and labor for concrete foundations and flatwork, underground plumbing, framing and trim for our houses built in Arizona and Nevada. The venture provides opportunities to capture additional margin and to reduce cycle times, while lowering costs through enhanced value engineering, manufacturer-direct purchasing, better scheduling and greater regional operating leverage.

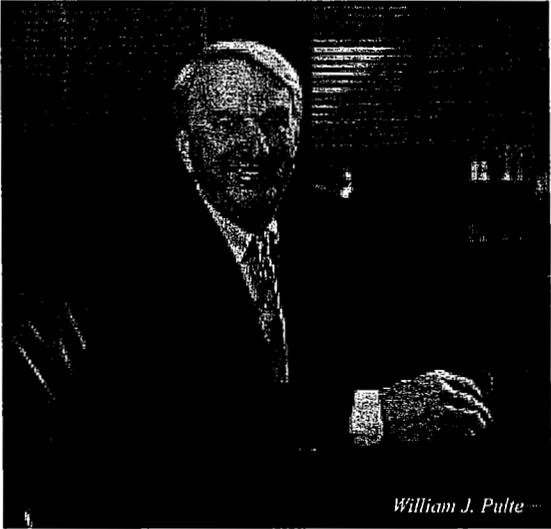
Through the development of more innovative building processes, we are taking a leadership role in advancing building science with the ultimate goals of delivering higher quality homes and better financial results.

We are often asked what is the most pressing issue we face, to which we answer "people." The ability to attract, hire and retain the best people is possibly Pulte's greatest opportunity,

which is why People Development is our third key initiative. Today, Pulte Homes employs almost 11,000 individuals. Given our expected growth, this number needs to increase significantly, which is why we maintain leading-edge training and development programs. A critical source of new talent is our college-recruiting program through which we hired over 675 graduates in 2003. Once on board, these individuals and all our employees benefit from our emphasis on continued development through such innovative programs as our Top Gun and Emerging Leaders training. Our focus on people development is yet another way we are differentiating Pulte Homes and speaks to our commitment to managing for long-term success.

In truth, competitors can copy our house designs, mimic our communities and attempt to match our quality. In the end, it is our people who will make the difference.

It may be a commentary on our times that a company needs to publicly affirm its commitment to fiscal and corporate responsibility. That is, however, exactly what we are doing through our fourth initiative, Financial Discipline. All of our employees understand that we will continue the conservative



*William J. Pulte*



*Richard J. Dugas, Jr.*

operating, financial and reporting practices that have been a part of Pulte's core values for the past 53 years. From our commitment to a strong balance sheet, to our stringent project-underwriting criteria, we understand that there are no short cuts to achieving long-term success.

It is, however, much more than just signing quarterly certifications with confidence; it's about a culture that encourages honesty and integrity in all business practices. Reflective of this culture, in 2003 our corporate governance score, as calculated by Institutional Shareholder Services, ranked higher than 95 percent of companies in the S&P 500. These scores are based on a number of factors, including a Board of Directors with a majority of independent outside members, providing for outside directors to meet regularly with-

out management present, and for publicly disclosing governance guidelines which we proudly post on our corporate website at [www.pulte.com](http://www.pulte.com).

Bill and I, speaking on behalf of the Board of Directors and the entire management team, recognize our fiduciary responsibilities and take our commitment to shareholders very seriously.

As a management team, it is our responsibility to always be looking ahead. As of today, the expectation is that interest rates are more likely to rise than decline in the coming quarters. From such a low starting point, however, we believe that an increase of 25, 50 or even 100-basis points in rates would not have a meaningful impact on overall housing demand, especially in light of the

supply constraints that exist in many markets today. To best position Pulte Homes, we have developed a robust land pipeline that is supported by a strong balance sheet. We have challenged our management teams to find opportunities to grow, while attacking our labor and material costs. In other words, since the future is always uncertain, we are prepared to capitalize on the market opportunities that develop in any given economic climate.

In conclusion, we are very proud of our results, but in no way are we satisfied. With the support of our customers and shareholders, and the continued passion and effort of our associates and business partners, we are confident that we can deliver even greater performance in the future.

*Sincerely,*

WILLIAM J. PULTE  
*Founder and Chairman of the Board*

RICHARD J. DUGAS, JR.  
*President and Chief Executive Officer*

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**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-K**

**(X) ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2003**

**OR**

**( ) TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

**Commission File Number 1-9804**

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**PULTE HOMES, INC.**

(Exact name of registrant as specified in its charter)

**MICHIGAN**  
(State or other jurisdiction of  
incorporation or organization)

**38-2766606**  
(I.R.S. Employer  
Identification No.)

**100 Bloomfield Hills Parkway, Suite 300  
Bloomfield Hills, Michigan 48304**  
(Address of principal executive offices) (Zip Code)

**Registrant's telephone number, including area code: (248) 647-2750**

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Common Stock, par value \$.01	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:

**NONE**  
(Title of class)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES  NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange Act).

Aggregate market value of voting stock held by nonaffiliates of the registrant as of June 30, 2003: \$2,477,924,686  
Number of shares of common stock outstanding as of January 31, 2004: 125,426,644

**Documents Incorporated by Reference**

Applicable portions of the Proxy Statement for the 2004 Annual Meeting of Shareholders are incorporated by reference in Part III of this Form.

**Website Access to Company Reports, Codes and Charters**

Our internet website address is [www.pulte.com](http://www.pulte.com). Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to section 13(a) or 15(d) of the Exchange Act are available free of charge through our website as soon as reasonably practicable after we electronically file with or furnish them to the Securities and Exchange Commission. Our code of ethics for principal officers, our corporate governance guidelines and the charters of the Audit, Compensation, and Nominating and Governance committees of our Board of Directors, are also posted on our website and are available in print upon request.

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**PULTE HOMES, INC.  
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## PART I

### ITEM 1. BUSINESS

#### **Pulte Homes, Inc.**

Pulte Homes, Inc. is a publicly held holding company whose subsidiaries engage in the homebuilding and financial services businesses. Our assets consist principally of the capital stock of our subsidiaries, cash and investments. Our income primarily consists of dividends from our subsidiaries and interest on investments. Our direct subsidiaries include Pulte Diversified Companies, Inc., Del Webb Corporation (Del Webb) and other subsidiaries engaged in the homebuilding business. Pulte Diversified Companies, Inc.'s operating subsidiaries include Pulte Home Corporation, Pulte International Corporation (International) and other subsidiaries engaged in the homebuilding business. Pulte Diversified Companies, Inc.'s non-operating thrift subsidiary, First Heights Bank, fsb (First Heights), is classified as a discontinued operation (see Note 4 of Notes to Consolidated Financial Statements). We also have a mortgage banking company, Pulte Mortgage LLC (Pulte Mortgage), which is a subsidiary of Pulte Home Corporation.

We have two reportable business segments, Homebuilding and Financial Services, and one non-operating segment, Corporate. The Homebuilding segment consists of the following two business units:

- Domestic Homebuilding, our core business, is engaged in the acquisition and development of land principally for residential purposes within the continental United States and the construction of housing on such land targeted for the first-time, first and second move-up, and active adult home buyers.
- International Homebuilding is primarily engaged in the acquisition and development of land principally for residential purposes, and the construction of housing on such land in Mexico, Puerto Rico and Argentina.

The Financial Services segment consists principally of mortgage banking and title operations conducted through Pulte Mortgage and other subsidiaries.

Corporate is a non-operating segment that supports the operations of our subsidiaries by acting as the internal source of financing, developing and implementing strategic initiatives centered on new business development and operating efficiencies, and providing the administrative support associated with being a publicly traded entity listed on the New York Stock Exchange.

Financial information, including revenue, pre-tax income and total assets of each of our business segments is included in Note 2 of Notes to Consolidated Financial Statements.

## Homebuilding Operations

	Years Ended December 31, (\$000's omitted)				
	2003	2002	2001	2000	1999
<b>Homebuilding settlement revenues:</b>					
Domestic .....	\$ 8,482,341	\$ 6,991,614	\$ 5,145,526	\$ 4,083,816	\$ 3,655,775
International.....	228,137	196,074	35,169	27,159	21,941
Total .....	<u>\$ 8,710,478</u>	<u>\$ 7,187,688</u>	<u>\$ 5,180,695</u>	<u>\$ 4,110,975</u>	<u>\$ 3,677,716</u>
<b>Homebuilding settlement units:</b>					
Domestic .....	32,693	28,903	22,915	19,799	19,569
International.....	7,120	6,525	221	264	262
Total .....	<u>39,813</u>	<u>35,428</u>	<u>23,136</u>	<u>20,063</u>	<u>19,831</u>

*Note: Homebuilding settlement revenues of affiliates, not included in the table above, for the years ended December 31, 2003 through 1999 were \$32,511, \$40,723, \$180,621, \$148,798, and \$162,926, respectively. Homebuilding unit settlements of affiliates, not included in the table above, for the years ended December 31, 2003 through 1999 were 149, 1,022, 7,258, 7,718, and 6,791, respectively.*

Settlements (home sales) and net new orders (orders for homes net of cancellations) in any year are strongly influenced by local, regional and national market economic conditions. Backlog (homes that have been ordered but not completed and sold) at any period is strongly influenced by local, regional and national market economic conditions.

### *Domestic Homebuilding*

We build a wide variety of homes, including single family detached units, townhouses, condominiums and duplexes, with varying prices, models, options and lot sizes. Since 1990, we have more than quadrupled our annual unit closings, unit orders and unit backlog levels. Including 2003 settlements of nearly 33,000 homes, we have closed more than 370,000 homes since our inception.

On July 31, 2001, we merged with Del Webb in a tax-free stock-for-stock transaction. Del Webb was primarily a homebuilder with operations in seven states. For the fiscal year ended June 30, 2001, Del Webb reported net income of \$91.2 million on revenues of \$1.9 billion and 7,038 unit settlements. Backlog reported at June 30, 2001, was 3,682 units valued at approximately \$994 million. This merger expanded and supported our leadership position. In particular, we believe the merger strengthened our position among active adult (55 and better) homebuyers, added important strategic land positions, provided operational savings from economies of scale, bolstered our purchasing leverage, and enhanced our overall competitive position. In accordance with our operational strategy, we will continue to evaluate available strategic acquisition opportunities that are consistent with our long-range goals.

As of December 31, 2003, our Domestic Homebuilding operations offered homes for sale in 535 communities at sales prices ranging from \$80,000 to \$2,300,000. Sales prices of homes currently offered for sale in 75% of our communities fall within the range of \$100,000 to \$350,000 with a 2003 average unit selling price of \$259,000. Sales of single-family detached homes, as a percentage of total unit sales, were 83% in 2003, 86% in 2002, and 82% in 2001. Our Domestic Homebuilding operations are geographically diverse and, as a result, better insulate us from demand changes in individual markets. As of December 31, 2003, our Domestic Homebuilding business operated in 44 markets spanning 27 states.

As of December 31, 2003, our Domestic Homebuilding operations had 13,952 units in backlog valued at approximately \$4.1 billion.

### *International Homebuilding*

Our International Homebuilding operations are principally conducted through subsidiaries of International in Mexico, Puerto Rico and Argentina. International Homebuilding product offerings focus on the demand of first-time buyers and middle-to-upper income consumer groups. Effective January 1, 2002, International reorganized its structure within Mexico to create a single company, Pulte Mexico S. de R.L. de C.V., which ranks as one of the largest builders in the country. Prior to the reorganization, these operations were conducted primarily through five joint ventures throughout Mexico. Under the new ownership structure, which combines the largest of these entities, we own 63.8% of Pulte Mexico S. de R.L. de C.V. and have consolidated Pulte Mexico S. de R.L. de C.V. into our financial statements.

We are currently in the process of evaluating various long-term strategic alternatives with regard to our International operations.

## Homebuilding Operations (continued)

### *Land acquisition and development*

We select locations for development of homebuilding communities after completing extensive market research, enabling us to match the location and product offering with our targeted consumer group. We consider factors such as proximity to developed areas, population and job growth patterns and, if applicable, estimated development costs. We historically have managed the risk of controlling our land positions through use of option contracts and outright acquisition. We typically control land with the intent to complete sales of housing units within 24 to 36 months from the date of opening a community, except in the case of certain active adult developments and our Del Webb operations for which the completion of community build out requires a longer time period due to typically larger project sizes. As a result, land is generally purchased after it is properly zoned and developed or is ready for development. In addition, we dispose of owned land not required in the business through sales to appropriate end users. Where we develop land, we engage directly in many phases of the development process, including land and site planning, obtaining environmental and other regulatory approvals, as well as constructing roads, sewers, water and drainage facilities and other amenities. We use our staff and the services of independent engineers and consultants for land development activities. Land development work is performed primarily by independent contractors and local government authorities who construct sewer and water systems in some areas. At December 31, 2003, we controlled approximately 257,000 lots, of which 120,000 were owned and 137,000 were under option agreements.

### *Sales and marketing*

We are dedicated to improving the quality and value of our domestic homes through innovative proprietary architectural and community designs and state-of-the-art customer marketing techniques. Analyzing various qualitative and quantitative data obtained through extensive market research, we segment our potential customers into well-defined buyer profiles. Segmentation analysis provides a method for understanding the business opportunities and risks across the full spectrum of consumer groups in each market. Once the demands of potential buyers are understood, we link our home design and community development efforts to the specific lifestyle of each targeted consumer group.

To meet the demands of our various domestic customers, we have established a solid design expertise for a wide array of product lines. We believe that we are an innovator in the design of our homes and we view design capacity as an integral aspect of our marketing strategy. Our in-house architectural services teams and management, supplemented by outside consultants, are successful in creating distinctive design features, both in exterior facades and interior options and features. In certain markets our strategy is to offer "the complete house" in which all features shown in the home are included in the sales price. Standard features typically offered include vaulted ceilings, appliances, and a variety of available flooring and carpet.

Typically, our domestic sales teams, together with outside sales brokers, are responsible for guiding the customer through the sales process. We are committed to industry-leading customer service through a variety of quality initiatives, including the customer care program, which ensures that homeowners are comfortable at every stage of the building process. Using a seven-step, interactive process, homeowners are kept informed during their homebuilding and home owning experience. The steps include (1) a pre-construction meeting with the superintendent; (2) pre-dry wall frame walk; (3) quality assurance inspection; (4) first homeowner orientation; (5) 30-day follow-up after the close of the home; (6) three-month follow-up; and (7) an 11-month quality list after the close of the home. Fully furnished and landscaped model homes are used to showcase our homes and their distinctive design features. We have great success with the first-time buyer in the low to moderate price range; in such cases, financing under United States Government-insured and guaranteed programs is often used and is facilitated through our mortgage company. We also enjoy strong sales to the move-up buyer and, in certain markets, offer semi-custom homes in higher price ranges.

As a result of the Del Webb merger, we are better able to address the needs of active adults, the fastest growing homebuying segment. With destination communities offering highly amenitized products such as golf courses, recreational centers and educational classes, the active adult buyer has many options to maintain an active lifestyle.

## Homebuilding Operations (continued)

### *Sales and marketing (continued)*

In 2003, our Dallas, Houston, Las Vegas, Minneapolis/St. Paul, San Francisco Bay Area, Phoenix, Raleigh/Durham, Sacramento, Southern California, Tampa, Tucson, and Palm Beach markets were recognized for ranking the highest in their markets in a national customer satisfaction study. The survey of twenty-one U. S. markets noted customer service and home readiness as the two factors that most heavily influenced the customer's overall level of satisfaction. We ranked third or better in seventeen of the twenty-one markets surveyed. Building on this quality foundation is our brand development program with our "Three I's on Quality" (Involvement, Integrity, and Innovation) platform. Developing the Pulte Homes brand and leveraging the strength of the "DiVosta," "Del Webb" and "Sun City" tradenames helps to distinguish our communities from the competition, and can often be rewarded with the advantages of additional sales pace, choice community locations, and reduced overall customer acquisition costs.

In addition, our Homeowner for Life™ strategy and philosophy has increased our business from those who have previously owned a Pulte home or have been referred by a Pulte homeowner by ensuring a positive home buying and home owning experience. We introduce our homes to prospective buyers through a variety of media advertising, illustrated brochures, Internet listings and link placements, and other advertising displays. In addition, our websites, [www.pulte.com](http://www.pulte.com), [www.delwebb.com](http://www.delwebb.com), and [www.divosta.com](http://www.divosta.com) provide tools to help users find a home that meets their needs, investigate financing alternatives, communicate moving plans, maintain a home, learn more about us and communicate directly with us. Approximately three million potential customers visited our websites during 2003.

Our international sales and marketing efforts focus on the identification of underserved market demand, particularly in Argentina and Puerto Rico, with strong emphasis on quality initiatives and customer service. In Mexico, where our product is focused largely on social interest housing, sales and marketing efforts target areas experiencing population and employment (industrialization) growth.

### *Construction*

The construction process for our domestic homes begins with the in-house design of the homes we sell. The building phase is conducted under the supervision of our on-site construction superintendents. The construction work is usually performed by independent contractors under contracts that, in many instances, cover both labor and materials on a fixed-price basis. We believe that Pulte Preferred Partnerships (P<sup>3</sup>), an extension of our quality assurance program, continues to establish new standards for contractor relations. Using a selective process, we have teamed up with what we believe are premier contractors and suppliers to improve all aspects of the land development and house construction processes.

We maintain efficient construction operations by using standard materials and components from a variety of sources and, when possible, by building on contiguous lots. To minimize the effects of changes in construction costs, the contracting and purchasing of building supplies and materials generally is negotiated at or near the time when related sales contracts are signed. In addition, we leverage our size by actively negotiating our materials needs on a national or regional basis to minimize production component cost. We are also working to establish a more integrated system that can effectively link suppliers, contractors and the production schedule through various strategic business partnerships and e-business initiatives.

Housing in Mexico and Puerto Rico consists primarily of reinforced poured concrete, concrete and ceramic block and/or brick construction with flat roofs and public water, electric and sanitary system connections. Our housing product in Argentina is designed and constructed in a similar fashion to our domestic product but is customized for local preferences. Building materials, supplies and components are sourced locally and the construction work is performed by general contractors and/or independent contractors, which in many cases include both labor and materials.

We cannot determine the extent to which necessary building materials will be available at reasonable prices in the future and have, on occasion, experienced shortages of skilled labor in certain trades and of building materials in some markets.

## Homebuilding Operations (continued)

### *Competition and other factors*

Our dedication to customer satisfaction is evidenced by our consumer and value-based brand approach to product development, and is something that we believe distinguishes us in the homebuilding industry and contributes to our long-term competitive advantage. The housing industry in the United States, however, is highly competitive. In each of our market areas, there are numerous homebuilders with which we compete. We also compete with the resales of existing house inventory. Any provider of housing units, for-sale or to rent, including apartment builders, may be considered a competitor. Conversion of apartments to condominiums further provides certain segments of the population an alternative to traditional housing, as does manufactured housing. We compete primarily on the basis of price, reputation, design, location and quality of our homes. The housing industry is affected by a number of economic and other factors including: (1) significant national and world events, which impact consumer confidence; (2) changes in interest rates; (3) changes in other costs associated with home ownership, such as property taxes and energy costs; (4) various demographic factors; (5) changes in federal income tax laws; (6) changes in government mortgage financing programs, and (7) availability of sufficient mortgage capacity. In addition to these factors, our business and operations could be affected by shifts in demand for new homes.

Our operations are subject to building, environmental and other regulations of various federal, state, local and foreign governing authorities. For our homes to qualify for Federal Housing Administration (FHA) or Veterans Administration (VA) mortgages, we must satisfy valuation standards and site, material and construction requirements of those agencies. Our compliance with federal, state, local and foreign laws relating to protection of the environment has had, to date, no material effect upon capital expenditures, earnings or competitive position. More stringent requirements could be imposed in the future on homebuilders and developers, thereby increasing the cost of compliance.

### **Financial Services Operations**

We conduct our financial services business, which includes mortgage and title operations, through Pulte Mortgage and other subsidiaries.

#### *Mortgage banking*

Our mortgage bank arranges financing through the origination of mortgage loans primarily for the benefit of our domestic homebuyers, but also services the general public. We also engage in the sale of such loans and the related servicing rights. We are a lender approved by the FHA and VA and are a seller/servicer approved by Government National Mortgage Association (GNMA), Federal National Mortgage Association (FNMA), Federal Home Loan Mortgage Corporation (FHLMC) and other investors. In our conventional mortgage lending activities we follow underwriting guidelines established by FNMA and FHLMC.

Our mortgage underwriting, processing and closing functions are centralized in Denver, Colorado using a mortgage operations center (MOC) concept. We also use a centralized telephone loan officer concept where loan officers are centrally located at a mortgage application center (MAC) in Denver. Our sales representatives, who are the mortgage customers' main contact, forward the loan applications to a MAC loan counselor who calls the customer to complete the loan application and then forwards it to the MOC for processing. We believe both the MOC and the MAC improve the speed and efficiency of our mortgage operations, thereby improving our profitability and allowing us to focus on creating attractive mortgage financing opportunities for our customers.

In originating mortgage loans, we initially use our own funds and borrowings made available to us through various credit arrangements. Subsequently, we sell such mortgage loans and mortgage-backed securities to outside investors.

Our capture rate for the years ended December 31, 2003, 2002, and 2001 was approximately 83%, 78%, and 74%, respectively. Our capture rate represents loan originations from our homebuilding business as a percent of total loan opportunities, excluding cash settlements, from our homebuilding business. During the years ended December 31, 2003, 2002 and 2001, we originated mortgage loans for approximately 73%, 68% and 67%, respectively, of the homes we sold domestically. Such originations represented 83%, 85% and 81%, respectively, of our originations.

We sell our servicing rights on a flow basis through fixed price servicing sales contracts to reduce the risks inherent in servicing loans. This strategy results in owning the servicing rights for only a short period of time, generally less than four months after the loan is originated, which substantially reduces the risk of impairment with respect to the fair value of these reported assets. The servicing sales contracts provide for the reimbursement of payments made when loans prepay within specified periods of time, usually 90 days after sale or securitization.

## **Financial Services Operations (continued)**

### *Mortgage banking (continued)*

The mortgage industry in the United States is highly competitive. We compete with other mortgage companies and financial institutions to provide attractive mortgage financing to both our homebuyers and to the general public. The Internet is also an important resource for homebuyers in obtaining financing as a number of companies provide online approval for their customers. These Internet-based mortgage companies may also be considered competitors.

In originating and servicing mortgage loans, we are subject to rules and regulations of the FHA, VA, GNMA, FNMA and FHLMC. In addition to being affected by changes in these programs, our mortgage banking business is also affected by several of the same factors that impact our homebuilding business.

### *Discontinued operations*

During the first quarter of 1994, we adopted a plan of disposal for First Heights and announced our strategy to exit the thrift industry and increase our focus on housing and related mortgage banking. First Heights sold all but one of its 32 bank branches and related deposits to two unrelated purchasers. The sale was substantially completed during the fourth quarter of 1994.

Although in 1994, we expected to complete the plan of disposal within a reasonable period of time, contractual disputes with the Federal Deposit Insurance Corporation (FDIC) prevented the prepayment of the Federal Savings and Loan Insurance Corporation Resolution Fund (FRF) notes, thereby precluding us from completing the disposal in accordance with our original plan. To provide liquidity for the sale, First Heights liquidated its investment portfolios and its single-family residential loan portfolio and, as provided in the Assistance Agreement, entered into a Liquidity Assistance Note (LAN) with the FDIC acting in its capacity as manager of the FRF notes. The LAN was collateralized by the FRF notes. The LAN and FRF notes matured in September 1998; however, payment of these obligations was withheld by both parties pending resolution of all open matters with the FDIC. As discussed in Item 3, we settled the litigation with the FDIC in October 2001, and as part of that settlement all obligations under the LAN and FRF notes were extinguished.

First Heights' day-to-day activities are principally devoted to supporting residual regulatory compliance matters and the litigation with the United States government, discussed in Item 3, and are not reflective of the active operations of the former thrift, such as maintaining traditional transaction accounts (e.g., checking and savings accounts) or making loans. Accordingly, such operations are presented as discontinued.

## **Corporate**

Corporate is a non-operating segment that is comprised primarily of Pulte Homes, Inc. and Pulte Diversified Companies, Inc., both of which are holding companies. The primary purpose of Corporate is to support the operations of our subsidiaries by acting as the internal source of financing, developing and implementing strategic initiatives centered around new business development and operating efficiencies. Business development activities include the pursuit of additional domestic and international opportunities as well as the development of innovative building components and processes. Corporate also includes the activities associated with supporting a publicly traded entity listed on the New York Stock Exchange.

Corporate assets include equity investments in its subsidiaries, short-term financial instruments and affiliate advances. Liabilities include senior and subordinated debt and income taxes. Corporate revenues consist primarily of investment earnings of excess funds, while its expenses include costs associated with supporting a publicly traded company and its subsidiaries' operations, and investigating strategic initiatives.

## **Organization/Employees**

All subsidiaries and operating units operate independently with respect to daily operations. Homebuilding real estate purchases and other significant homebuilding, mortgage banking, financing activities and similar operating decisions must be approved by the business unit and/or corporate senior management.

At December 31, 2003, we employed approximately 10,800 persons. Our employees are not represented by any union. Contracted work, however, may be performed by union contractors. Homebuilding and mortgage banking management personnel are paid performance bonuses and incentive compensation. Performance bonuses are based on individual performance while incentive compensation is based on the performance of the applicable business unit or subsidiary. Our corporate management personnel are paid incentive compensation based on our overall performance. Each subsidiary is given autonomy regarding employment of personnel, although our senior corporate management acts in an advisory capacity in the employment of subsidiary officers. We consider our employee and contractor relations to be satisfactory.

## ITEM 2. PROPERTIES

Our homebuilding and corporate headquarters are located at 100 Bloomfield Hills Parkway, Suite 300, Bloomfield Hills, Michigan 48304, where we lease 63,740 square feet of office space. We also lease 37,004 square feet of office space at 15333 N. Pima Rd., Suite 300/340/345, Scottsdale, Arizona 85250 and 41,208 square feet of office space at 1230 West Washington Street, Tempe, Arizona 85281 for certain corporate and business services. Pulte Mortgage's offices are located at 7475 South Joliet Street, Englewood, Colorado 80112 and 99 Inverness Drive East, Englewood, Colorado 80112. We lease approximately 61,436 square feet and 32,000 square feet, respectively, of office space at these locations. Our homebuilding markets and mortgage branch operations generally lease office space for their day-to-day operations. First Heights' administrative office is located in 918 square feet of leased space at 2010 North Loop West, Suite 220, Houston, Texas 77018.

Because of the nature of our homebuilding operations, significant amounts of property are held as inventory in the ordinary course of our homebuilding business. Such properties are not included in response to this Item.

## ITEM 3. LEGAL PROCEEDINGS

We are involved in various litigation incidental to our continuing business operations. We believe that none of this litigation will have a material adverse impact on our results of operations, our financial position or our cash flows.

### *First Heights-related litigation*

We were a party to three lawsuits relating to First Heights' 1988 acquisition from the Federal Savings and Loan Insurance Corporation (FSLIC) and First Heights' ownership of five failed Texas thrifts. The first lawsuit (the District Court Case) was filed on July 7, 1995, in the United States District Court, Eastern District of Michigan, by the Federal Deposit Insurance Corporation (FDIC) against Pulte Homes, Inc., Pulte Diversified Companies, Inc. and First Heights (collectively, the Pulte Parties). The second lawsuit (the Court of Federal Claims Case) was filed on December 26, 1996, in the United States Court of Federal Claims (Washington, D.C.) by the Pulte Parties against the United States. The third lawsuit was filed by First Heights on January 10, 2000, in the United States District Court, Eastern District of Michigan against the FDIC regarding the amounts, including interest, the FDIC was obligated to pay First Heights on two promissory notes which had been executed by the FDIC's predecessor, the FSLIC.

In the District Court Case, the FDIC, as successor to the FSLIC, sought a declaration of rights and other relief related to the Assistance Agreement entered into between First Heights and the FSLIC. The FDIC and the Pulte Parties disagreed about the proper interpretation of provisions in the Assistance Agreement which provide for sharing of certain tax benefits achieved in connection with First Heights' 1988 acquisition and ownership of the five failed Texas thrifts. The District Court Case also included certain other claims relating to the foregoing, including claims resulting from our amendment and First Heights' amendment of a tax sharing and allocation agreement between us and First Heights. The Pulte Parties disputed the FDIC's claims and filed an answer and a counterclaim, seeking, among other things, a declaration that the FDIC had breached the Assistance Agreement in numerous respects. On December 24, 1996, the Pulte Parties voluntarily dismissed without prejudice certain of their claims in the District Court Case and, on December 26, 1996, initiated the Court of Federal Claims Case.

In October 2001, the FDIC and the Pulte Parties settled the District Court Case, the related appeal to the Sixth Circuit Court of Appeals and the third lawsuit. As part of this settlement (the Settlement), the First Heights Assistance Agreement was terminated, except that certain tax benefit sharing provisions will continue in effect, and the warrants issued by First Heights to the FDIC were extinguished. We do not believe that the claims in the Court of Federal Claims Case are in any way prejudiced by the Settlement.

In the Court of Federal Claims Case, the Pulte Parties assert breaches of contract on the part of the United States in connection with the enactment of Section 13224 of the Omnibus Budget Reconciliation Act of 1993 (OBRA). That provision repealed portions of the tax benefits that the Pulte Parties claim they were entitled to under the contract to acquire the failed Texas thrifts. The Pulte Parties also assert other claims concerning the contract, including that the United States (through the FDIC as receiver) improperly attempted to amend the failed thrifts' pre-acquisition tax returns and that this attempt was made in an effort to deprive the Pulte Parties of tax benefits for which they had contracted.

On August 17, 2001, the United States Court of Federal Claims ruled that the United States government is liable to the Pulte Parties for breach of contract by enacting Section 13224 of OBRA. In September 2003, the United States Court of Federal Claims issued final judgment that the Pulte Parties have been damaged by approximately \$48.7 million as a result of the United States government's breach of contract with them. The United States government and the Pulte Parties filed Notices of Appeal with the United States Court of Appeals for the Federal Circuit in October 2003. Accordingly, any gain related to this litigation will be recognized only upon final resolution.

#### ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

This Item is not applicable.

#### ITEM 4A. EXECUTIVE OFFICERS OF THE REGISTRANT

Set forth below is certain information with respect to our executive officers.

<u>Name</u>	<u>Age</u>	<u>Position</u>	<u>Year Became An Officer</u>
William J. Pulte	71	Chairman of the Board	1956
Richard J. Dugas, Jr.	38	President and Chief Executive Officer	2002
Steven C. Petruska	45	Executive Vice President and Chief Operating Officer	2004
Roger A. Cregg	47	Executive Vice President and Chief Financial Officer	1997
Leo J. Taylor	45	Executive Vice President, Human Resources	2003
John R. Stoller	55	Senior Vice President, General Counsel and Secretary	1990
Vincent J. Frees	53	Vice President and Controller	1995
Gregory M. Nelson	48	Vice President and Assistant Secretary	1993
Bruce E. Robinson	42	Vice President and Treasurer	1998

The following is a brief account of the business experience of each officer during the past five years:

Mr. Pulte was appointed Chairman of the Board in December 2001. He has also served as Chairman of the Executive Committee of the Board of Directors since January 1999.

Mr. Dugas was appointed President and Chief Executive Officer in July 2003. Prior to that date, he served as Executive Vice President and Chief Operating Officer. He was appointed Chief Operating Officer in May 2002 and Executive Vice President in December 2002. Since 1994, he has served in a variety of management positions. Most recently, he was Coastal Region President with responsibility for our Georgia, North Carolina, South Carolina, and Tennessee operations.

Mr. Petruska was appointed Executive Vice President and Chief Operating Officer in January 2004. Since joining our company in 1984, he has held a number of management positions. Most recently, he was the President for both the Arizona Area and Nevada Area operations.

Mr. Cregg was appointed Executive Vice President in May 2003 and was named Chief Financial Officer effective January 1998.

Mr. Taylor was appointed Executive Vice President, Human Resources, in May 2003. Prior to that date, he was Vice President of Human Resources and Sales Development since 1997.

Mr. Stoller was appointed Senior Vice President in September 1999. Prior to that date, he served as Vice President and General Counsel since October 1990.

Mr. Frees has been Vice President and Controller since May 1995.

Mr. Nelson has been Vice President since August 1993.

Mr. Robinson was appointed Treasurer in July 1998 and was named Vice President and Treasurer effective January 1999.

There is no family relationship between any of the officers. Each officer serves at the pleasure of the Board of Directors.

**PART II**

**ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS**

Our common shares are listed on the New York Stock Exchange (Symbol: PHM). The table below, which has been adjusted to retroactively reflect our two-for-one stock split announced December 11, 2003 and effected January 2, 2004, sets forth, for the quarterly periods indicated, the range of high and low closing prices and cash dividends declared per share.

	2003			2002		
	<u>High</u>	<u>Low</u>	<u>Declared Dividends</u>	<u>High</u>	<u>Low</u>	<u>Declared Dividends</u>
1st Quarter	\$26.59	\$22.73	\$.02	\$27.22	\$20.99	\$.02
2nd Quarter	35.99	24.66	.02	29.47	23.00	.02
3rd Quarter	34.88	28.98	.02	28.97	20.41	.02
4th Quarter	49.42	33.73	.05	24.85	18.30	.02

At December 31, 2003, there were 1,527 shareholders of record.

**ITEM 6. SELECTED FINANCIAL DATA**

Set forth below is selected consolidated financial data for each of the past five fiscal years. The selected financial data should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and our Consolidated Financial Statements and Notes thereto included elsewhere in this report.

	Years Ended December 31, (\$000's omitted)				
	<u>2003</u>	<u>2002</u>	<u>2001(a)</u>	<u>2000</u>	<u>1999</u>
<b>OPERATING DATA:</b>					
<b>Homebuilding:</b>					
Revenues.....	<u>\$ 8,929,798</u>	<u>\$ 7,363,989</u>	<u>\$ 5,309,829</u>	<u>\$ 4,195,675</u>	<u>\$ 3,711,196</u>
Income before income taxes.....	<u>\$ 1,002,161</u>	<u>\$ 724,067</u>	<u>\$ 512,291</u>	<u>\$ 386,604</u>	<u>\$ 311,668</u>
<b>Financial Services:</b>					
Revenues.....	<u>\$ 115,847</u>	<u>\$ 106,628</u>	<u>\$ 77,222</u>	<u>\$ 50,669</u>	<u>\$ 54,279</u>
Income before income taxes.....	<u>\$ 68,846</u>	<u>\$ 66,723</u>	<u>\$ 36,948</u>	<u>\$ 24,788</u>	<u>\$ 25,721</u>
<b>Corporate:</b>					
Revenues.....	<u>\$ 3,281</u>	<u>\$ 1,202</u>	<u>\$ 2,210</u>	<u>\$ 633</u>	<u>\$ 2,748</u>
Loss before income taxes.....	<u>\$ (75,351)</u>	<u>\$ (61,968)</u>	<u>\$ (57,452)</u>	<u>\$ (56,296)</u>	<u>\$ (50,984)</u>
<b>Consolidated results:</b>					
Revenues.....	<u>\$ 9,048,926</u>	<u>\$ 7,471,819</u>	<u>\$ 5,389,261</u>	<u>\$ 4,246,977</u>	<u>\$ 3,768,223</u>
Income from continuing operations before income taxes.....	<u>\$ 995,656</u>	<u>\$ 728,822</u>	<u>\$ 491,787</u>	<u>\$ 355,096</u>	<u>\$ 286,405</u>
Income taxes.....	<u>378,334</u>	<u>284,221</u>	<u>189,362</u>	<u>136,712</u>	<u>108,118</u>
Income from continuing operations.....	<u>617,322</u>	<u>444,601</u>	<u>302,425</u>	<u>218,384</u>	<u>178,287</u>
Income (loss) from discontinued operations	<u>7,312</u>	<u>9,044</u>	<u>(1,032)</u>	<u>(29,871)</u>	<u>(122)</u>
Net income.....	<u>\$ 624,634</u>	<u>\$ 453,645</u>	<u>\$ 301,393</u>	<u>\$ 188,513</u>	<u>\$ 178,165</u>

(a) Del Webb operations were merged effective July 31, 2001.

	Years Ended December 31,				
	2003	2002	2001(a)	2000	1999
<b>PER SHARE DATA (b):</b>					
<b>Earnings per share - basic:</b>					
Income from continuing operations.....	\$ 5.05	\$ 3.68	\$ 3.08	\$ 2.64	\$ 2.06
Income (loss) from discontinued operations .....	.06	.07	(.01)	(.36)	-
Net income .....	\$ 5.11	\$ 3.75	\$ 3.07	\$ 2.28	\$ 2.06
Weighted-average common shares outstanding (000's omitted) .....	122,162	120,906	98,196	82,620	86,492
<b>Earnings per share - assuming dilution:</b>					
Income from continuing operations.....	\$ 4.91	\$ 3.60	\$ 3.00	\$ 2.59	\$ 2.03
Income (loss) from discontinued operations .....	.06	.07	(.01)	(.35)	-
Net income .....	\$ 4.97	\$ 3.67	\$ 2.99	\$ 2.24	\$ 2.03
Weighted-average common shares outstanding and effect of dilutive securities (000's omitted) .....	125,730	123,492	100,646	84,292	87,646
Shareholders' equity.....	\$ 27.55	\$ 22.58	\$ 19.22	\$ 15.01	\$ 12.64
Cash dividends declared .....	\$ .11	\$ .08	\$ .08	\$ .08	\$ .08

(a) Del Webb operations were merged effective July 31, 2001.

(b) All share and per share amounts have been restated to retroactively reflect the two-for-one stock split announced on December 11, 2003 and effected January 2, 2004.

	December 31, (\$000's omitted)				
	2003	2002	2001	2000	1999
<b>BALANCE SHEET DATA:</b>					
House and land inventories .....	\$ 5,528,410	\$ 4,293,597	\$ 3,833,763	\$ 1,896,856	\$ 1,822,060
Total assets.....	8,063,352	6,872,087	5,710,893	2,886,483	2,487,351
Senior notes and subordinated notes .....	2,150,972	1,913,268	1,722,864	666,296	508,690
Shareholders' equity .....	3,448,123	2,760,426	2,276,665	1,247,931	1,093,319

	Years Ended December 31,				
	2003	2002	2001	2000	1999
<b>OTHER DATA:</b>					
<b>Domestic Homebuilding:</b>					
Total markets, at year-end .....	44	44	43	41	41
Total active communities, at year-end.....	535	460	440	396	388
Total settlements - units .....	32,693	28,903	22,915	19,799	19,569
Total net new orders - units (a) .....	34,989	30,830	22,163	19,844	19,367
Backlog units, at year-end .....	13,952	10,605	8,678	5,477	5,432
Average unit selling price .....	\$ 259,000	\$ 242,000	\$ 225,000	\$ 206,000	\$ 187,000
Gross profit margin %					
from home sales (b) .....	20.6%	19.4%	19.1%	18.0%	17.0%
<b>Homebuilding settlement units (c):</b>					
Domestic.....	32,693	28,903	22,915	19,799	19,569
International.....	7,120	6,525	221	264	262
Total .....	39,813	35,428	23,136	20,063	19,831

(a) Total net new orders-units for the years ended December 31, 2003 and 2001, do not include 1,051 units and 3,953 units, respectively, of acquired backlog.

(b) Domestic homebuilding interest expense, which represents the amortization of capitalized interest, has been reclassified to home cost of sales.

(c) Homebuilding unit settlements of affiliates, not included in the table above, for the years ended December 31, 2003 through 1999 were 149, 1,022, 7,258, 7,718, and 6,791, respectively.

**ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

**Overview**

A summary of our operating results by business segment for the years ended December 31, 2003, 2002, and 2001 is as follows (\$000's omitted, except per share data):

	<u>Years Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
Pre-tax income (loss):			
Homebuilding .....	\$1,002,161	\$ 724,067	\$ 512,291
Financial Services .....	68,846	66,723	36,948
Corporate .....	<u>(75,351)</u>	<u>(61,968)</u>	<u>(57,452)</u>
Income from continuing operations before income taxes ...	995,656	728,822	491,787
Income taxes .....	<u>378,334</u>	<u>284,221</u>	<u>189,362</u>
Income from continuing operations .....	617,322	444,601	302,425
Income (loss) from discontinued operations .....	<u>7,312</u>	<u>9,044</u>	<u>(1,032)</u>
Net income .....	<u>\$ 624,634</u>	<u>\$ 453,645</u>	<u>\$ 301,393</u>
Per share data - assuming dilution:			
Income from continuing operations .....	\$ 4.91	\$ 3.60	\$ 3.00
Income (loss) from discontinued operations .....	<u>.06</u>	<u>.07</u>	<u>(.01)</u>
Net income .....	<u>\$ 4.97</u>	<u>\$ 3.67</u>	<u>\$ 2.99</u>

A comparison of pre-tax income (loss), for the years ended December 31, 2003, 2002, and 2001 is as follows:

- Continued strong demand for new housing, the addition and expansion of the Del Webb branded communities, coupled with our ability to effectively manage selling price and pace through our unique segmentation strategy drove pre-tax income of our homebuilding business segment to increase 38% in 2003 and 41% in 2002. Domestic average unit selling price increased by 7% in 2003 and 8% in 2002. Additionally, domestic gross margin percentages from home sales were up 120 basis points in 2003 principally as a result of product price increases and market and product mix shifts. Compared to 2001, our 2002 domestic gross margin percentages were up 30 basis points principally as a result of purchase accounting adjustments recorded in 2001.
- Pre-tax income of our financial services business segment increased 3% in 2003 and 81% in 2002. The increase in 2003 was primarily driven by an increase in loan originations and a higher capture rate tempered by a less favorable interest rate environment during the last half of the year. The 2002 increase was a result of increased volume, a favorable interest rate environment, effective leverage of overhead costs and the addition of Del Webb mortgage operations.
- Pre-tax loss of our non-operating corporate segment increased 22% in 2003 to \$75.4 million principally from higher compensation-related costs. The pre-tax loss in 2002 increased 8% as a result of higher interest costs, related to an increase in debt levels to support the growth of the business.

During the third quarter of 2003 and 2002, we recorded non-cash, after-tax gains of \$7.9 million and \$10.0 million, respectively, related to the favorable resolution of certain tax matters relating to our thrift operation, which we discontinued in 1994.

## Homebuilding

Our Homebuilding segment consists of the following operations:

- Domestic Homebuilding - We conduct our Domestic Homebuilding operations in 44 markets located throughout 27 states. Domestic Homebuilding offers a broad product line to meet the needs of the first-time, first and second move-up, and active adult homebuyers.
- International Homebuilding - We conduct our International Homebuilding operations through subsidiaries of Pulte International Corporation (International) in Mexico, Puerto Rico and Argentina. International Homebuilding product offerings focus on the demand of first-time buyers and middle-to-upper income consumer groups. We are currently in the process of evaluating various long-term strategic alternatives with regard to our International operations.

Certain operating data relating to our homebuilding operations are as follows (\$000's omitted):

	Years Ended December 31,		
	2003	2002	2001
Homebuilding settlement revenues:			
Domestic .....	\$ 8,482,341	\$ 6,991,614	\$ 5,145,526
International .....	228,137	196,074	35,169
Total .....	<u>\$ 8,710,478</u>	<u>\$ 7,187,688</u>	<u>\$5,180,695</u>
Homebuilding settlement units:			
Domestic .....	32,693	28,903	22,915
International .....	7,120	6,525	221
Total .....	<u>39,813</u>	<u>35,428</u>	<u>23,136</u>

*Note: Homebuilding revenues of affiliates, not included in the table above, for the years ended December 31, 2003 through 2001 were \$32,511, \$40,723, and \$180,621, respectively. Homebuilding unit settlements of affiliates, not included in the table above, for the years ended December 31, 2003 through 2001 were 149, 1,022, and 7,258, respectively.*

### Domestic Homebuilding

The Domestic Homebuilding operations represent our core business. We conduct our operations in 44 markets, located throughout 27 states, presented geographically as follows:

<i>Northeast:</i>	Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Pennsylvania, Virginia
<i>Southeast:</i>	Florida, Georgia, North Carolina, South Carolina, Tennessee
<i>Midwest:</i>	Illinois, Indiana, Kansas, Michigan, Minnesota, Ohio
<i>Central:</i>	Colorado, Texas, New Mexico
<i>West:</i>	Arizona, California, Nevada

The greater Phoenix market accounted for 11% of Domestic Homebuilding settlement revenues, 12% of settlement units and 14% of net new orders in 2003. The Las Vegas market accounted for 10% of net new orders in 2003. For the year ended December 31, 2002, the greater Phoenix market accounted for 10% of Domestic Homebuilding settlement revenues, 11% of settlement units and 11% of net new orders. No other individual markets represented more than 10% of total Domestic Homebuilding settlement revenues, settlement units or net new orders during the three years ended December 31, 2003.

## Homebuilding (continued)

### Domestic Homebuilding (continued)

The following table presents selected unit information for our Domestic Homebuilding operations:

	<u>Years Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
Unit settlements:			
Northeast .....	2,692	2,440	2,014
Southeast .....	8,234	8,271	8,126
Midwest.....	4,936	4,458	3,288
Central .....	5,283	4,588	3,982
West.....	<u>11,548</u>	<u>9,146</u>	<u>5,505</u>
	<u>32,693</u>	<u>28,903</u>	<u>22,915</u>
Net new orders - units (a):			
Northeast .....	3,098	2,738	1,905
Southeast .....	9,021	8,651	8,111
Midwest.....	4,736	4,684	3,515
Central .....	5,125	4,590	3,817
West.....	<u>13,009</u>	<u>10,167</u>	<u>4,815</u>
	<u>34,989</u>	<u>30,830</u>	<u>22,163</u>
Net new orders - dollars (\$000's omitted) (a).....	<u>\$9,555,000</u>	<u>\$7,731,000</u>	<u>\$4,855,000</u>
Backlog at December 31 - units:			
Northeast .....	1,535	1,129	831
Southeast .....	3,726	2,939	2,559
Midwest.....	1,401	1,601	1,375
Central .....	1,156	905	903
West.....	<u>6,134</u>	<u>4,031</u>	<u>3,010</u>
	<u>13,952</u>	<u>10,605</u>	<u>8,678</u>
Backlog at December 31 - dollars (\$000's omitted).....	<u>\$4,147,000</u>	<u>\$2,857,000</u>	<u>\$2,118,000</u>

(a) Net new orders for the years ended December 31, 2003 and 2001, do not include 1,051 units and 3,953 units, respectively, of acquired backlog and related dollars.

Unit settlements in 2003 reached a record high, increasing 13% to 32,693 units. The increase in 2003 can be attributed to continued strong demand for new housing and an increase in the active communities to 535 from 460. Unit settlements in 2002 increased 26% to 28,903 units, principally from the inclusion of a full year of Del Webb operations combined with strong sales in the Midwest. The average selling price for our homes increased from \$225,000 in 2001 to \$242,000 in 2002 and to \$259,000 in the current year. Changes in average selling price reflect a number of factors, including price increases, the mix of product closed during a period and the number of options purchased by customers. Both 2003 and 2002 benefited from increased product prices and improved product mix.

Ending backlog, which represents orders for homes that have not yet closed, climbed 32% to 13,952 homes. The dollar value of our ending backlog was up 45% to \$4.1 billion at December 31, 2003. Unit and dollar backlog at December 31, 2002, increased 22% and 35%, respectively, to 10,605 homes valued at \$2.9 billion. Overall, strong demand supported by a favorable interest rate environment and an increase in the number of active communities drove increased order activity and record levels of backlog.

## Homebuilding (continued)

### Domestic Homebuilding (continued)

The following table presents a summary of pre-tax income for our Domestic Homebuilding operations (\$000's omitted):

	Years Ended December 31,		
	2003	2002	2001
Home sale revenue (settlements).....	\$ 8,482,341	\$ 6,991,614	\$ 5,145,526
Land sale revenue .....	219,320	176,301	129,134
Home cost of sales* .....	(6,731,834)	(5,638,162)	(4,163,065)
Land cost of sales.....	(153,415)	(123,306)	(97,941)
Selling, general and administrative expenses .....	(820,951)	(664,469)	(482,128)
Other income (expense), net.....	3,361	(22,968)	(16,851)
Pre-tax income .....	<u>\$ 998,822</u>	<u>\$ 719,010</u>	<u>\$ 514,675</u>
Average sales price.....	<u>\$ 259</u>	<u>\$ 242</u>	<u>\$ 225</u>

\* Domestic homebuilding interest expense, which represents the amortization of capitalized interest, has been reclassified to home cost of sales.

Gross profit margins from home sales in 2003 increased 120 basis points over 2002 to 20.6%. Gross profit margins in 2002 increased 30 basis points to 19.4%. Factors that contributed to this favorable trend include strong customer demand, positive home pricing, the benefits of leverage-buy purchasing activities and effective production and inventory management. In addition, 2001 gross profit margins were negatively impacted 20 basis points as a result of purchase accounting adjustments.

Land sales increased in each of the prior three years, demonstrating our competency in purchasing, developing and entitling certain land positions for sale primarily to other homebuilders, as well as to retail and commercial establishments. Revenues and their related gains/losses may vary significantly between periods, depending on the timing of such sales. We continue to rationalize certain existing land positions to ensure the most effective use of invested capital. Included in other assets is approximately \$251.2 million in land held for disposition as of December 31, 2003, as compared to \$218.8 million in the prior year.

For the year ended December 31, 2003, selling, general and administrative expenses, as a percentage of home settlement revenues, increased 20 basis points to 9.7% after increasing 10 basis points to 9.5% in 2002. The increase in 2003 is principally attributable to costs associated with the realignment of our field operations and organizations to meet the challenge and opportunity for future growth. Higher startup costs for new communities and increased compensation related costs partially offset by a reduction in costs associated with the Del Webb operations contributed to the change in 2002.

Other income (expense), net totaled income of \$3.4 million in 2003 compared to expense of \$23.0 million in 2002. This favorable change was principally a result of equity earnings from two Nevada-based joint ventures, totaling \$28.5 million, related to the sale of commercial and residential properties. Other expense, net of \$16.9 million in 2001 benefited from income from certain non-operating investments totaling \$4.2 million.

At December 31, 2003 and 2002, our Domestic Homebuilding operations controlled approximately 256,900 and 176,800 lots, respectively. Approximately 120,400 and 84,300 lots were owned, and approximately 66,000 and 43,800 lots were under option agreements approved for purchase at December 31, 2003 and 2002, respectively. In addition, there were approximately 70,500 lots under option agreements at December 31, 2003, pending approval, that are under review and evaluation for future use by our Domestic Homebuilding operations. This compared to 48,700 lots at December 31, 2002.

The total purchase price applicable to approved land under option for use by our homebuilding operations at future dates approximated \$2.6 billion at December 31, 2003. In addition, total purchase price applicable to land under option pending approval was valued at \$2.1 billion at December 31, 2003. Land option agreements, which may be cancelled at our discretion, may extend over several years and are secured by deposits totaling \$99.0 million, which are generally non-refundable.

## Homebuilding (continued)

### International Homebuilding

Our International Homebuilding operations are primarily conducted through subsidiaries of International in Mexico, Puerto Rico and Argentina. Effective January 1, 2002, we reorganized the structure of our operations within Mexico to create a single company, Pulte Mexico S. de R.L. de C.V., which ranks as one of the largest builders in the country. Prior to the reorganization, these operations were conducted primarily through five joint ventures throughout Mexico. Under the new ownership structure, which combines the largest of these entities, we own 63.8% of Pulte Mexico S. de R.L. de C.V. and have consolidated Pulte Mexico S. de R.L. de C.V. into our financial statements. Results for 2002 include joint venture operations for one month and operations as a consolidated entity for eleven months, as the operations in Mexico report on a one-month lag.

We are currently in the process of evaluating various long-term strategic alternatives with regard to our International operations.

The following table presents selected financial data for our International Homebuilding operations for the years ended December 31, 2003, 2002 and 2001 (\$000's omitted):

	Years Ended December 31,		
	2003	2002	2001
Revenues.....	\$ 228,137	\$ 196,074	\$ 35,169
Cost of sales.....	(183,271)	(157,056)	(30,937)
Selling, general and administrative expense.....	(42,126)	(35,029)	(11,820)
Other income (expense), net .....	(1,485)	(1,610)	66
Minority interest .....	(1,382)	(1,801)	-
Equity in income of joint ventures .....	<u>3,466</u>	<u>4,479</u>	<u>5,138</u>
Pre-tax income (loss).....	<u>\$ 3,339</u>	<u>\$ 5,057</u>	<u>\$ (2,384)</u>
Unit settlements:.....	<u>7,120</u>	<u>6,525</u>	<u>221</u>

*Note: Homebuilding unit settlements of affiliates, not included in the table above, for the years ended December 31, 2003, 2002, and 2001 were 149, 1,022, and 7,258, respectively.*

International revenues and unit settlements for 2003 benefited from a full year of results from our operations in Mexico as well as increased sales in both Argentina and Puerto Rico. Our Mexico operations had revenues of \$172.3 million and unit settlements of 6,777 for the year ended December 31, 2003. Increased revenues and settlements in 2002 were due to consolidation of the operations in Mexico for eleven months of 2002, a full year of closings in Argentina, which recorded its first closing in June of 2001, partially offset by a decline in Puerto Rico. Our operations in Mexico contributed revenues of \$158.1 million and unit settlements of 6,271 units in 2002.

Gross profit margins from home sales declined 20 basis points to 19.7% in 2003 compared to 2002, as favorable product and geographic mix shifts in Mexico were offset by less favorable product mix shifts in Puerto Rico and unfavorable sales pace in Argentina. The consolidation of Mexico had a positive effect on 2002 gross margins, increasing to 19.9% from 12.0% in 2001.

Selling, general and administrative expenses as a percent of revenue increased by 60 basis points to 18.5% in 2003 from 17.9% in 2002. This increase was driven by additional costs incurred reorganizing our operations in Mexico in an effort to enhance future profitability. Aggressive marketing efforts in Argentina, coupled with limited reorganization costs and a stronger peso, also contributed to the increase.

Our operations in Argentina and Mexico are affected by fluctuations in currency rates for those countries. Transaction gains and losses for the years ended December 31, 2003, 2002 and 2001, classified as other income (expense), net, were not significant. For the years ended December 31, 2003 and 2002, we recorded a foreign currency translation gain of \$1.9 million and a loss of \$12.8 million, respectively, for Argentina and a translation loss of \$5.9 million and a gain of \$8.6 million for Mexico, as a component of accumulated other comprehensive income on the balance sheet. At December 31, 2003, our investment in Argentina and Mexico, net of accumulated foreign currency translation adjustments, approximated \$13.2 million and \$65.8 million, respectively.

## Financial Services

We conduct our financial services business, which includes mortgage and title operations, through Pulte Mortgage and other subsidiaries.

We sell our servicing rights on a flow basis through fixed price servicing sales contracts. Due to the short period of time the servicing rights are held, generally less than four months, we do not amortize the servicing asset. Since the servicing rights are recorded based on the value in the servicing sales contracts, there are no impairment issues related to these assets. We also originate mortgage loans using our own funds or borrowings made available through various credit arrangements, and then sell such mortgage loans to outside investors.

The following table presents mortgage origination data for our Financial Services operations:

	<u>Years Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
Total originations:			
Loans.....	<u>28,655</u>	<u>23,074</u>	<u>19,018</u>
Principal (\$000's omitted).....	<u>\$4,989,500</u>	<u>\$3,771,000</u>	<u>\$2,937,100</u>
Originations for Pulte customers:			
Loans.....	<u>23,864</u>	<u>19,537</u>	<u>15,402</u>
Principal (\$000's omitted).....	<u>\$4,179,100</u>	<u>\$3,176,500</u>	<u>\$2,385,500</u>

Mortgage origination unit and principal volume for the year ended December 31, 2003, increased 24% and 32%, respectively, over 2002. This growth can be attributed to an increase in the capture rate of 510 basis points to 82.7% combined with the volume increases experienced in our Homebuilding business and an increase in average loan size. Our capture rate represents loan originations from our homebuilding business as a percent of total loan opportunities, excluding cash settlements, from our homebuilding business. Mortgage origination principal volume in 2002 increased 28% over 2001, due to an increase in the capture rate of 390 basis points to 77.6% and the inclusion of Del Webb mortgage operations for a full year. Origination unit volume increased 21% due to the same factors. Our home buying customers continue to account for the majority of total loan production representing 83% of total Pulte Mortgage unit production for 2003, compared with 85% in 2002 and 81% in 2001. Refinancings represented 8% of total loan production in 2003 and 2002, and 10% during 2001. At December 31, 2003, loan application backlog increased 57% to \$2.2 billion as compared to \$1.4 billion and \$0.8 billion at December 31, 2002 and 2001, respectively.

Pre-tax income for the year ended December 31, 2003, increased 3% to \$68.8 million, as a result of increased volume, partially offset by the impact of a less favorable interest rate environment for selling loans during the last six months of the year and an increase in training, systems, and facilities costs incurred in anticipation of the projected growth of the business. Gains from the sale of mortgages increased \$2.0 million, or 3%, from the same period in 2002. As compared with 2002, net interest income increased \$3.8 million to \$15.1 million during 2003 due to increased production. Income from our title operations was \$13.5 million in 2003, an increase of 11% over 2002.

Pre-tax income for the year ended December 31, 2002, increased 81% to \$66.7 million, as a result of increased volume, a favorable interest rate environment, effective leverage of overhead costs and the inclusion of Del Webb mortgage operations for a full year. Gains from the sale of mortgages increased \$20.4 million, or 49%, from the same period in 2001. As compared with 2001, net interest income increased \$6.3 million to \$11.3 million during 2002 due to increased production and a steeper yield curve as a result of the drop in interest rates during 2002. Title income grew 42% contributing \$12.2 million to pre-tax income for the year.

We hedge portions of our forecasted cash flow from sales of closed mortgage loans with derivative financial instruments. For the year ended December 31, 2003, we did not recognize any net gains or losses related to an ineffective portion of the hedging instrument. We also did not recognize any gains or losses during 2003, for cash flow hedges that were discontinued because it is probable that the original forecasted transaction will not occur. At December 31, 2003, we expect to reclassify \$0.2 million, net of taxes, of net losses on derivative instruments from accumulated other comprehensive income to earnings during the next twelve months from sales of closed mortgage loans.

## Corporate

Corporate is a non-operating segment that supports the operations of our subsidiaries by acting as the internal source of financing, developing and implementing strategic initiatives centered on new business development and operating efficiencies, and providing the necessary administrative support associated with being a publicly traded entity listed on the New York Stock Exchange. As a result, the corporate segment's operating results will vary from year to year as these strategic initiatives evolve.

The following table presents this segment's results of operations (\$000's omitted):

	<u>Years Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
Net interest expense .....	\$ 39,364	\$ 38,214	\$ 34,261
Other corporate expenses, net .....	<u>35,987</u>	<u>23,754</u>	<u>23,191</u>
Loss before income taxes .....	<u>\$ 75,351</u>	<u>\$ 61,968</u>	<u>\$ 57,452</u>

Interest expense, net of interest capitalized into inventory, increased 3% to \$39.4 million in 2003 and 12% to \$38.2 million in 2002. This trend is a result of an increase in debt levels necessary to support our growth. Interest incurred for the years ended December 31, 2003, 2002, and 2001, excluding interest incurred by our financial services operations, was approximately \$179.0 million, \$162.5 million and \$116.9 million, respectively.

Other corporate expense, net in 2003 increased \$12.2 million principally as a result of higher compensation-related costs. Over the two-year period ended December 31, 2002, other corporate expenses, net were relatively flat, as higher compensation-related costs were offset by income from the sale and adjustment to fair value of various non-operating parcels of commercial land held for sale.

Interest capitalized into inventory is charged to home cost of sales based on the cyclical timing of our unit settlements, over a period that approximates the average life cycle of our communities. Interest in inventory, has increased primarily as a result of higher levels of indebtedness and the addition of the Del Webb properties, which have a longer life cycle. Information related to Corporate interest capitalized into inventory is as follows (\$000's omitted):

	<u>Years Ended December 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
Interest in inventory at beginning of year .....	\$ 142,984	\$ 68,595	\$ 24,202
Interest capitalized .....	136,308	123,086	80,399
Interest expensed .....	<u>(78,708)</u>	<u>(48,697)</u>	<u>(36,006)</u>
Interest in inventory at end of year.....	<u>\$ 200,584</u>	<u>\$ 142,984</u>	<u>\$ 68,595</u>

## Discontinued Operations

During the third quarter of 2003 and 2002, we recorded non-cash, after-tax gains of \$7.9 million and \$10.0 million, respectively, related to the favorable resolution of certain tax matters relating to our thrift operation, First Heights Bank, fsb (First Heights), which we discontinued in 1994.

In September 2003, the United States Court of Federal Claims issued final judgment that Pulte Homes, Inc., Pulte Diversified Companies, Inc. and First Heights (collectively, the Pulte Parties) had been damaged by approximately \$48.7 million as a result of the United States government's breach of contract with them. The final judgment follows the Court's August 17, 2001 ruling that the United States breached the contract related to the Pulte Parties' 1988 acquisition of five savings and loan associations by enacting Section 13224 of the Omnibus Budget Reconciliation Act of 1993. The United States government and the Pulte Parties filed Notices of Appeal with the United States Court of Appeals for the Federal Circuit in October 2003. Accordingly, any gain related to this litigation will be recognized only upon final resolution.

## Liquidity and Capital Resources

Our net cash used in operating activities for the year ended December 31, 2003 totaled \$301.8 million. The increase in net income was offset by significant investments in land necessary to support the continued growth of the business. Net cash used in investing activities was \$34.1 million for 2003. Net cash provided by financing activities for the year ended December 31, 2003, was \$128.9 million, reflecting proceeds from the \$300 million senior notes issued in February and the \$400 million senior notes issued in May and proceeds from employee stock option exercises, offset by the repayment of debt, dividends paid and stock repurchases.

Our net cash provided by operating activities for the year ended December 31, 2002, was \$148.8 million. The increase in net income was aided by the realization of certain tax benefits and an increase in accrued liabilities, while inventories continued to build to support the growth of the business. Net cash provided by investing activities was \$21.5 million for 2002. Net cash provided by financing activities for the year ended December 31, 2002, was \$374.0 million, reflecting proceeds from the \$300 million senior notes issued in June 2002, proceeds from borrowings under our various credit facilities and proceeds from employee stock option exercises, offset by the repayment of debt, dividends paid and stock repurchases.

We finance our homebuilding land acquisitions, development and construction activities from internally generated funds and existing credit agreements. Effective October 1, 2003, we replaced our \$570 million revolving credit facility with an \$850 million facility that includes the capacity to issue letters of credit up to \$500 million. This new credit facility expires October 1, 2008. We had no borrowings under our unsecured revolving credit facility at December 31, 2003.

Pulte Mortgage provides mortgage financing for many of our home sales and uses its own funds and borrowings made available pursuant to various committed and uncommitted credit arrangements. Pulte Mortgage has committed credit arrangements of \$860 million comprised of a \$310 million bank revolving credit facility and a \$550 million annual asset-backed commercial paper program. There were approximately \$479.3 million of borrowings outstanding under existing Pulte Mortgage arrangements at December 31, 2003. Mortgage loans originated by Pulte Mortgage are subsequently sold to outside investors. We anticipate that there will be adequate mortgage financing available for purchasers of our homes.

In February 2003, we sold \$300 million of 6.25% unsecured senior notes, due 2013. Proceeds from this issuance were used to retire our \$175 million 9.5% senior notes that matured on April 1, 2003 and redeem the remaining outstanding principal balance of approximately \$155 million of Del Webb's \$200 million 9.375% senior subordinated notes due 2009 that were called for redemption in March at a price equal to 104.688% of the principal amount.

In May 2003, we sold \$400 million of 6.375% unsecured senior notes, due 2033. Proceeds from this issuance were used for general corporate purposes and to retire our \$100 million 7% senior notes that matured on December 15, 2003.

In December 2003, we increased our dividend 150% to \$.05 per share from \$.02 per share.

Pursuant to our \$100 million share repurchase program, we repurchased 790,800 common shares at an aggregate cost of approximately \$18.2 million during 2003 and 200,000 common shares for approximately \$4.3 million in 2002. At December 31, 2003, we had remaining authorization to purchase common stock aggregating \$77.5 million.

Our income tax liability and related effective tax rate are affected by a number of factors. In 2003, our effective tax rate was 38.0% compared to 39.0% in 2002 and 38.5% in 2001. The reduction in the effective tax rate for 2003 is principally due to a lower expected effective state income tax rate for 2003 and the shareholders' approval of our new Senior Management Annual Incentive Plan, which will allow for full tax deductibility of Plan payments under Section 162(m) of the Internal Revenue Service Code. We anticipate that our effective tax rate for 2004 will be approximately 38%.

At December 31, 2003, we had cash and equivalents of \$404.1 million, \$2.1 billion of unsecured senior notes and \$77.3 million of unsecured senior subordinated notes. Other financing includes limited recourse collateralized financing totaling \$83.3 million.

Sources of our working capital at December 31, 2003, include cash and equivalents, our \$850 million committed unsecured revolving credit facility and Pulte Mortgage's \$860 million revolving credit facilities. Our debt-to-total capitalization, excluding our collateralized debt, was 38.4% as of December 31, 2003, and 33.6% net of cash and equivalents. We expect to maintain our net debt-to-total capitalization at or below the 40% level.

In January 2004, we sold \$500 million of 5.25% senior notes, due 2014. Proceeds from the sale will be used to retire the Del Webb 10.25% subordinated debentures called for redemption and for general corporate purposes including continued investment in our business.

## Liquidity and Capital Resources (continued)

### Inflation

We, and the homebuilding industry in general, may be adversely affected during periods of high inflation because of higher land and construction costs. Inflation also increases our financing, labor and material costs. In addition, higher mortgage interest rates significantly affect the affordability of permanent mortgage financing to prospective homebuyers. We attempt to pass to our customers any increases in our costs through increased sales prices. To date, inflation has not had a material adverse effect on our results of operations. However, there is no assurance that inflation will not have a material adverse impact on our future results of operations.

### Contractual Obligations and Commercial Commitments

The following table summarizes our payments under contractual obligations as of December 31, 2003:

	Payments Due by Period				
	(\$000's omitted)				
	Total	2004	2005-2006	2007-2008	After 2008
Contractual obligations:					
Long-term debt (a).....	\$4,394,051	\$ 346,369	\$ 403,778	\$ 269,652	\$3,374,252
Capital lease obligations .....	-	-	-	-	-
Operating lease obligations .....	126,403	32,590	44,057	26,355	23,401
Purchase obligations.....	-	-	-	-	-
Other long-term liabilities (b).....	91,223	32,849	50,806	5,314	2,254
Total contractual obligations.....	<u>\$4,611,677</u>	<u>\$ 411,808</u>	<u>\$ 498,641</u>	<u>\$ 301,321</u>	<u>\$3,399,907</u>

(a) Represents our senior notes and subordinated notes and related interest payments

(b) Represents our limited recourse collateralized financing arrangements and related interest payments

The following table summarizes our other commercial commitments as of December 31, 2003:

	Amount of Commitment Expiration by Period				
	(\$000's omitted)				
	Total	2004	2005-2006	2007-2008	After 2008
Other commercial commitments:					
Guarantor revolving credit facilities (a) ...	\$ 850,000	\$ -	\$ -	\$ 850,000	\$ -
Non-guarantor revolving credit facilities.	860,000	-	860,000	-	-
Other credit facilities .....	3,000	3,000	-	-	-
Standby letters of credit (b) .....	57,844	56,890	954	-	-
Total commercial commitments .....	<u>\$1,770,844</u>	<u>\$ 59,890</u>	<u>\$ 860,954</u>	<u>\$ 850,000</u>	<u>\$ -</u>

(a) Includes capacity to issue up to \$500 million in standby letters of credit of which \$157.4 million was outstanding at December 31, 2003.

(b) Excludes standby letters of credit issued under the Guarantor revolving credit facilities.

### Off-Balance Sheet Arrangements

We use standby letters of credit and performance bonds to guarantee our performance under various contracts, principally in connection with the development of our projects. The expiration dates of the letter of credit contracts coincide with the expected completion date of the related projects. If the obligations related to a project are ongoing, annual extensions of the letters of credit are typically granted on a year-to-year basis. At December 31, 2003, we had outstanding letters of credit of \$215.2 million. Performance bonds do not have stated expiration dates; rather, we are released from the bonds as the contractual performance is completed. These bonds, which approximated \$1.2 billion at December 31, 2003, are typically outstanding over a period that approximates 3-5 years. We do not believe that we will be required to draw upon any such letters of credit or performance bonds.

## Off-Balance Sheet Arrangements (continued)

In the ordinary course of business, we enter into land option or option type agreements in order to procure land for the construction of houses in the future. At December 31, 2003, these agreements totaled approximately \$4.7 billion. Pursuant to these land option agreements, we provide a deposit to the seller as consideration for the right to purchase land at different times in the future, usually at predetermined prices. If the entity holding the land under option is a variable interest entity, our deposit represents a variable interest in that entity. At December 31, 2003, we consolidated certain variable interest entities with assets totaling \$73.3 million.

We currently do not have any non-consolidated special purpose entity arrangements.

## Critical Accounting Policies and Estimates

The accompanying consolidated financial statements were prepared in conformity with accounting principles generally accepted in the United States. When more than one accounting principle, or the method of its application, is generally accepted, we select the principle or method that is appropriate in our specific circumstances (see Note 1 of Notes to Consolidated Financial Statements). Application of these accounting principles requires us to make estimates about the future resolution of existing uncertainties; as a result, actual results could differ from these estimates. In preparing these financial statements, we have made our best estimates and judgments of the amounts and disclosures included in the financial statements, giving due regard to materiality. The development and selection of the following critical accounting policies and estimates have been discussed with the Audit Committee of the Board of Directors.

### *Revenue recognition*

**Homebuilding** – Homebuilding revenues are recorded when the sales of homes are completed and ownership has transferred to the customer. Unfunded settlements are deposits in transit on homes for which the sale was completed. We do not engage in arrangements whereby we have ongoing relationships with our homebuyers that require us to repurchase our homes or provide homebuyers with the right of return.

**Financial Services** – Mortgage servicing fees represent fees earned for servicing loans for various investors. Servicing fees are based on a contractual percentage of the outstanding principal balance and are credited to income when the related mortgage payments are received. Loan origination fees, commitment fees and certain direct loan origination costs are deferred as an adjustment to the cost of the related mortgage loan until such loan is sold. Gains and losses from sales of mortgage loans are recognized when the loans are sold. Interest income is accrued from the date a mortgage loan is originated until the loan is sold.

### *Inventory valuation*

Our finished inventories are stated at the lower of accumulated costs or net realizable value. Included in inventories are all direct development costs. Inventories under development or held for development are stated at accumulated cost, unless they are determined to be impaired, in which case these inventories are measured at fair value. If actual market conditions are less favorable than those projected by management, additional inventory adjustments may be required.

We capitalize interest cost into homebuilding inventories. Interest capitalized each quarter is identified as a separate layer in our capitalized interest balance sheet pool. Each layer of capitalized interest is amortized over a period that approximates the average life of communities under development. Interest expense is allocated to the quarters over the amortization period based on the historical relationship of unit settlements in a quarter compared to annual unit settlements. This period increased in 2001, due to the addition of the Del Webb properties, which have a longer life cycle, and could change in the future as the mix of communities change.

Sold units are expensed on a specific identification basis. Under the specific identification basis, cost of sales includes the construction cost of the home, an average lot cost by project based on land acquisition and development costs, and closing costs and commissions. Construction cost of the home includes amounts paid through the closing date of the home, plus an accrual for costs incurred but not yet paid, based on an analysis of budgeted construction cost. This accrual is reviewed for accuracy based on actual payments made after closing compared to the amount accrued, and adjustments are made if needed. Total project land acquisition and development costs are based on an analysis of budgeted costs compared to actual costs incurred to date and estimates to complete. Adjustments to estimated total project land acquisition and development costs for the project affect the amount of future lots costed.

## Critical Accounting Policies and Estimates (continued)

### *Residential mortgage loans available-for-sale*

Residential mortgage loans available-for-sale are stated at the lower of aggregate cost or market value. Gains and losses from sales of mortgage loans are recognized when the loans are sold. We hedge our residential mortgage loans available-for-sale. Gains and losses from closed commitments and futures contracts are matched against the related gains and losses on the sale of mortgage loans.

### *Goodwill and intangible assets*

We have identified significant intangible assets and generated significant goodwill, most recently as a result of the Del Webb merger in 2001. Intangible assets, primarily trademarks and tradenames, were valued using proven valuation procedures and are amortized over their estimated useful life. Goodwill is subject to annual impairment testing. The carrying value and ultimate realization of these assets is dependent upon estimates of future earnings and benefits that we expect to generate from their use. If our expectations of future results and cash flows decrease significantly, intangible assets and goodwill may be impaired and the resulting charge to operations may be material. If we determine that the carrying value of intangible assets, long-lived assets and goodwill may not be recoverable based upon the existence of one or more indicators of impairment, we measure impairment based on one of three methods. For assets related to ongoing operations, we use a projected undiscounted cash flow method to determine if impairment exists and then measure impairment using discounted cash flows. For assets to be disposed of, we assess the fair value of the asset based on current market conditions for similar assets. For goodwill, we assess fair value by measuring discounted cash flows of our reporting units and measure impairment as the difference between the resulting implied fair value of goodwill and the recorded book value.

The estimates of useful lives and expected cash flows require us to make significant judgments regarding future periods that are subject to some factors outside of our control. Changes in these estimates could result in significant revisions to the carrying value of these assets and material charges to the results of operations.

### *Allowance for warranties*

Home purchasers are provided with warranties against certain building defects. The specific terms and conditions of those warranties vary geographically. Most warranties cover different aspects of the home's construction and operating systems for a period of up to ten years. We estimate the costs to be incurred under these warranties and record a liability in the amount of such costs at the time product revenue is recognized. Factors that affect our warranty liability include the number of homes sold, historical and anticipated rates of warranty claims, and cost per claim. We periodically assess the adequacy of recorded warranty liabilities and adjust the amounts as necessary. Although we have not made significant adjustments to the accrual in the past, actual warranty cost in the future could differ from our current estimate.

### *Stock-based compensation*

We currently have several stock-based employee compensation plans. Effective January 1, 2003 we adopted the preferable fair value recognition provisions of SFAS No. 123, "Accounting for Stock Issued to Employees." We selected the prospective method of adoption as permitted by SFAS No. 148, "Accounting for Stock-Based Compensation -- Transition and Disclosure." Under the prospective method, we will recognize compensation expense based on the fair value provisions of SFAS No. 123 for all new stock option grants effective January 1, 2003. Grants made prior to January 1, 2003 will continue to be accounted for under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees," and related Interpretations. With the exception of certain variable stock option grants, no stock-based employee compensation cost is reflected in net income for grants made prior to January 1, 2003, as all options granted under those plans had an exercise price equal to the market value of the underlying common stock on the date of the grant.

We use the Black-Scholes option-pricing model to determine the fair value of each option grant. The Black-Scholes model includes assumptions regarding dividend yields, expected volatility, risk-free interest rates and expected lives. These assumptions reflect management's best estimates, but these items involve inherent uncertainties based on market conditions generally outside of our control. As a result, if other assumptions had been used, stock-based compensation expense could have been materially impacted. Furthermore, if management uses different assumptions in future periods, stock-based compensation expense could be materially impacted in future periods.

**ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

We are subject to interest rate risk on our rate-sensitive financing to the extent long-term rates decline. The following tables set forth, as of December 31, 2003 and 2002, our rate-sensitive financing obligations, principal cash flows by scheduled maturity, weighted-average interest rates and estimated fair market value (\$000's omitted).

		As of December 31, 2003 for the Years ended December 31,							
		2004	2005	2006	2007	2008	There- after	Total	Fair Value
<b>Rate sensitive liabilities:</b>									
<i>Fixed interest rate debt:</i>									
Senior notes and subordinated notes .....	\$	185,503	\$ 125,000	\$ -	\$ -	\$ -	\$1,848,563	\$2,159,066	\$ 2,387,945
Average interest rate .....		9.12%	7.0%	-	-	-	7.29%	7.45%	-
Limited recourse collateralized financing .....	\$	29,259	\$ 33,865	\$ 13,267	\$ 2,367	\$ 2,354	\$ 2,143	\$ 83,255	\$ 83,255
Average interest rate .....		2.52%	6.00%	3.50%	5.09%	5.24%	4.78%	4.31%	-

		As of December 31, 2002 for the Years ended December 31,							
		2003	2004	2005	2006	2007	There- after	Total	Fair Value
<b>Rate sensitive liabilities:</b>									
<i>Fixed interest rate debt:</i>									
Senior notes and subordinated notes .....	\$	275,000	\$ 112,000	\$ 125,000	\$ -	\$ -	\$1,395,976	\$1,907,976	\$ 2,006,173
Average interest rate .....		8.59%	8.38%	7.3%	-	-	8.46%	8.23%	-
Limited recourse collateralized financing .....	\$	59,563	\$ 41,528	\$ 31,131	\$ 9,128	\$ 1,350	\$ 2,826	\$ 145,526	\$ 145,526
Average interest rate .....		5.27%	5.53%	6.12%	2.16%	4.00%	4.00%	5.30%	-

Pulte Mortgage, operating as a mortgage banker, is also subject to interest rate risk. Interest rate risk begins when we commit to lend money to a customer at agreed-upon terms (i.e., commit to lend at a certain interest rate for a certain period of time). The interest rate risk continues through the loan closing and until the loan is sold to an investor. During 2003 and 2002, this period of interest rate exposure averaged approximately 60 days. In periods of rising interest rates, the length of exposure will generally increase due to customers locking in an interest rate sooner as opposed to letting the interest rate float.

We minimize interest rate risk by (i) financing the loans via a variable rate borrowing agreement tied to the Federal Funds rate and (ii) hedging our loan commitments and closed loans through derivative financial instruments. These financial instruments include cash forward placement contracts on mortgage-backed securities, whole loan investor commitments, options on treasury future contracts and options on cash forward placement contracts on mortgage-backed securities. We do not use any derivative financial instruments for trading purposes.

Hypothetical changes in the fair values of our financial instruments arising from immediate parallel shifts in long-term mortgage rates of plus 50, 100 and 150 basis points would not be material to our financial results.

Our aggregate net investments exposed to foreign currency exchange rate risk include our operations in Mexico which approximated \$65.8 million, our mortgage banking joint venture investment in Mexico which approximated \$17.5 million and our operations in Argentina which approximated \$13.2 million.

## SPECIAL NOTES CONCERNING FORWARD-LOOKING STATEMENTS

As a cautionary note, except for the historical information contained herein, certain matters discussed in Item 7., *Management's Discussion and Analysis of Financial Condition and Results of Operations* and Item 7A., *Quantitative and Qualitative Disclosures About Market Risk*, are "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements involve known risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from our future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among other things, (1) general economic and business conditions; (2) interest rate changes and the availability of mortgage financing; (3) the relative stability of debt and equity markets; (4) competition; (5) the availability and cost of land and other raw materials used in our homebuilding operations; (6) the availability and cost of insurance covering risks associated with our business; (7) shortages and the cost of labor; (8) weather related slowdowns; (9) slow growth initiatives and/or local building moratoria; (10) governmental regulation, including the interpretation of tax, labor and environmental laws; (11) changes in consumer confidence and preferences; (12) required accounting changes; (13) terrorist acts and other acts of war; and (14) other factors over which we have little or no control.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

**PULTE HOMES, INC.**  
**CONSOLIDATED BALANCE SHEETS**  
**December 31, 2003 and 2002**  
**(\$000's omitted, except share data)**

**ASSETS**

	<b>2003</b>	<b>2002</b>
Cash and equivalents .....	\$ 404,092	\$ 613,168
Unfunded settlements .....	122,300	60,641
House and land inventory .....	5,528,410	4,293,597
Land, not owned, under option agreements .....	73,256	-
Residential mortgage loans available-for-sale .....	541,126	600,339
Goodwill .....	307,693	307,693
Intangible assets, net .....	143,704	151,954
Other assets .....	942,771	832,952
Deferred income tax asset .....	-	11,743
	<b>\$ 8,063,352</b>	<b>\$ 6,872,087</b>

**LIABILITIES AND SHAREHOLDERS' EQUITY**

**Liabilities:**

Accounts payable, including book overdrafts of \$222,681 and \$181,812 in 2003 and 2002, respectively .....	\$ 452,648	\$ 376,653
Customer deposits .....	372,507	265,817
Accrued and other liabilities .....	1,072,550	906,293
Collateralized short-term debt, recourse solely to applicable non-guarantor subsidiary assets .....	479,287	559,621
Income taxes .....	79,391	90,009
Deferred income tax liability .....	7,874	-
Senior notes and subordinated notes .....	<b>2,150,972</b>	<b>1,913,268</b>
Total liabilities .....	<b>4,615,229</b>	<b>4,111,661</b>

**Shareholders' Equity:**

Preferred stock, \$.01 par value; 50,000,000 shares authorized, none issued .....	-	-
Common stock, \$.01 par value; 400,000,000 shares authorized, 125,152,816 and 122,249,872 shares issued and outstanding in 2003 and 2002, respectively .....	1,252	1,222
Additional paid-in capital .....	1,015,991	932,551
Unearned compensation .....	(656)	(9,866)
Accumulated other comprehensive loss .....	(39,142)	(35,371)
Retained earnings .....	<b>2,470,678</b>	<b>1,871,890</b>
Total shareholders' equity .....	<b>3,448,123</b>	<b>2,760,426</b>
	<b>\$ 8,063,352</b>	<b>\$ 6,872,087</b>

See Notes to Consolidated Financial Statements.

**PULTE HOMES, INC.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
For the years ended December 31, 2003, 2002 and 2001  
(000's omitted, except per share data)

	<u>2003</u>	<u>2002</u>	<u>2001</u>
<b>Revenues:</b>			
Homebuilding .....	\$ 8,929,798	\$ 7,363,989	\$ 5,309,829
Financial Services .....	115,847	106,628	77,222
Corporate .....	<u>3,281</u>	<u>1,202</u>	<u>2,210</u>
<b>Total revenues</b> .....	<u>9,048,926</u>	<u>7,471,819</u>	<u>5,389,261</u>
<b>Expenses:</b>			
Homebuilding, principally cost of sales .....	7,960,148	6,646,666	4,806,812
Financial Services .....	53,253	45,579	44,546
Corporate, net .....	<u>78,632</u>	<u>63,170</u>	<u>59,662</u>
<b>Total expenses</b> .....	<u>8,092,033</u>	<u>6,755,415</u>	<u>4,911,020</u>
<b>Other income:</b>			
Equity income .....	<u>38,763</u>	<u>12,418</u>	<u>13,546</u>
Income from continuing operations before income taxes .....	995,656	728,822	491,787
Income taxes .....	<u>378,334</u>	<u>284,221</u>	<u>189,362</u>
Income from continuing operations .....	617,322	444,601	302,425
Income (loss) from discontinued operations .....	<u>7,312</u>	<u>9,044</u>	<u>(1,032)</u>
<b>Net income</b> .....	<u>\$ 624,634</u>	<u>\$ 453,645</u>	<u>\$ 301,393</u>
<b>Per share data:</b>			
<b>Basic:</b>			
Income from continuing operations .....	\$ 5.05	\$ 3.68	\$ 3.08
Income (loss) from discontinued operations .....	<u>.06</u>	<u>.07</u>	<u>(.01)</u>
<b>Net income</b> .....	<u>\$ 5.11</u>	<u>\$ 3.75</u>	<u>\$ 3.07</u>
<b>Assuming dilution:</b>			
Income from continuing operations .....	\$ 4.91	\$ 3.60	\$ 3.00
Income (loss) from discontinued operations .....	<u>.06</u>	<u>.07</u>	<u>(.01)</u>
<b>Net income</b> .....	<u>\$ 4.97</u>	<u>\$ 3.67</u>	<u>\$ 2.99</u>
Cash dividends declared .....	<u>\$ .11</u>	<u>\$ .08</u>	<u>\$ .08</u>
<b>Number of shares used in calculation:</b>			
<b>Basic:</b>			
Weighted-average common shares outstanding .....	122,162	120,906	98,196
<b>Assuming dilution:</b>			
Effect of dilutive securities - stock options and restricted stock grants .....	<u>3,568</u>	<u>2,586</u>	<u>2,450</u>
<b>Adjusted weighted-average common shares     and effect of dilutive securities</b> .....	<u>125,730</u>	<u>123,492</u>	<u>100,646</u>

See Notes to Consolidated Financial Statements.

**PULTE HOMES, INC.**  
**CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**  
For the years ended December 31, 2003, 2002 and 2001  
(\$000's omitted, except per share data)

	Common Stock	Additional Paid-in Capital	Unearned Compensation	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total
<b>Shareholders' Equity, December 31, 2000</b> .....	832	109,177	-	185	1,137,737	1,247,931
Common stock issued and stock options exchanged in merger .....	336	729,051	-	-	-	729,387
Stock option exercise, including tax benefit of \$4,982 .....	14	18,505	-	-	-	18,519
Restricted stock award .....	2	5,556	(5,558)	-	-	-
Restricted stock award amortization .....	-	-	1,699	-	-	1,699
Cash dividends declared - \$.08 per share .....	-	-	-	-	(8,110)	(8,110)
Comprehensive income:						
Net income .....	-	-	-	-	301,393	301,393
Change in fair value of derivatives, net of income taxes of \$371 .....	-	-	-	(592)	-	(592)
Foreign currency translation adjustments .....	-	-	-	(13,562)	-	(13,562)
Total comprehensive income .....	-	-	-	-	-	287,239
<b>Shareholders' Equity, December 31, 2001</b> .....	1,184	862,289	(3,859)	(13,969)	1,431,020	2,276,665
Stock option exercise, including tax benefit of \$20,651 .....	34	55,667	-	-	-	55,701
Restricted stock award .....	6	11,313	(11,319)	-	-	-
Restricted stock award amortization .....	-	-	5,312	-	-	5,312
Cash dividends declared - \$.08 per share .....	-	-	-	-	(9,773)	(9,773)
Stock repurchases .....	(2)	(1,793)	-	-	(3,002)	(4,797)
Stock based compensation .....	-	5,075	-	-	-	5,075
Comprehensive income:						
Net income .....	-	-	-	-	453,645	453,645
Change in fair value of derivatives, net of income taxes of \$807 .....	-	-	-	(1,288)	-	(1,288)
Foreign currency translation adjustments .....	-	-	-	(20,114)	-	(20,114)
Total comprehensive income .....	-	-	-	-	-	432,243
<b>Shareholders' Equity, December 31, 2002</b> .....	1,222	932,551	(9,866)	(35,371)	1,871,890	2,760,426
Stock option exercise, including tax benefit of \$28,742 .....	32	68,203	-	-	-	68,235
Restricted stock award .....	6	(6)	-	-	-	-
Restricted stock award amortization .....	-	-	9,210	-	-	9,210
Cash dividends declared - \$.11 per share .....	-	-	-	-	(13,612)	(13,612)
Stock repurchases .....	(8)	(6,062)	-	-	(12,234)	(18,304)
Stock based compensation .....	-	21,305	-	-	-	21,305
Comprehensive income:						
Net income .....	-	-	-	-	624,634	624,634
Change in fair value of derivatives, net of income taxes of \$(1,055) .....	-	-	-	1,682	-	1,682
Foreign currency translation adjustments .....	-	-	-	(5,453)	-	(5,453)
Total comprehensive income .....	-	-	-	-	-	620,863
<b>Shareholders' Equity, December 31, 2003</b> .....	<u>\$ 1,252</u>	<u>\$ 1,015,991</u>	<u>\$ (656)</u>	<u>\$ (39,142)</u>	<u>\$ 2,470,678</u>	<u>\$ 3,448,123</u>

See Notes to Consolidated Financial Statements.

**PULTE HOMES, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
For the years ended December 31, 2003, 2002 and 2001  
(\$000's omitted)

	<u>2003</u>	<u>2002</u>	<u>2001</u>
<b>Cash flows from operating activities:</b>			
Net income .....	\$ 624,634	\$ 453,645	\$ 301,393
Adjustments to reconcile net income to net cash flows provided by (used in) operating activities:			
Amortization and depreciation .....	40,160	39,251	32,384
Stock-based compensation expense .....	30,515	10,387	314
Deferred income taxes .....	19,617	39,235	(8,176)
Other, net.....	(4,183)	(9,754)	(15)
Increase (decrease) in cash, excluding effects of acquired entities, due to:			
Inventories .....	(1,414,294)	(516,179)	(646,590)
Residential mortgage loans available-for-sale .....	59,213	(164,878)	(157,325)
Other assets .....	(19,413)	24,990	25,286
Accounts payable, accrued and other liabilities.....	343,779	196,852	1,371
Income taxes .....	18,124	75,245	44,671
Net cash provided by (used in) operating activities.....	<u>(301,848)</u>	<u>148,794</u>	<u>(406,687)</u>
<b>Cash flows from investing activities:</b>			
Cash paid for acquisitions, net of cash acquired .....	-	-	11,644
Proceeds from the sale of fixed assets.....	5,023	45,198	18,115
Capital expenditures .....	(39,120)	(23,700)	(30,196)
Other, net.....	-	-	1,285
Net cash provided by (used in) investing activities.....	<u>(34,097)</u>	<u>21,498</u>	<u>848</u>
<b>Cash flows from financing activities:</b>			
Payment of senior notes and subordinated notes .....	(457,511)	(107,576)	(363,391)
Proceeds from borrowings.....	696,965	578,317	980,306
Repayment of borrowings .....	(118,168)	(117,256)	(325,714)
Issuance of common stock.....	39,493	34,597	13,537
Stock repurchases .....	(18,304)	(4,344)	-
Dividends paid .....	(13,612)	(9,773)	(8,110)
Net cash provided by financing activities.....	<u>128,863</u>	<u>373,965</u>	<u>296,628</u>
Effect of exchange rate changes on cash and equivalents.....	(1,994)	(3,233)	(2,630)
Net increase (decrease) in cash and equivalents.....	(209,076)	541,024	(111,841)
Cash and equivalents at beginning of year .....	<u>613,168</u>	<u>72,144</u>	<u>183,985</u>
Cash and equivalents at end of year.....	<u>\$ 404,092</u>	<u>\$ 613,168</u>	<u>\$ 72,144</u>
<b>Supplemental Cash Flow Information:</b>			
<b>Non-cash investing and financing activities:</b>			
Issuance of common stock and exchange of stock options in merger .....	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 729,387</u>
<b>Cash paid during the year for:</b>			
Interest, net of amount capitalized .....	<u>\$ 42,885</u>	<u>\$ 48,268</u>	<u>\$ 31,364</u>
Income taxes.....	<u>\$ 337,590</u>	<u>\$ 165,570</u>	<u>\$ 137,684</u>

See Notes to Consolidated Financial Statements.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. Basis of presentation and significant accounting policies**

**Basis of presentation**

The consolidated financial statements include the accounts of Pulte Homes, Inc. and all of its direct and indirect subsidiaries (the Company). The direct subsidiaries of Pulte Homes, Inc. include Pulte Diversified Companies, Inc., Del Webb Corporation (Del Webb) and other subsidiaries that are engaged in the homebuilding business. Pulte Diversified Companies, Inc.'s operating subsidiaries include Pulte Home Corporation, Pulte International Corporation (International) and other subsidiaries that are engaged in the homebuilding business. Pulte Diversified Companies, Inc.'s non-operating thrift subsidiary, First Heights Bank, fsb (First Heights), is classified as a discontinued operation (See Note 4). The Company also has a mortgage banking company, Pulte Mortgage LLC (Pulte Mortgage), which is a subsidiary of Pulte Home Corporation.

Effective January 1, 2002, the Company reorganized the structure of its operations within Mexico to create a single company, Pulte Mexico S. de R.L. de C.V. Under the new ownership structure, the Company's operations in Mexico, which were primarily conducted through joint ventures, have been combined into Pulte Mexico S. de R.L. de C.V. and are 63.8% owned by International. Results for 2002 include joint venture operations for one month and operations as a consolidated entity for eleven months, as the operations in Mexico report on a one-month lag.

Certain amounts previously reported in the 2002 financial statements and notes thereto were reclassified to conform to the 2003 presentation. In addition, all share and per share amounts have been restated to reflect the Company's two-for-one stock split announced December 11, 2003 and effected January 2, 2004.

**Significant accounting policies**

*Use of estimates*

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

*Foreign currency*

The financial statements of the Company's foreign subsidiaries in Argentina and Mexico are measured using the local currency as the functional currency. Assets and liabilities of these subsidiaries are translated at exchange rates as of the balance sheet date. Revenues and expenses are translated at average exchange rates in effect during the year. The resulting cumulative translation adjustments have been recorded in other comprehensive income. Realized foreign currency transaction gains and losses are included in the Consolidated Statement of Operations. Realized foreign currency transaction losses were \$0.4 million, \$0.7 million, and \$0.8 million for the years ended December 31, 2003, 2002 and 2001, respectively.

*Cash and equivalents*

For purposes of the Consolidated Statements of Cash Flows, commercial paper and time deposits with a maturity of three months or less when acquired are classified as cash equivalents.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**1. Basis of presentation and significant accounting policies (continued)**

**Significant accounting policies (continued)**

*Goodwill*

On January 1, 2002, Statement of Financial Accounting Standards ("SFAS") No. 142, "Goodwill and Other Intangible Assets," became effective. In accordance with SFAS No. 142, the Company does not record amortization expense related to goodwill but reviews it annually for impairment. The following table sets forth reported net income and earnings per share, as adjusted to exclude goodwill amortization:

	<b>Year Ended December 31, 2001</b>	
	(\$000's omitted, except per share data)	
	<u>As Reported</u>	<u>As Adjusted</u>
Income from continuing operations .....	\$ 302,425	\$ 306,587
Net income .....	<u>\$ 301,393</u>	<u>\$ 305,555</u>
Per share data:		
Basic:		
Income from continuing operations .....	\$ 3.08	\$ 3.12
Net Income .....	<u>\$ 3.07</u>	<u>\$ 3.11</u>
Diluted:		
Income from continuing operations .....	\$ 3.00	\$ 3.05
Net income .....	<u>\$ 2.99</u>	<u>\$ 3.04</u>

At December 31, 2003, the majority of goodwill, which represents the cost of acquired companies in excess of the fair value of the net assets at the acquisition date, resulted from the acquisition of Del Webb in 2001. All goodwill relates to the Homebuilding segment, except for \$0.7 million which relates to the Financial Services segment. In accordance with SFAS No. 142, annually and when events or changes in circumstances indicate the carrying amount may not be recoverable, management evaluates the recoverability of goodwill by comparing the carrying value of the Company's reporting units to their fair value. Fair value is determined based on discounted future cash flows. The Company performed its annual impairment test during the fourth quarter 2003 and determined there to be no impairment of goodwill. There has been no change in the carrying amount of goodwill for the years ended December 31, 2003 and 2002.

*Intangible assets*

Intangible assets consist primarily of trademarks and tradenames acquired in connection with the 2001 acquisition of Del Webb. These intangible assets were valued at the acquisition date utilizing proven valuation procedures and are being amortized on a straight-line basis over a 20-year life. The acquired cost and accumulated amortization of the Company's intangible assets is \$163.5 million and \$19.8 million, respectively, at December 31, 2003. Amortization expense for the years ended December 31, 2003, 2002, and 2001 was \$8.3 million, \$8.2 million, and \$3.4 million, respectively, and is expected to be approximately \$8.3 million in each of the next 5 years.

In accordance with SFAS No. 144, intangible assets are reviewed for impairment when events or changes in circumstances indicate the carrying amount may not be recoverable. If impairment indicators exist, an assessment of undiscounted future cash flows for the assets related to these intangibles is evaluated accordingly. If the results of the analysis indicate impairment, the assets are adjusted to fair market value.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**1. Basis of presentation and significant accounting policies (continued)**

**Significant accounting policies (continued)**

*Fixed Assets and Depreciation*

Fixed assets are recorded at cost. Maintenance and repair costs are charged to earnings as incurred. Depreciation is computed principally by the straight-line method based upon estimated useful lives as follows: Vehicles, three to five years, model and office furniture, two to five years, and equipment, three to ten years. Fixed assets are included in Other Assets and totaled \$92.4 million net of accumulated depreciation of \$88.8 million at December 31, 2003 and \$76.1 million net of \$74.3 million at December 31, 2002. Total depreciation expense for the years ended December 31, 2003, 2002 and 2001 was \$31.9 million, \$31.1 million, and \$30.1 million, respectively.

*Investments in unconsolidated entities*

The Company participates in a number of joint ventures with independent third parties in which the Company has less than a controlling interest. These joint ventures purchase, develop and/or sell land and homes in the United States, Mexico and Puerto Rico. The Company recognizes its share of profits from the sale of lots and homes to other buyers. Profits from lots the Company purchases from the joint ventures are not recognized, but instead are deferred until which time the related homes are sold. At December 31, 2003, the Company had approximately \$51.9 million invested in these joint ventures. In the event management of the joint ventures determines that an additional capital infusion is required, the Company would need to contribute its pro rata portion of those capital needs in order not to dilute its ownership in the joint venture. The Company has not guaranteed any of the outstanding debt of the joint ventures at December 31, 2003, which approximated \$121.4 million.

The Company also owns 22.2% of the capital stock of a mortgage banking company in Mexico. At December 31, 2003, the Company's investment in this entity was approximately \$17.5 million. The Company does not have any purchase or investment commitments to this entity. Furthermore, the Company has not guaranteed any of the indebtedness of this entity, which approximated \$1.3 billion at December 31, 2003.

These investments are accounted for under the equity method.

*Advertising cost*

The Company expenses advertising costs as incurred. For the years ended December 31, 2003, 2002 and 2001, the Company incurred advertising costs of approximately \$80.6 million, \$78.2 million and \$56.8 million, respectively.

*Employee benefits*

The Company maintains three defined contribution plans that cover substantially all of the Company's employees. Company contributions to the plans are expensed as paid. The total Company contributions pursuant to the plans were approximately \$9.5 million, \$7.0 million and \$3.8 million for the years ended December 31, 2003, 2002 and 2001, respectively.

*Earnings per share*

Basic earnings per share is computed by dividing income available to common shareholders (the numerator) by the weighted-average number of common shares, adjusted for nonvested shares of restricted stock (the denominator) for the period. Computing diluted earnings per share is similar to basic earnings per share, except that the denominator is increased to include the dilutive effects of options and restricted stock grants. Any options that have an exercise price greater than the average market price are excluded from the diluted earnings per share calculation. For the years ended December 31, 2003, 2002 and 2001, 78,316, 267,272 and 1,795,500, respectively, of the outstanding stock options were excluded from this calculation.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**1. Basis of presentation and significant accounting policies (continued)**

**Significant accounting policies (continued)**

*Fair values of financial instruments*

Carrying amounts for financial derivative instruments reported in the balance sheet approximate fair value as the amounts reported are based on current market prices. The estimated fair values of financial instruments were determined by management using available market information and appropriate valuation methodologies. Considerable judgment is necessary to interpret the market data and develop the estimated fair value. Accordingly, the estimates presented are not necessarily indicative of the amounts the Company could realize on disposition of the financial instruments. The use of different market assumptions and/or estimation methodologies may have a material effect on the estimated fair value amounts.

The carrying amounts of cash and equivalents approximate their fair values due to their short-term nature.

The fair value of residential mortgage loans available-for-sale is estimated using the quoted market prices for securities backed by similar loans. Fair value exceeded cost by approximately \$6.3 million and \$7.8 million at December 31, 2003 and 2002, respectively.

The carrying amounts reported in the balance sheet for derivative instruments approximate fair value as the amounts reported are based on current market prices. At December 31, 2003, derivative assets, included in other assets, in the balance sheet, totaled \$2.7 million and derivative liabilities, included in accrued and other liabilities, totaled \$3.9 million.

The fair values of subordinated debentures and senior notes are based on quoted market prices, when available. If quoted market prices are not available, fair values are based on quoted market prices of similar issues.

Disclosures about the fair value of financial instruments are based on pertinent information available to management as of December 31, 2003. Although management is not aware of any factors that would significantly affect the reasonableness of the fair value amounts, such amounts were not comprehensively revalued for purposes of these financial statements since that date and current estimates of fair value may differ significantly from the amounts presented herein.

*Stock-based compensation*

The Company currently has several stock-based employee compensation plans. Effective January 1, 2003, the Company adopted the preferable fair value recognition provisions of SFAS No. 123, "Accounting for Stock Issued to Employees." The Company selected the prospective method of adoption as permitted by SFAS No. 148, "Accounting for Stock-Based Compensation – Transition and Disclosure." Under the prospective method, the Company will recognize compensation expense based on the fair value provisions of SFAS No. 123 for all new stock option grants effective January 1, 2003. Grants made prior to January 1, 2003 will continue to be accounted for under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees," and related Interpretations. With the exception of certain variable stock option grants, no stock-based employee compensation cost is reflected in net income for grants made prior to January 1, 2003, as all options granted in those years had an exercise price equal to the market value of the underlying common stock on the date of grant.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**1. Basis of presentation and significant accounting policies (continued)**

**Significant accounting policies (continued)**

*Stock-based compensation (continued)*

The following table illustrates the effect on net income and earnings per share if the company had applied the fair value recognition provisions of SFAS No. 123, "Accounting for Stock-Based Compensation," to all stock-based employee compensation. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions used for grants in 2003, 2002 and 2001, respectively: weighted-average dividend yields of .44%, .32% and .39%, expected volatility of 35.3%, 34.9% and 34.8%, weighted-average risk-free interest rates of 3.57%, 3.45% and 4.94%, and weighted-average expected lives of 6.76 years, 6.82 years and 6.97 years.

	<b>Years Ended December 31,</b>		
	<b>(\$000's omitted, except per share data)</b>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
Net income, as reported .....	\$ 624,634	\$ 453,645	\$ 301,393
Add: Stock-based employee compensation expense included in reported net income, net of related tax effects .....	8,972	3,096	-
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects .....	<u>(11,456)</u>	<u>(11,986)</u>	<u>(14,324)</u>
Pro forma net income .....	<u>\$ 622,150</u>	<u>\$ 444,755</u>	<u>\$ 287,069</u>
Earnings per share:			
Basic-as reported .....	<u>\$ 5.11</u>	<u>\$ 3.75</u>	<u>\$ 3.07</u>
Basic-pro forma .....	<u>\$ 5.09</u>	<u>\$ 3.68</u>	<u>\$ 2.93</u>
Diluted-as reported .....	<u>\$ 4.97</u>	<u>\$ 3.67</u>	<u>\$ 2.99</u>
Diluted-pro forma .....	<u>\$ 4.95</u>	<u>\$ 3.60</u>	<u>\$ 2.85</u>

The company also recorded compensation expense for restricted stock awards, net of related tax effects, of \$9.9 million, \$3.2 million, and \$1.1 million for the years ended December 31, 2003, 2002 and 2001, respectively. These amounts have been excluded from the reconciliation above as they would have no impact on pro forma net income as presented.

*New accounting pronouncements*

In November of 2002, the FASB issued FASB Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others", an interpretation of FASB Statements No. 5, 57, and 107 and rescission of FASB Interpretation No. 34. This interpretation elaborates on the disclosures to be made by a guarantor in its interim and annual financial statements about its obligations under certain guarantees that it has issued. It also clarifies that a guarantor is required to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. The initial recognition and initial measurement provisions are applicable on a prospective basis to guarantees issued or modified after December 31, 2002 and the disclosure provisions were effective for the year ended December 31, 2002. The adoption of this interpretation did not have a material effect on the Company's consolidated results of operations, financial condition, or cash flows.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." This statement establishes standards for the classification and measurement of certain financial instruments with characteristics of both liabilities and equity. With the exception of certain measurement criteria deferred indefinitely by the FASB, SFAS No. 150 is effective for financial instruments entered into or modified after May 31, 2003 and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. The implementation of SFAS No. 150 is not expected to have a material impact on the Company's results of operations, financial condition, or cash flows.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**1. Basis of presentation and significant accounting policies (continued)**

**Significant accounting policies (continued)**

**Homebuilding**

*Inventories*

Finished inventories are stated at the lower of accumulated cost or net realizable value. Inventories under development or held for development are stated at accumulated cost, unless certain facts indicate such cost would not be recovered from the cash flows generated by future disposition. In this instance, such inventories are measured at fair value.

Sold units are expensed on a specific identification basis. Under the specific identification basis, cost of sales includes the construction cost of the home, an average lot cost by project based on land acquisition and development costs, and closing costs and commissions. Construction cost of the home includes amounts paid through the closing date of the home, plus an accrual for costs incurred but not yet paid, based on an analysis of budgeted construction cost. This accrual is reviewed for accuracy based on actual payments made after closing compared to the amount accrued, and adjustments are made if needed. Total project land acquisition and development costs are based on an analysis of budgeted costs compared to actual costs incurred to date and estimates to complete. Adjustments to estimated total project land acquisition and development costs for the project affect the amount of future lots costed.

The Company capitalizes interest cost into homebuilding inventories. Each layer of capitalized interest is amortized over a period that approximates the average life of communities under development. Interest expense is allocated over the period based on the cyclical timing of unit settlements. The Company capitalized interest in the amount of \$136.3 million, \$123.1 million and \$80.4 million and expensed to home cost of sales \$78.7 million, \$48.7 million and \$36.0 million in 2003, 2002 and 2001, respectively.

Major components of the Company's inventory at December 31, 2003 and 2002 were:

	<u>2003</u>	<u>2002</u>
Homes under construction .....	\$ 2,124,222	\$ 1,697,348
Land under development .....	2,876,256	2,243,478
Land held for future development .....	<u>527,932</u>	<u>352,771</u>
Total .....	<u>\$ 5,528,410</u>	<u>\$ 4,293,597</u>

*Land, not owned, under option agreements*

In January 2003, the FASB issued Interpretation No. 46 (FIN 46), "Consolidation of Variable Interest Entities." Until this interpretation was issued, a company generally included another entity in its consolidated financial statements only if it controlled the entity through voting interests. FIN 46 requires a variable interest entity to be consolidated by a company if that company is subject to a majority of the expected losses from the variable interest entity's activities or is entitled to receive a majority of the entity's expected residual returns. FIN 46 applied immediately to all variable interest entities created after January 31, 2003 and is effective no later than the first interim period ending after December 31, 2003 for variable interest entities created prior to February 1, 2003.

In the ordinary course of business, the Company enters into land option agreements in order to procure land for the construction of houses in the future. Pursuant to these land option agreements, the Company will provide a deposit to the seller as consideration for the right to purchase land at different times in the future, usually at predetermined prices. Under FIN 46, if the entity holding the land under option is a variable interest entity, the Company's deposit represents a variable interest in that entity. The Company does not guarantee the obligations or performance of the variable interest entity.

In applying the provisions of FIN 46, the Company evaluated all post-January 31, 2003 land option agreements and determined that the Company was subject to a majority of the expected losses or entitled to receive a majority of the expected residual returns under a limited number of these agreements. As the primary beneficiary under these agreements, the Company is required to consolidate the fair value of the variable interest entity. At December 31, 2003, the Company classified \$73.3 million as Land, Not Owned, Under Option Agreements on the balance sheet, representing the fair value of land under contract including deposits. The corresponding liability has been classified as Accounts Payable, Accrued and Other Liabilities on the balance sheet. The adoption of FIN 46 has had no impact on the Company's results of operations or cash flows.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**1. Basis of presentation and significant accounting policies (continued)**

**Significant accounting policies (continued)**

**Homebuilding (continued)**

*Land, not owned, under option agreements (continued)*

The Company is in the process of evaluating its land option agreements and other agreements entered into prior to February 1, 2003. Depending on the terms and conditions of these agreements, the Company may be required to consolidate other variable interest entities. This evaluation will be completed by March 31, 2004.

*Land held for sale*

At December 31, 2003 and 2002, the Company had approximately \$251.2 million and \$226.1 million of land held for sale classified as other assets in the Consolidated Balance Sheets related to the Company's Homebuilding segment. Land held for sale is recorded at the lower of cost or fair value less costs to sell.

*Allowance for warranties*

Home purchasers are provided with warranties against certain building defects. The specific terms and conditions of those warranties vary geographically. Most warranties cover different aspects of the home's construction and operating systems for a period of up to ten years. The Company estimates the costs to be incurred under these warranties and records a liability in the amount of such costs at the time product revenue is recognized. Factors that affect the Company's warranty liability include the number of homes sold, historical and anticipated rates of warranty claims, and cost per claim. The Company periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts as necessary.

Changes to the Company's allowance for warranties for the years ended December 31, 2003 and 2002, are as follows (\$000's omitted):

	<u>2003</u>	<u>2002</u>
January 1.....	\$ 51,973	\$ 40,866
Warranty reserves provided .....	84,669	70,966
Payments and other adjustments.....	<u>(74,426)</u>	<u>(59,859)</u>
December 31 .....	<u>\$ 62,216</u>	<u>\$ 51,973</u>

*Revenues*

Homebuilding revenues are recorded when the sales of homes are completed and ownership has transferred to the customer. Unfunded settlements are deposits in transit on homes for which the sale was completed.

*Start-up costs*

Costs and expenses associated with entry into new homebuilding markets and opening new communities in existing markets are expensed when incurred.

**Financial Services**

*Mortgage servicing rights*

The Company allocates the cost of mortgage loans originated and purchased between the mortgage loans and the right to service those mortgage loans, based on relative fair value, on the date the loan is sold.

The Company sells its servicing rights on a flow basis through fixed price servicing sales contracts. Due to the short period of time the servicing rights are held, generally less than four months, the Company does not amortize the servicing asset. Furthermore, there are no impairment issues since the servicing rights are recorded based on the value in the servicing sales contracts. The servicing sales contracts provide for the reimbursement of payments made when loans prepay within specified periods of time, usually 90 days after sale or securitization. The Company establishes reserves for this liability, included in accrued and other liabilities, at the time the sale is recorded. During 2003, 2002 and 2001, total servicing rights recognized were \$36.7 million, \$35.7 million, and \$36.2 million, respectively, which are reflected in net gains from the sale of mortgages.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**1. Basis of presentation and significant accounting policies (continued)**

**Significant accounting policies (continued)**

**Financial Services (continued)**

*Residential mortgage loans available-for-sale*

Residential mortgage loans available-for-sale are stated at the lower of aggregate cost or market value. Unamortized net mortgage discounts totaled \$1.6 million and \$1.5 million at December 31, 2003 and 2002, respectively. These discounts are not amortized as interest revenue during the period the loans are held for sale.

Gains and losses from sales of mortgage loans are recognized when the loans are sold. The Company hedges its residential mortgage loans available-for-sale. Gains and losses from closed commitments and futures contracts are matched against the related gains and losses on the sale of mortgage loans. During 2003, 2002 and 2001, net gains from the sale of mortgages were \$64.4 million, \$62.4 million and \$41.9 million, respectively, which have been included in Financial Services revenue.

*Interest income on mortgage loans*

Interest income is accrued from the date a mortgage loan is originated until the loan is sold.

*Mortgage servicing, origination and commitment fees*

Mortgage servicing fees represent fees earned for servicing loans for various investors. Servicing fees are based on a contractual percentage of the outstanding principal balance and are credited to income when related mortgage payments are received. Loan origination fees, commitment fees and certain direct loan origination costs are deferred as an adjustment to the cost of the related mortgage loan until such loan is sold.

*Derivative instruments and hedging activities*

The Company recognizes all of its derivative instruments as either assets or liabilities in the balance sheet at fair value. The accounting for changes in the fair value (i.e., gains or losses) of a derivative instrument depends on whether it has been designated and qualifies as part of a hedging relationship and further, on the type of hedging relationship. For those derivative instruments that are designated and qualify as hedging instruments, a company must designate the hedging instrument, based upon the exposure being hedged, as either a fair value hedge or a cash flow hedge.

For derivative instruments that are designated and qualify as a fair value hedge (i.e., hedging the exposure to changes in the fair value of an asset or a liability or an identified portion thereof that is attributable to a particular risk), the gain or loss on the derivative instrument as well as the offsetting loss or gain on the hedged item attributable to the hedged risk are recognized in current earnings during the period of the change in fair values. For derivative instruments that are designated and qualify as a cash flow hedge (i.e., hedging the exposure to variability in expected future cash flows that is attributable to a particular risk), the effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. For derivative instruments not designated as hedging instruments, the gain or loss is recognized in current earnings during the period of change. The Company currently uses only cash flow hedges.

Market risks arise from movements in interest rates and cancelled or modified commitments to lend. In order to reduce these risks, the Company uses derivative financial instruments. These financial instruments include cash forward placement contracts on mortgage-backed securities, whole loan investor commitments, options on treasury futures contracts, and options on cash forward placement contracts on mortgage-backed securities. The Company does not use any derivative financial instruments for trading purposes. When the Company commits to lend to the borrower (interest rate is locked to the borrower), the Company enters into one of the aforementioned derivative financial instruments. The change in the value of the loan commitment and the derivative financial instrument is recognized in current earnings during the period of change. At December 31, 2003, commitments by Pulte Mortgage to originate mortgage loans totaled \$201.5 million at interest rates prevailing at the date of commitment.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**1. Basis of presentation and significant accounting policies (continued)**

**Significant accounting policies (continued)**

**Financial Services (continued)**

*Derivative instruments and hedging activities (continued)*

Cash forward placement contracts on mortgage-back securities are commitments to either purchase or sell a specified financial instrument at a specified future date for a specified price and may be settled in cash by offsetting the position, or through the delivery of the financial instrument. Options on treasury futures contracts and options on mortgage-backed securities grant the purchaser, for a premium payment, the right to either purchase or sell a specified treasury futures contract or a specified mortgage-backed security, respectively, for a specified price within a specified period of time or on a specified date from or to the writer of the option.

Mandatory cash forward contracts on mortgage-backed securities are the predominant derivative financial instruments used to minimize the market risk during the period from when the Company extends an interest rate lock to a loan applicant until the time the loan is sold to an investor. Whole loan investor commitments are obligations of the investor to buy loans at a specified price within a specified time period. At December 31, 2003, Pulte Mortgage had unexpired cash forward contracts and whole loan investor commitments of \$668.8 million. Options on cash forward contracts on mortgage-backed securities are used in the same manner as mandatory cash forward contracts, but provide protection from interest rates rising, while still allowing an opportunity for profit if interest rates fall. Options on the treasury futures contracts are used as cross hedges on various loan product types and to protect the Company in a volatile interest rate environment from unexpected increases, cancellations or modifications in lending commitments.

Since the Company can terminate a loan commitment if the borrower does not comply with the terms of the contract, and some loan commitments may expire without being drawn upon, these commitments do not necessarily represent future cash requirements of Pulte Mortgage. The Company evaluates the creditworthiness of these transactions through its normal credit policies.

The Company hedges portions of its forecasted cash flow from sales of closed mortgage loans with derivative financial instruments. During the year ended December 31, 2003, the Company did not recognize any net gains or losses related to an ineffective portion of the hedging instrument. In addition, the Company did not recognize any net gains or losses during the year ended December 31, 2003, for cash flow hedges that were discontinued because the forecasted transaction did not occur. At December 31, 2003, the Company expects to reclassify \$0.2 million net of taxes, of net losses on derivative instruments from accumulated other comprehensive income to earnings during the next twelve months from sales of closed mortgage loans.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**2. Segment information**

The Company's operations are classified into two reportable segments, Homebuilding and Financial Services and one non-operating segment, Corporate.

The Company's Homebuilding segment consists of the following operations:

- Domestic Homebuilding, the Company's core business, is engaged in the acquisition and development of land primarily for residential purposes within the continental United States and the construction of housing on such land targeted for the first-time, first and second move-up, and active adult home buyers.
- International Homebuilding is primarily engaged in the acquisition and development of land principally for residential purposes, and the construction of housing on such land in Mexico, Puerto Rico and Argentina.

The Company's Financial Services segment consists principally of mortgage banking and title operations conducted through Pulte Mortgage and other Company subsidiaries.

Corporate is a non-operating segment that supports the operations of the Company's subsidiaries by acting as the internal source of financing, developing and implementing strategic initiatives centered on new business development and operating efficiencies, and providing the necessary administrative functions to support the Company as a publicly traded entity listed on the New York Stock Exchange.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**2. Segment information (continued)**

	<i>Operating Data by Segment (\$000's omitted)</i>		
	<b>Years Ended December 31,</b>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
<b>Revenues:</b>			
Homebuilding .....	\$8,929,798	\$7,363,989	\$5,309,829
Financial Services.....	115,847	106,628	77,222
Corporate .....	<u>3,281</u>	<u>1,202</u>	<u>2,210</u>
Total revenues .....	<u>9,048,926</u>	<u>7,471,819</u>	<u>5,389,261</u>
<b>Cost of sales (a):</b>			
Homebuilding .....	<u>7,068,520</u>	<u>5,918,524</u>	<u>4,291,943</u>
<b>Selling, general and administrative:</b>			
Homebuilding .....	863,077	699,498	493,948
Financial Services.....	45,867	38,826	35,467
Corporate .....	<u>45,235</u>	<u>29,417</u>	<u>15,443</u>
Total selling, general and administrative .....	<u>954,179</u>	<u>767,741</u>	<u>544,858</u>
<b>Interest (a):</b>			
Financial Services.....	7,386	6,753	9,079
Corporate .....	<u>42,645</u>	<u>39,416</u>	<u>36,471</u>
Total interest .....	<u>50,031</u>	<u>46,169</u>	<u>45,550</u>
<b>Other (income) expense, net:</b>			
Homebuilding .....	28,551	28,644	20,921
Corporate .....	<u>(9,248)</u>	<u>(5,663)</u>	<u>7,748</u>
Total other expense, net.....	<u>19,303</u>	<u>22,981</u>	<u>28,669</u>
<b>Total costs and expenses .....</b>	<u>8,092,033</u>	<u>6,755,415</u>	<u>4,911,020</u>
<b>Equity income:</b>			
Homebuilding .....	32,511	6,744	9,274
Financial Services.....	<u>6,252</u>	<u>5,674</u>	<u>4,272</u>
Total equity income .....	<u>38,763</u>	<u>12,418</u>	<u>13,546</u>
<b>Income (loss) before income taxes:</b>			
Homebuilding .....	1,002,161	724,067	512,291
Financial Services.....	68,846	66,723	36,948
Corporate .....	<u>(75,351)</u>	<u>(61,968)</u>	<u>(57,452)</u>
Total income before income taxes.....	<u>\$ 995,656</u>	<u>\$ 728,822</u>	<u>\$ 491,787</u>

(a) Homebuilding interest expense, which represents the amortization of capitalized interest, of \$78.7 million, \$48.7 million, and \$36.0 million for the years ended December 31, 2003, 2002, and 2001, respectively, have been reclassified to cost of sales. The reclassifications had no impact on reported net earnings.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**2. Segment information (continued)**

**Supplemental Operating Data by Geographic Region**  
**(\$000's omitted)**

	<b>Years Ended December 31,</b>		
	<b>2003</b>	<b>2002</b>	<b>2001</b>
<b>Revenues:</b>			
Domestic United States.....	\$8,820,789	\$7,275,745	\$5,354,092
International.....	<u>228,137</u>	<u>196,074</u>	<u>35,169</u>
Total revenues.....	<u>9,048,926</u>	<u>7,471,819</u>	<u>5,389,261</u>
<b>Cost of sales (a):</b>			
Domestic United States.....	6,885,249	5,761,468	4,261,006
International.....	<u>183,271</u>	<u>157,056</u>	<u>30,937</u>
Total cost of sales.....	<u>7,068,520</u>	<u>5,918,524</u>	<u>4,291,943</u>
<b>Selling, general and administrative:</b>			
Domestic United States.....	912,639	734,408	534,315
International.....	<u>41,540</u>	<u>33,333</u>	<u>10,543</u>
Total selling, general and administrative.....	<u>954,179</u>	<u>767,741</u>	<u>544,858</u>
<b>Interest (a):</b>			
Domestic United States.....	<u>50,031</u>	<u>46,169</u>	<u>45,550</u>
<b>Other (income) expense, net:</b>			
Domestic United States.....	16,436	19,570	28,689
International.....	<u>2,867</u>	<u>3,411</u>	<u>(20)</u>
Total other expense, net.....	<u>19,303</u>	<u>22,981</u>	<u>28,669</u>
<b>Total costs and expenses.....</b>	<u>8,092,033</u>	<u>6,755,415</u>	<u>4,911,020</u>
<b>Equity income:</b>			
Domestic United States.....	35,297	3,897	5,676
International.....	<u>3,466</u>	<u>8,521</u>	<u>7,870</u>
Total equity in income of joint ventures.....	<u>38,763</u>	<u>12,418</u>	<u>13,546</u>
<b>Income before income taxes.....</b>	<u>\$ 995,656</u>	<u>\$ 728,822</u>	<u>\$ 491,787</u>

(a) Homebuilding interest expense, which represents the amortization of capitalized interest, of \$78.7 million, \$48.7 million, and \$36.0 million for the years ended December 31, 2003, 2002, and 2001, respectively, have been reclassified to cost of sales. The reclassifications had no impact on reported net earnings.

**Asset Data by Segment (\$000's omitted)**

	<b>Homebuilding</b>	<b>Financial</b>		<b>Total</b>
		<b>Services</b>	<b>Corporate</b>	
<b>At December 31, 2003:</b>				
Inventory.....	\$ 5,601,666	\$ -	\$ -	\$ 5,601,666
Total assets.....	7,305,447	584,976	172,929	\$ 8,063,352
<b>At December 31, 2002:</b>				
Inventory.....	\$ 4,293,597	\$ -	\$ -	\$ 4,293,597
Total assets.....	6,075,734	714,274	82,079	\$ 6,872,087

**Supplemental Asset Data by Geographic Region (\$000's omitted)**

	<b>Domestic</b>		<b>Total</b>
	<b>United States</b>	<b>International</b>	
<b>At December 31, 2003:</b>			
Inventory.....	\$ 5,427,716	\$ 173,950	\$ 5,601,666
Total assets.....	7,834,374	228,978	\$ 8,063,352
<b>At December 31, 2002:</b>			
Inventory.....	\$ 4,143,827	\$ 149,770	\$ 4,293,597
Total assets.....	6,690,284	181,803	\$ 6,872,087

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**3. Del Webb merger**

On July 31, 2001, the Company merged with Del Webb Corporation in a tax-free stock-for-stock transaction. Under the terms of the merger agreement, each outstanding share of Del Webb common stock was exchanged for approximately 0.894 shares of newly issued Company stock. Approximately 16.8 million shares were issued to Del Webb shareholders. Del Webb was primarily a homebuilder with operations in seven states. For the fiscal year ended June 30, 2001, Del Webb reported net income of \$91.2 million on revenues of \$1.9 billion and 7,038 unit settlements. Backlog reported at June 30, 2001, was 3,682 units valued at approximately \$994 million.

This merger expanded and supported the Company's leadership position. In particular, the Company believes the merger strengthened its position among active adult homebuyers, added important strategic land positions, provided operational savings from economies of scale, bolstered purchasing leverage, and enhanced overall competitive position.

The merger was accounted for using the purchase method of accounting. Approximately 16.8 million shares were issued and assigned an approximate accounting value of \$42.74 per share based on the average closing price of the Company's stock for the five trading days ended July 26, 2001. The components of the purchase price and allocation are as follows (\$000's omitted):

Consideration and merger costs:

Stock issued to Del Webb stockholders .....	\$ 720,111	
Cash paid to Del Webb stock option and restricted stockholders .....	29,498	
Fair value of stock options exchanged.....	9,276	
Cash paid for certain change-in-control and consulting arrangements.....	52,709	
Other transaction costs .....	<u>22,389</u>	
Total purchase price		\$ 833,983

Purchase price allocation:

Inventory .....	\$ 1,522,797	
Other assets.....	387,301	
Trademarks and tradenames .....	163,000	
Accounts payable and other .....	(494,029)	
Unsecured short-term borrowings .....	(300,000)	
Subordinated notes .....	<u>(729,096)</u>	<u>549,973</u>
Goodwill.....		<u>\$ 284,010</u>

This goodwill, which is not deductible for tax purposes, was allocated solely to the homebuilding segment. Trademarks and tradenames are being amortized on a straight-line basis over a period of 20 years.

Del Webb operations have been included in the consolidated results since July 31, 2001. The following table presents a summary of the unaudited pro forma operating results for the Company assuming that the merger with Del Webb occurred on January 1, 2001.

	<b>Year Ended December 31, 2001 (Unaudited)</b>
Revenues (\$000's omitted) .....	<u>\$ 6,494,795</u>
Income from continuing operations (\$000's omitted)....	<u>\$ 336,856</u>
Basic earnings per share.....	<u>\$ 5.73</u>
Diluted earnings per share.....	<u>\$ 5.62</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**3. Del Webb merger (continued)**

The pro forma information presented does not purport to be indicative of the results of operations that would have actually been reported had the merger occurred on January 1, 2001. For the purposes of the above pro-forma information presented and in accordance with Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets," goodwill is not amortized for transactions occurring subsequent to June 30, 2001. As such, operations presented do not include amortization of the goodwill recognized in the Del Webb merger.

**4. Discontinued operations**

In September 1988, substantially all of the assets, business operations and certain liabilities of five Texas-based insolvent thrifts were acquired by First Heights. Assistance with each acquisition was provided by the Federal Savings and Loan Insurance Corporation (FSLIC) pursuant to an Assistant Agreement.

During the first quarter of 1994, the Company adopted a plan of disposal for First Heights and announced its strategy to exit the thrift industry and increase its focus on housing and related mortgage banking. First Heights sold all but one of its 32 bank branches and related deposits to two unrelated purchasers. The sale was substantially completed during the fourth quarter of 1994, although the Company held brokered deposits which were not liquidated until 1998.

Although the Company in 1994, expected to complete the plan of disposal within a reasonable period of time, contractual disputes with the Federal Deposit Insurance Corporation (FDIC) precluded the Company from completing the disposal in accordance with its original plan. As discussed in Note 11, the Company settled its litigation with the FDIC in October 2001.

First Heights' day-to-day activities have been principally devoted to supporting residual regulatory compliance matters and the litigation with the United States government, discussed in Note 11, and are not reflective of the active operations of the former thrift, such as maintaining traditional transaction accounts (e.g., checking and savings accounts) or making loans. Accordingly, such operations are being presented as discontinued.

Revenues of discontinued operations were \$6,000, \$17,000 and \$29,000 for the years ended December 31, 2003, 2002 and 2001, respectively. For the years ended December 31, 2003, 2002 and 2001, discontinued thrift operations reported after-tax gains of \$7.3 million and \$9.0 million and an after-tax loss of \$1.0 million, respectively. The after-tax gains for the years ended December 31, 2003 and 2002 include approximately \$7.9 million and \$10.0 million, respectively, of income related to the recognition of income tax benefits resulting from the favorable resolution of certain tax matters.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**5. Other financing arrangements**

*Corporate/Homebuilding*

Effective October 1, 2003, Pulte Homes, Inc. replaced its \$570 million revolving credit facility with an \$850 million facility that includes the capacity to issue letters of credit up to \$500 million. Borrowing availability on this line is reduced by the amount of letters of credit outstanding. This new credit facility expires October 1, 2008. The bank credit agreement contains restrictive covenants, the most restrictive of which requires the Company not to exceed a debt-to-total capitalization ratio as defined in the agreement of 50%. The following is a summary of aggregate borrowing information related to this facility (\$000's omitted):

	<u>2003</u>	<u>2002</u>	<u>2001</u>
Available credit lines at year-end.....	\$ 850,000	\$ 570,000	\$ 560,000
Unused credit lines at year-end .....	\$ 693,000	\$ 570,000	\$ 450,000
Maximum amount outstanding at the end of any month.....	\$ -	\$ 245,000	\$ 334,000
Average monthly indebtedness .....	\$ 2,000	\$ 92,000	\$ 72,000
Range of interest rates during the year.....	2.08 to 4.25%	2.56 to 4.75%	2.65 to 6.81%
Weighted-average rate at year-end.....	2.22%	2.78%	3.79%

In addition, the Company's operating entity in Argentina entered into a \$3 million revolving credit facility in October 2002 to provide an additional financial resource to support the operations. Pulte Homes, Inc. has guaranteed the credit facility. There was \$2 million outstanding under this facility at December 31, 2003.

At December 31, 2003, other financing included limited recourse collateralized financing arrangements totaling \$83.3 million. These financing arrangements have maturities ranging primarily from one to four years, a weighted average interest rate of 4.31%, are generally collateralized by certain land positions and have no recourse to any other assets. These arrangements have been classified as accrued and other liabilities in the Consolidated Balance Sheets.

*Financial Services*

Notes payable to banks (collateralized short-term debt) are secured by residential mortgage loans available-for-sale. The carrying amounts of such borrowings approximate fair value.

During 2003, Pulte Mortgage replaced and expanded its \$175 million revolving credit facility with a \$310 million facility and replaced its \$325 million asset-backed commercial paper program with a \$550 million program. The revolving credit facility expires in March 2005 and the asset-backed commercial paper program can be extended to August 2005. During the three years ended December 31, 2003, Pulte Mortgage provided compensating balances, in the form of escrows and other custodial funds, in order to further reduce interest rates. The bank credit agreements contain restrictive covenants, the most restrictive of which requires Pulte Mortgage to maintain a minimum tangible net worth of \$30 million.

The following is aggregate borrowing information (\$000's omitted):

	<u>2003</u>	<u>2002</u>	<u>2001</u>
Available credit lines at year-end.....	\$ 860,000	\$ 600,000	\$ 450,000
Unused credit lines at year-end .....	\$ 381,000	\$ 41,000	\$ 40,000
Maximum amount outstanding at the end of any month.....	\$ 483,000	\$ 559,000	\$ 410,000
Average monthly indebtedness .....	\$ 391,000	\$ 290,000	\$ 219,000
Range of interest rates during the year.....	0.45 to 2.31%	0.45 to 2.75%	0.45 to 9.18%
Weighted-average rate at year-end.....	1.59%	1.91%	2.35%

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**6. Senior notes and subordinated notes**

The Company's senior notes and subordinated notes at book value are summarized as follows (\$000's omitted):

	<u>At December 31,</u>	
	<u>2003</u>	<u>2002</u>
9.5% unsecured senior notes, issued by Pulte Homes, Inc. due 2003, not redeemable prior to maturity, guaranteed on a senior basis by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See Note 12.....	\$ -	\$ 174,934
7% unsecured senior notes, issued by Pulte Homes, Inc. due 2003, not redeemable prior to maturity, guaranteed on a senior basis by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See Note 12.....	-	99,960
9.375% senior subordinated notes, issued by Del Webb Corporation, called March 2003 for redemption in May 2003, guaranteed by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See Note 12.....	-	162,205
10.25% senior subordinated notes, issued by Del Webb Corporation, called December 2003 for redemption in February 2004, guaranteed by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See Note 12.....	77,283	98,461
8.375% unsecured senior notes, issued by Pulte Homes, Inc. due 2004, not redeemable prior to maturity, guaranteed on a senior basis by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See Note 12.....	111,983	111,949
7.3% unsecured senior notes, issued by Pulte Homes, Inc. due 2005, not redeemable prior to maturity, guaranteed on a senior basis by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See Note 12.....	124,981	124,970
8.125% unsecured senior notes, issued by Pulte Homes, Inc. due 2011, not redeemable prior to maturity, guaranteed on a senior basis by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See Note 12.....	199,127	199,005
7.875% unsecured senior notes, issued by Pulte Homes, Inc. due 2011, callable prior to maturity, guaranteed on a senior basis by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See Note 12.....	495,117	494,671
6.25% unsecured senior notes, issued by Pulte Homes, Inc. due 2013, callable prior to maturity, guaranteed on a senior basis by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See Note 12.....	297,390	-
7.625% unsecured senior notes, issued by Pulte Homes, Inc. due 2017, not redeemable prior to maturity, guaranteed on a senior basis by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See Note 12.....	148,505	148,396
7.875% unsecured senior notes, issued by Pulte Homes, Inc. due 2032, callable prior to maturity, guaranteed on a senior basis by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See Note 12.....	298,760	298,717
6.375% unsecured senior notes, issued by Pulte Homes, Inc. due 2033, callable prior to maturity, guaranteed on a senior basis by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. See note 12.....	397,826	-
	<u>\$2,150,972</u>	<u>\$1,913,268</u>
Estimated fair value.....	<u>\$2,387,945</u>	<u>\$2,006,173</u>

Total senior note and subordinated note principal maturities during the five years after 2003 are as follows: 2004 - \$186 million; 2005 - \$125 million; 2006 - \$0; 2007 - \$0; 2008 - \$0 and thereafter \$1.8 billion.

In January 2004, the Company sold \$500 million of 5.25% unsecured senior notes, callable prior to maturity and guaranteed by Pulte Homes, Inc. and certain of its 100% owned subsidiaries. The notes are due 2014.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**7. Shareholders' equity**

In October 2002, the Company's Board of Directors authorized the repurchase of \$100 million of Pulte Homes, Inc. common stock in open-market transactions or otherwise. Pursuant to this authorization, 790,800 common shares were repurchased at an aggregate cost of approximately \$18.2 million in 2003 and 200,000 shares for approximately \$4.3 million in 2002. At December 31, 2003, the Company had remaining authorization to purchase common stock aggregating \$77.5 million.

On December 11, 2003 the Company announced a two-for-one stock split effected in the form of a 100 percent stock dividend. The distribution was made on January 2, 2004. All share and per share amounts have been restated to retroactively reflect the stock split.

*Accumulated other comprehensive income (loss)*

The accumulated balances related to each component of other comprehensive income (loss) are as follows (\$000's omitted):

	<b>December 31,</b>	
	<b>2003</b>	<b>2002</b>
Foreign currency translation adjustments:		
Argentina.....	\$ (24,982)	\$ (26,876)
Mexico .....	(13,962)	(6,615)
Change in fair value of derivatives, net of income taxes of \$122 in 2003 and \$1,204 in 2002 .....	(198)	(1,880)
	<b>\$ (39,142)</b>	<b>\$ (35,371)</b>

**8. Stock compensation plans and management incentive compensation**

The Company has fixed stock option plans for both employees (the "Employee Plans") and for nonemployee directors (the "Director Plan"); information related to the active plans is as follows:

<u>Plan Name</u>	<u>Shares Authorized</u>
<i>Employee Plans</i>	
Pulte Homes, Inc. 2002 Stock Incentive Plan .....	6,000,000
Pulte Corporation 2000 Stock Incentive Plan for Key Employees.....	5,000,000
Pulte Corporation 1995 Stock Incentive Plan for Key Employees.....	8,000,000
Pulte Corporation 1994 Stock Incentive Plan for Key Employees.....	4,000,000
<i>Director Plan</i>	
2000 Stock Plan for Nonemployee Directors.....	500,000

As of December 31, 2003, 2,917,350 stock options remain available for grant under the Employee Plans and 206,000 stock options remain available for grant under the Director Plan.

The Employee Plans primarily provide for the grant of options (both non-qualified options and incentive stock options as defined in each respective plan), stock appreciation rights and restricted stock to key employees of the Company or its subsidiaries (as determined by the Compensation Committee of the Board of Directors) for periods not exceeding ten years. Options granted under the Employee Plans vest incrementally in periods ranging from six months to five years. Under the Director Plan, nonemployee directors are entitled to an annual distribution of 1,800 shares of common stock and options to purchase an additional 8,000 shares. All options granted are non-qualified, vest immediately and are exercisable on the date of grant. Options granted under the Director Plan are exercisable for ten years from the grant date.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**8. Stock compensation plans and management incentive compensation (continued)**

A summary of the status of the Company's stock options for the years ended December 31, 2003, 2002 and 2001 is presented below (000's omitted except per share data):

	2003		2002		2001	
	Shares	Weighted-Average Per Share Exercise Price	Shares	Weighted-Average Per Share Exercise Price	Shares	Weighted-Average Per Share Exercise Price
Outstanding, beginning of year .....	12,288	\$ 17	13,078	\$ 14	10,716	\$ 12
Granted .....	2,001	43	2,780	23	3,866	19
Exercised .....	(3,135)	(12)	(3,454)	(9)	(1,356)	10
Forfeited .....	(377)	(22)	(116)	(20)	(148)	12
Outstanding, end of year .....	<u>10,777</u>	<u>\$ 23</u>	<u>12,288</u>	<u>\$ 17</u>	<u>13,078</u>	<u>\$ 14</u>
Options exercisable at year-end .....	<u>4,718</u>	<u>\$ 17</u>	<u>5,640</u>	<u>\$ 14</u>	<u>6,676</u>	<u>\$ 10</u>
Weighted-average per share fair value of options granted during the year .....	<u>\$17.59</u>		<u>\$9.68</u>		<u>\$11.63</u>	

The following table summarizes information about fixed stock options outstanding at December 31, 2003:

Range of Per Share Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding at December 31 (000's omitted)	Weighted-Average Remaining Contract Life	Weighted-Average Per Share Exercise Price	Number Exercisable at December 31 (000's omitted)	Weighted-Average Per Share Exercise Price
\$ 0.00 to 12.99	1,685	4.5	\$ 10	1,682	\$ 10
\$ 13.00 to 20.00	1,610	5.9	\$ 17	755	\$ 16
\$ 20.01 to 31.00	5,491	7.6	\$ 22	2,201	\$ 22
\$ 31.01 to 44.00	1,991	9.9	\$ 43	80	\$ 33

Exclusive of the Employee Plans and Director Plan above, the Company awarded 544,354, 482,482 and 315,922 shares of restricted stock to certain key employees during 2003, 2002, and 2001, respectively. In connection with the restricted stock awards, which cliff vest at the end of three years, the Company recorded compensation expense of \$16.0 million, \$5.3 million and \$1.7 million during 2003, 2002, and 2001, respectively.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**9. Income taxes**

The Company's net deferred tax asset (liability) is as follows (\$000's omitted):

	At December 31,	
	2003	2002
Deferred tax liabilities:		
Capitalized items, principally real estate basis differences, deducted for tax, net .....	\$ (89,949)	\$ (95,732)
Trademarks and tradenames .....	<u>(54,456)</u>	<u>(59,067)</u>
	<u>(144,405)</u>	<u>(154,799)</u>
Deferred tax assets:		
Non-deductible reserves and other.....	104,491	129,621
Adjustments to the fair value of acquired senior subordinated notes .....	4,106	7,495
State and other net operating loss carryforwards.....	19,936	18,935
State and other credit carryforwards .....	<u>10,779</u>	<u>11,952</u>
	<u>139,312</u>	<u>168,003</u>
Asset valuation allowance.....	<u>(2,781)</u>	<u>(1,461)</u>
Net deferred tax asset (liability).....	<u>\$ (7,874)</u>	<u>\$ 11,743</u>

The state net operating losses of \$62.7 million expire in years 2013 through 2023. International net operating losses of \$48,007 will expire in years 2006 through 2013. Net operating losses are generally available to offset the Company's taxable income in future years. State and other credit carryforwards include a state credit voucher of \$10.8 million that is expected to be realized by the Company no later than 2006. Realization of the net deferred tax asset, in certain jurisdictions, is dependent on future reversals of existing taxable temporary differences and adequate future taxable income. Although realization is not assured, management believes that, except for the valuation allowance stated, it is more likely than not that the net deferred tax asset will be realized.

Components of current and deferred income tax expense (benefit) for continuing operations are as follows (\$000's omitted):

	Current	Deferred	Total
Year ended December 31, 2003			
Federal .....	\$ 334,737	\$ 15,067	\$ 349,804
State and other .....	<u>23,980</u>	<u>4,550</u>	<u>28,530</u>
	<u>\$ 358,717</u>	<u>\$ 19,617</u>	<u>\$ 378,334</u>
Year ended December 31, 2002			
Federal .....	\$ 221,178	\$ 36,545	\$ 257,723
State and other .....	<u>23,808</u>	<u>2,690</u>	<u>26,498</u>
	<u>\$ 244,986</u>	<u>\$ 39,235</u>	<u>\$ 284,221</u>
Year ended December 31, 2001			
Federal .....	\$ 179,428	\$ (7,879)	\$ 171,549
State and other .....	<u>18,110</u>	<u>(297)</u>	<u>17,813</u>
	<u>\$ 197,538</u>	<u>\$ (8,176)</u>	<u>\$ 189,362</u>

The following table reconciles the statutory federal income tax rate to the effective income tax rate for continuing operations:

	2003	2002	2001
Income taxes at federal statutory rate.....	35.00%	35.00%	35.00%
Effect of state and local income taxes, net of federal tax .....	2.04	3.20	3.09
Settlement of state tax issues and other.....	<u>.96</u>	<u>.80</u>	<u>.41</u>
Effective rate .....	<u>38.00%</u>	<u>39.00%</u>	<u>38.50%</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**10. Leases**

The Company leases certain property and equipment under non-cancelable leases. Office and equipment leases are generally for terms of three to five years and generally provide renewal options for terms of up to an additional three years. Model home leases are generally for shorter terms approximating one year with renewal options on a month-to-month basis. In most cases, management expects that in the normal course of business, leases that expire will be renewed or replaced by other leases. The future minimum lease payments required under operating leases that have initial or remaining non-cancelable terms in excess of one year are as follows (\$000's omitted):

<u>Years Ending December 31,</u>	
2004 .....	\$ 32,590
2005 .....	25,682
2006 .....	18,375
2007 .....	14,903
2008 .....	11,452
After 2008.....	<u>23,401</u>
Total minimum lease payments .....	<u>\$ 126,403</u>

Net rental expense for the years ended December 31, 2003, 2002 and 2001 was \$49.6 million, \$48.8 million and \$36.5 million, respectively. Certain leases contain purchase options and generally provide that the Company shall pay for insurance, taxes and maintenance.

**11. Commitments and contingencies**

In the normal course of business, the Company acquires rights under options or option-type agreements to purchase land to be used in homebuilding operations at future dates. The total purchase price applicable to land under option that has been approved for purchase approximated \$2.6 billion and \$1.5 billion at December 31, 2003 and 2002, respectively. The total purchase price applicable to land under option that has not been approved for purchase approximated \$2.1 billion and \$982 million at December 31, 2003 and 2002, respectively.

At December 31, 2003, the Company, in the normal course of business, had outstanding letters of credit and performance bonds of \$1.4 billion.

The Company could be required to repurchase loans sold to investors that have not been underwritten in accordance with the investor guidelines (defective loans). The Company, in the normal course of business, indemnifies investors for defective loans that they have purchased. As of December 31, 2003 and 2002, the Company had been notified of \$8.6 million and \$8.8 million of defective loans, respectively. The Company assesses the risk of loss on these indemnifications and establishes reserves for them. At December 31, 2003 and 2002, reserves for indemnification on defective loans are reflected in accrued and other liabilities and amounted to \$0.3 million.

The Company is involved in various litigation incidental to its continuing business operations. Management does not believe that this litigation will have a material adverse impact on the results of operations, financial position or cash flows of the Company.

*First Heights-related litigation*

Pulte Homes, Inc. was a party to three lawsuits relating to First Heights' 1988 acquisition from the Federal Savings and Loan Insurance Corporation (FSLIC) and First Heights' ownership of five failed Texas thrifts. The first lawsuit (the District Court Case) was filed on July 7, 1995, in the United States District Court, Eastern District of Michigan, by the Federal Deposit Insurance Corporation (FDIC) against Pulte Homes, Inc., Pulte Diversified Companies, Inc. and First Heights (collectively, the Pulte Parties). The second lawsuit (the Court of Federal Claims Case) was filed on December 26, 1996, in the United States Court of Federal Claims (Washington, D.C.) by the Pulte Parties against the United States. The third lawsuit was filed by First Heights on January 10, 2000, in the United States District Court, Eastern District of Michigan against the FDIC regarding the amounts, including interest, the FDIC was obligated to pay First Heights on two promissory notes which had been executed by the FDIC's predecessor, the FSLIC.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**11. Commitments and contingencies (continued)**

*First Heights-related litigation (continued)*

In the District Court Case, the FDIC, as successor to the FSLIC, sought a declaration of rights and other relief related to the Assistance Agreement entered into between First Heights and the FSLIC. The FDIC and the Pulte Parties disagreed about the proper interpretation of provisions in the Assistance Agreement which provide for sharing of certain tax benefits achieved in connection with First Heights' 1988 acquisition and ownership of the five failed Texas thrifts. The District Court Case also included certain other claims relating to the foregoing, including claims resulting from the Company's and First Heights' amendment of a tax sharing and allocation agreement between the Company and First Heights. The Pulte Parties disputed the FDIC's claims and filed an answer and a counterclaim seeking, among other things, a declaration that the FDIC had breached the Assistance Agreement in numerous respects. On December 24, 1996, the Pulte Parties voluntarily dismissed without prejudice certain of their claims in the District Court Case and, on December 26, 1996, initiated the Court of Federal Claims Case.

In October 2001, the FDIC and the Pulte Parties settled the District Court Case, the related appeal to the Sixth Circuit Court of Appeals and the third lawsuit. As part of this settlement (the Settlement), the First Heights Assistance Agreement was terminated, except that certain tax benefit sharing provisions will continue in effect, and the warrants issued by First Heights to the FDIC were extinguished. The Company does not believe that the claims in the Court of Federal Claims Case are in any way prejudiced by the Settlement.

In the Court of Federal Claims Case, the Pulte Parties assert breaches of contract on the part of the United States in connection with the enactment of Section 13224 of the Omnibus Budget Reconciliation Act of 1993 (OBRA). That provision repealed portions of the tax benefits that the Pulte Parties claim they were entitled to under the contract to acquire the failed Texas thrifts. The Pulte Parties also assert other claims concerning the contract, including that the United States (through the FDIC as receiver) improperly attempted to amend the failed thrifts' pre-acquisition tax returns and that this attempt was made in an effort to deprive the Pulte Parties of tax benefits for which they had contracted.

On August 17, 2001, the United States Court of Federal Claims ruled that the United States government is liable to the Pulte Parties for breach of contract by enacting Section 13224 of OBRA. In September 2003, the United States Court of Federal Claims issued final judgment that the Pulte Parties had been damaged by approximately \$48.7 million as a result of the United States government's breach of contract with them. The United States government and the Pulte Parties filed Notices of Appeal with the United States Court of Appeals for the Federal Circuit in October 2003. Accordingly, any gain related to this litigation will be recognized only upon final resolution.

**12. Supplemental Guarantor information**

Pulte Homes, Inc. has the following outstanding senior note obligations at December 31, 2003: (1) \$115 million, 8.375%, due 2004, (2) \$125 million, 7.3%, due 2005, (3) \$150 million, 7.625%, due 2017, (4) \$200 million, 8.125%, due 2011, (5) \$500 million, 7.875%, due 2011, (6) \$300 million, 7.875%, due 2032, (7) \$300 million, 6.25%, due 2013, and (8) \$400 million, 6.375%, due 2033. Such obligations to pay principal, premium, if any, and interest are guaranteed jointly and severally on a senior basis by Pulte Homes, Inc.'s 100%-owned Domestic Homebuilding subsidiaries (collectively, the Guarantors). The Company has outstanding \$74 million, senior subordinated notes due 2010, which the Company called and will redeem at a price equal to 105.125% in February 2004. Such obligations to pay principal, premium, if applicable, and interest are guaranteed jointly and severally on a senior subordinated basis by the Guarantors. Such guarantees are full and unconditional.

Supplemental consolidating financial information of the Company, specifically including such information for the Guarantors, is presented below. Investments in subsidiaries are presented using the equity method of accounting. Separate financial statements of the Guarantors are not provided as the consolidating financial information contained herein provides a more meaningful disclosure to allow investors to determine the nature of the assets held by the operations of the combined groups.

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**12. Supplemental Guarantor information (continued)**

**CONSOLIDATING BALANCE SHEET**  
**DECEMBER 31, 2003**  
(\$000's omitted)

	<u>Unconsolidated</u>			<u>Eliminating</u> <u>Entries</u>	<u>Consolidated</u> <u>Pulte Homes, Inc.</u>
	<u>Pulte</u> <u>Homes, Inc.</u>	<u>Guarantor</u> <u>Subsidiaries</u>	<u>Non-Guarantor</u> <u>Subsidiaries</u>		
<b>ASSETS</b>					
Cash and equivalents .....	\$ 2,949	\$ 305,356	\$ 95,787	\$ -	\$ 404,092
Unfunded settlements .....	-	140,431	(18,131)	-	122,300
House and land inventories .....	-	5,354,460	173,950	-	5,528,410
Land, not owned, under option agreements .....	-	73,256	-	-	73,256
Residential mortgage loans available-for-sale .....	-	-	541,126	-	541,126
Land held for sale .....	-	251,237	-	-	251,237
Goodwill .....	-	306,993	700	-	307,693
Intangible assets .....	-	143,704	-	-	143,704
Other assets .....	81,145	501,052	109,337	-	691,534
Investment in subsidiaries .....	<u>6,618,888</u>	<u>74,738</u>	<u>1,352,274</u>	<u>(8,045,900)</u>	<u>-</u>
	<u>\$ 6,702,982</u>	<u>\$ 7,151,227</u>	<u>\$ 2,255,043</u>	<u>\$ (8,045,900)</u>	<u>\$ 8,063,352</u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>					
<b>Liabilities:</b>					
Accounts payable, accrued and other liabilities .....	\$ 149,572	\$ 1,547,241	\$ 200,892	\$ -	\$ 1,897,705
Collateralized short-term debt, recourse solely to applicable non-guarantor subsidiary assets .....	-	-	479,287	-	479,287
Income taxes .....	79,391	-	-	-	79,391
Deferred income tax liability .....	(8,799)	-	16,673	-	7,874
Senior notes and subordinated notes .....	2,073,689	77,283	-	-	2,150,972
Advances (receivable) payable - subsidiaries .....	<u>961,006</u>	<u>(1,124,437)</u>	<u>163,431</u>	<u>-</u>	<u>-</u>
Total liabilities .....	<u>3,254,859</u>	<u>500,087</u>	<u>860,283</u>	<u>-</u>	<u>4,615,229</u>
<b>Shareholders' Equity:</b>					
Common stock .....	1,252	-	7,823	(7,823)	1,252
Additional paid-in capital .....	1,015,991	5,381,553	1,170,349	(6,551,902)	1,015,991
Unearned compensation .....	(656)	-	-	-	(656)
Accumulated other comprehensive loss .....	(39,142)	(2,706)	(39,142)	41,848	(39,142)
Retained earnings .....	<u>2,470,678</u>	<u>1,272,293</u>	<u>255,730</u>	<u>(1,528,023)</u>	<u>2,470,678</u>
Total shareholders' equity .....	<u>3,448,123</u>	<u>6,651,140</u>	<u>1,394,760</u>	<u>(8,045,900)</u>	<u>3,448,123</u>
	<u>\$ 6,702,982</u>	<u>\$ 7,151,227</u>	<u>\$ 2,255,043</u>	<u>\$ (8,045,900)</u>	<u>\$ 8,063,352</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**12. Supplemental Guarantor information (continued)**

**CONSOLIDATING BALANCE SHEET**  
**DECEMBER 31, 2002**  
(\$000's omitted)

	<u>Unconsolidated</u>			<u>Eliminating</u> <u>Entries</u>	<u>Consolidated</u> <u>Pulte Homes, Inc.</u>
	<u>Pulte</u> <u>Homes, Inc.</u>	<u>Guarantor</u> <u>Subsidiaries</u>	<u>Non-Guarantor</u> <u>Subsidiaries</u>		
<b>ASSETS</b>					
Cash and equivalents .....	\$ -	\$ 541,095	\$ 72,073	\$ -	\$ 613,168
Unfunded settlements .....	-	66,203	(5,562)	-	60,641
House and land inventories .....	-	4,143,827	149,770	-	4,293,597
Residential mortgage loans available-for-sale .....	-	-	600,339	-	600,339
Land held for sale .....	-	226,054	-	-	226,054
Goodwill .....	-	306,993	700	-	307,693
Intangible assets .....	-	151,954	-	-	151,954
Other assets .....	54,295	457,805	94,798	-	606,898
Deferred income taxes .....	27,784	-	(16,041)	-	11,743
Investment in subsidiaries .....	<u>3,553,786</u>	<u>93,710</u>	<u>1,809,031</u>	<u>(5,456,527)</u>	<u>-</u>
	<u>\$ 3,635,865</u>	<u>\$ 5,987,641</u>	<u>\$ 2,705,108</u>	<u>\$ (5,456,527)</u>	<u>\$ 6,872,087</u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>					
<b>Liabilities:</b>					
Accounts payable, accrued and other liabilities .....	\$ 125,941	\$ 1,281,648	\$ 141,174	\$ -	\$ 1,548,763
Collateralized short-term debt, recourse solely to applicable non-guarantor subsidiary assets .....	-	-	559,621	-	559,621
Income taxes .....	90,009	-	-	-	90,009
Senior notes and subordinated notes .....	1,652,602	260,666	-	-	1,913,268
Advances (receivable) payable - subsidiaries .....	<u>(993,113)</u>	<u>768,997</u>	<u>224,116</u>	<u>-</u>	<u>-</u>
Total liabilities .....	<u>875,439</u>	<u>2,311,311</u>	<u>924,911</u>	<u>-</u>	<u>4,111,661</u>
<b>Shareholders' Equity:</b>					
Common stock .....	1,222	40,656	52,195	(92,851)	1,222
Additional paid-in capital .....	932,551	1,977,009	720,923	(2,697,932)	932,551
Unearned compensation .....	(9,866)	-	-	-	(9,866)
Accumulated other comprehensive loss .....	(35,371)	-	(35,371)	35,371	(35,371)
Retained earnings .....	<u>1,871,890</u>	<u>1,658,665</u>	<u>1,042,450</u>	<u>(2,701,115)</u>	<u>1,871,890</u>
Total shareholders' equity .....	<u>2,760,426</u>	<u>3,676,330</u>	<u>1,780,197</u>	<u>(5,456,527)</u>	<u>2,760,426</u>
	<u>\$ 3,635,865</u>	<u>\$ 5,987,641</u>	<u>\$ 2,705,108</u>	<u>\$ (5,456,527)</u>	<u>\$ 6,872,087</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**12. Supplemental Guarantor information (continued)**

**CONSOLIDATING STATEMENT OF OPERATIONS**  
**For the year ended December 31, 2003**  
(\$000's omitted)

	<u>Unconsolidated</u>			<u>Eliminating Entries</u>	<u>Consolidated Pulte Homes, Inc.</u>
	<u>Pulte Homes, Inc.</u>	<u>Guarantor Subsidiaries</u>	<u>Non-Guarantor Subsidiaries</u>		
<b>Revenues:</b>					
Homebuilding .....	\$ -	\$ 8,701,661	\$ 228,137	\$ -	\$ 8,929,798
Financial Services .....	-	16,491	99,356	-	115,847
Corporate .....	<u>42</u>	<u>2,602</u>	<u>637</u>	<u>-</u>	<u>3,281</u>
Total revenues .....	<u>42</u>	<u>8,720,754</u>	<u>328,130</u>	<u>-</u>	<u>9,048,926</u>
<b>Expenses:</b>					
<b>Homebuilding:</b>					
Cost of sales .....	-	6,885,249	183,271	-	7,068,520
Selling, general and administrative and other expense .....	10,910	829,871	50,847	-	891,628
Financial Services, principally interest ....	-	4,851	48,402	-	53,253
Corporate, net.....	<u>83,637</u>	<u>(4,816)</u>	<u>(189)</u>	<u>-</u>	<u>78,632</u>
Total expenses .....	<u>94,547</u>	<u>7,715,155</u>	<u>282,331</u>	<u>-</u>	<u>8,092,033</u>
<b>Other Income:</b>					
Equity income.....	<u>-</u>	<u>30,913</u>	<u>7,850</u>	<u>-</u>	<u>38,763</u>
<b>Income (loss) from continuing operations before income taxes and equity in income of subsidiaries .....</b>					
	(94,505)	1,036,512	53,649	-	995,656
Income taxes (benefit).....	<u>(38,465)</u>	<u>396,090</u>	<u>20,709</u>	<u>-</u>	<u>378,334</u>
<b>Income (loss) from continuing operations before equity in income of subsidiaries.....</b>					
	(56,040)	640,422	32,940	-	617,322
Income from discontinued operations.....	<u>7,312</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>7,312</u>
<b>Income (loss) before equity in net income of subsidiaries .....</b>					
	<u>(48,728)</u>	<u>640,422</u>	<u>32,940</u>	<u>-</u>	<u>624,634</u>
<b>Equity in net income of subsidiaries:</b>					
Continuing operations .....	673,362	34,481	231,826	(939,669)	-
Discontinued operations .....	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
	<u>673,362</u>	<u>34,481</u>	<u>231,826</u>	<u>(939,669)</u>	<u>-</u>
Net income .....	<u>\$ 624,634</u>	<u>\$ 674,903</u>	<u>\$ 264,766</u>	<u>\$ (939,669)</u>	<u>\$ 624,634</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**12. Supplemental Guarantor information (continued)**

**CONSOLIDATING STATEMENT OF OPERATIONS**  
**For the year ended December 31, 2002**  
(\$000's omitted)

	Unconsolidated			Eliminating Entries	Consolidated Pulte Homes, Inc.
	Pulte Homes, Inc.	Guarantor Subsidiaries	Non-Guarantor Subsidiaries		
<b>Revenues:</b>					
Homebuilding.....	\$ -	\$7,167,915	\$ 196,074	\$ -	\$ 7,363,989
Financial Services .....	-	15,004	91,624	-	106,628
Corporate.....	164	1,038	-	-	1,202
Total revenues.....	<u>164</u>	<u>7,183,957</u>	<u>287,698</u>	<u>-</u>	<u>7,471,819</u>
<b>Expenses:</b>					
Homebuilding:					
Cost of sales.....	-	5,761,468	157,056	-	5,918,524
Selling, general and administrative and other expense .....	8,661	682,737	36,744	-	728,142
Financial Services, principally interest....	-	4,445	41,134	-	45,579
Corporate, net.....	63,036	281	(147)	-	63,170
Total expenses .....	<u>71,697</u>	<u>6,448,931</u>	<u>234,787</u>	<u>-</u>	<u>6,755,415</u>
<b>Other Income:</b>					
Equity income.....	-	3,897	8,521	-	12,418
Income (loss) from continuing operations before income taxes and equity in					
income of subsidiaries .....	(71,533)	738,923	61,432	-	728,822
Income taxes (benefit) .....	(28,302)	288,111	24,412	-	284,221
Income (loss) from continuing operations before equity in income of					
subsidiaries .....	(43,231)	450,812	37,020	-	444,601
Income from discontinued operations .....	9,042	-	2	-	9,044
Income (loss) before equity in net income of subsidiaries.....					
	<u>(34,189)</u>	<u>450,812</u>	<u>37,022</u>	<u>-</u>	<u>453,645</u>
Equity in net income of subsidiaries:					
Continuing operations.....	487,832	33,310	297,229	(818,371)	-
Discontinued operations .....	2	-	-	(2)	-
	<u>487,834</u>	<u>33,310</u>	<u>297,229</u>	<u>(818,373)</u>	<u>-</u>
Net income.....	<u>\$ 453,645</u>	<u>\$ 484,122</u>	<u>\$ 334,251</u>	<u>\$ (818,373)</u>	<u>\$ 453,645</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**12. Supplemental Guarantor information (continued)**

**CONSOLIDATING STATEMENT OF OPERATIONS**  
**For the year ended December 31, 2001**  
**(\$000's omitted)**

	<u>Unconsolidated</u>			<u>Eliminating</u> <u>Entries</u>	<u>Consolidated</u> <u>Pulte Homes, Inc.</u>
	<u>Pulte</u> <u>Homes, Inc.</u>	<u>Guarantor</u> <u>Subsidiaries</u>	<u>Non-Guarantor</u> <u>Subsidiaries</u>		
<b>Revenues:</b>					
Homebuilding .....	\$ -	\$ 5,274,660	\$ 35,169	\$ -	\$ 5,309,829
Financial Services .....	-	10,073	67,149	-	77,222
Corporate .....	189	2,021	-	-	2,210
Total revenues .....	<u>189</u>	<u>5,286,754</u>	<u>102,318</u>	<u>-</u>	<u>5,389,261</u>
<b>Expenses:</b>					
Homebuilding:					
Cost of sales .....	-	4,261,006	30,937	-	4,291,943
Selling, general and administrative and other expense .....	2,873	501,519	10,477	-	514,869
Financial Services, principally interest ...	-	2,996	41,550	-	44,546
Corporate, net .....	51,940	9,280	(1,558)	-	59,662
Total expenses .....	<u>54,813</u>	<u>4,774,801</u>	<u>81,406</u>	<u>-</u>	<u>4,911,020</u>
<b>Other Income:</b>					
Equity income .....	-	5,676	7,870	-	13,546
Income (loss) from continuing operations before income taxes and equity in income of subsidiaries .....					
	(54,624)	517,629	28,782	-	491,787
Income taxes (benefit) .....	(26,779)	199,369	16,772	-	189,362
Income (loss) from continuing operations before equity in income of subsidiaries .....					
	(27,845)	318,260	12,010	-	302,425
Income (loss) from discontinued operations	87	-	(1,119)	-	(1,032)
Income (loss) before equity in net income of subsidiaries .....					
	<u>(27,758)</u>	<u>318,260</u>	<u>10,891</u>	<u>-</u>	<u>301,393</u>
Equity in net income (loss) of subsidiaries:					
Continuing operations .....	330,270	16,599	253,898	(600,767)	-
Discontinued operations .....	(1,119)	-	-	1,119	-
	<u>329,151</u>	<u>16,599</u>	<u>253,898</u>	<u>(599,648)</u>	<u>-</u>
Net income .....	<u>\$ 301,393</u>	<u>\$ 334,859</u>	<u>\$ 264,789</u>	<u>\$ (599,648)</u>	<u>\$ 301,393</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**12. Supplemental Guarantor information (continued)**

**CONSOLIDATING STATEMENT OF CASH FLOWS**  
**For the year ended December 31, 2003**  
(\$000's omitted)

	<u>Unconsolidated</u>			<u>Eliminating</u> <u>Entries</u>	<u>Consolidated</u> <u>Pulte Homes, Inc.</u>
	<u>Pulte</u> <u>Homes, Inc.</u>	<u>Guarantor</u> <u>Subsidiaries</u>	<u>Non-Guarantor</u> <u>Subsidiaries</u>		
<b>Cash flows from operating activities:</b>					
Net income .....	\$ 624,634	\$ 674,903	\$ 264,766	\$(939,669)	\$ 624,634
Adjustments to reconcile net income to net cash flows provided by (used in) operating activities:					
Equity in income of subsidiaries ..	(673,362)	(34,481)	(231,826)	939,669	-
Amortization and depreciation .....	-	36,410	3,750	-	40,160
Stock-based compensation expense .....	30,515	-	-	-	30,515
Deferred income taxes .....	18,985	-	632	-	19,617
Other, net.....	1,150	(2,912)	(2,421)	-	(4,183)
Increase (decrease) in cash due to:					
Inventories .....	-	(1,377,875)	(36,419)	-	(1,414,294)
Residential mortgage loans available-for-sale .....	-	-	59,213	-	59,213
Other assets .....	(26,850)	13,306	(5,869)	-	(19,413)
Accounts payable, accrued and other liabilities .....	18,222	260,790	64,767	-	343,779
Income taxes .....	<u>(145,718)</u>	<u>162,014</u>	<u>1,828</u>	<u>-</u>	<u>18,124</u>
Net cash provided by (used in) operating activities .....	<u>(152,424)</u>	<u>(267,845)</u>	<u>118,421</u>	<u>-</u>	<u>(301,848)</u>
Dividends received from subsidiaries .....	1,107,549	16,000	1,069,503	(2,193,052)	-
Investment in subsidiaries .....	(3,497,651)	(1,910)	-	3,499,561	-
Advances from affiliates .....	106,461	-	-	(106,461)	-
Proceeds from sale of fixed assets .....	-	5,023	-	-	5,023
Capital expenditures.....	<u>-</u>	<u>(28,405)</u>	<u>(10,715)</u>	<u>-</u>	<u>(39,120)</u>
Net cash provided by (used in) investing activities .....	<u>(2,283,641)</u>	<u>(9,292)</u>	<u>1,058,788</u>	<u>1,200,048</u>	<u>(34,097)</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

12. Supplemental Guarantor information (continued)

**CONSOLIDATING STATEMENT OF CASH FLOWS (continued)**  
**For the year ended December 31, 2003**  
(\$000's omitted)

	<u>Unconsolidated</u>			<u>Eliminating</u> <u>Entries</u>	<u>Consolidated</u> <u>Pulte Homes, Inc.</u>
	<u>Pulte</u> <u>Homes, Inc.</u>	<u>Guarantor</u> <u>Subsidiaries</u>	<u>Non-Guarantor</u> <u>Subsidiaries</u>		
Cash flows from financing activities:					
Payment of senior notes and subordinated notes .....	\$(275,000)	\$(182,511)	\$ -	\$ -	\$ (457,511)
Proceeds from borrowings.....	694,937	-	2,028	-	696,965
Repayment of borrowings .....	-	(35,230)	(82,938)	-	(118,168)
Capital contributions from parent .....	-	3,472,607	26,954	(3,499,561)	-
Advances (to) from affiliates.....	2,011,500	(2,105,919)	(12,042)	106,461	-
Issuance of common stock .....	39,493	-	-	-	39,493
Stock repurchases .....	(18,304)	-	-	-	(18,304)
Dividends paid .....	<u>(13,612)</u>	<u>(1,107,549)</u>	<u>(1,085,503)</u>	<u>2,193,052</u>	<u>(13,612)</u>
Net cash provided by (used in) financing activities .....	<u>2,439,014</u>	<u>41,398</u>	<u>(1,151,501)</u>	<u>(1,200,048)</u>	<u>128,863</u>
Effect of exchange rate changes on cash and cash equivalents .....	-	-	(1,994)	-	(1,994)
Net increase (decrease) in cash and equivalents .....	2,949	(235,739)	23,714	-	(209,076)
Cash and equivalents at beginning of year ..	<u>-</u>	<u>541,095</u>	<u>72,073</u>	<u>-</u>	<u>613,168</u>
Cash and equivalents at end of year .....	<u>\$ 2,949</u>	<u>\$ 305,356</u>	<u>\$ 95,787</u>	<u>\$ -</u>	<u>\$ 404,092</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**12. Supplemental Guarantor information (continued)**

**CONSOLIDATING STATEMENT OF CASH FLOWS**  
**For the year ended December 31, 2002**  
(\$000's omitted)

	<u>Unconsolidated</u>			<u>Eliminating</u> <u>Entries</u>	<u>Consolidated</u> <u>Pulte Homes, Inc.</u>
	<u>Pulte</u> <u>Homes, Inc.</u>	<u>Guarantor</u> <u>Subsidiaries</u>	<u>Non-Guarantor</u> <u>Subsidiaries</u>		
<b>Cash flows from operating activities:</b>					
Net income .....	\$ 453,645	\$ 484,122	\$ 334,251	\$(818,373)	\$ 453,645
Adjustments to reconcile net income to net cash flows provided by (used in) operating activities:					
Equity in income of subsidiaries ..	(487,834)	(33,310)	(297,229)	818,373	-
Amortization and depreciation ....	-	36,542	2,709	-	39,251
Stock based compensation expense.....	10,387	-	-	-	10,387
Deferred income taxes .....	39,235	-	-	-	39,235
Other, net.....	1,042	(3,410)	(7,386)	-	(9,754)
Increase (decrease) in cash due to:					
Inventories.....	-	(465,051)	(51,128)	-	(516,179)
Residential mortgage loans available-for-sale.....	-	-	(164,878)	-	(164,878)
Other assets .....	(926)	39,254	(13,338)	-	24,990
Accounts payable, accrued and other liabilities .....	(6,359)	157,754	45,457	-	196,852
Income taxes .....	(52,405)	122,421	5,229	-	75,245
Net cash provided by (used in) operating activities .....	<u>(43,215)</u>	<u>338,322</u>	<u>(146,313)</u>	<u>-</u>	<u>148,794</u>
Dividends received from subsidiaries .....	232,000	23,500	-	(255,500)	-
Investment in subsidiaries.....	(1,228,780)	(1,331)	-	1,230,111	-
Advances (to) from affiliates .....	1,844,046	248,458	33,946	(2,126,450)	-
Proceeds from sale of fixed assets.....	-	45,502	(304)	-	45,198
Capital expenditures.....	-	(18,863)	(4,837)	-	(23,700)
Net cash provided by (used in) investing activities .....	<u>847,266</u>	<u>297,266</u>	<u>28,805</u>	<u>(1,151,839)</u>	<u>21,498</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**12. Supplemental Guarantor information (continued)**

**CONSOLIDATING STATEMENT OF CASH FLOWS (continued)**  
**For the year ended December 31, 2002**  
**(\$000's omitted)**

	<u>Unconsolidated</u>			<u>Eliminating</u> <u>Entries</u>	<u>Consolidated</u> <u>Pulte Homes, Inc.</u>
	<u>Pulte</u> <u>Homes, Inc.</u>	<u>Guarantor</u> <u>Subsidiaries</u>	<u>Non-Guarantor</u> <u>Subsidiaries</u>		
<b>Cash flows from financing activities:</b>					
Payment of senior notes and subordinated notes .....	\$ (1,437)	\$(106,139)	\$ -	\$ -	\$ (107,576)
Proceeds from borrowings.....	298,707	132,599	147,011	-	578,317
Repayment of borrowings .....	(110,000)	-	(7,256)	-	(117,256)
Capital contributions from parent .....	-	1,196,038	34,073	(1,230,111)	-
Advances (to) from affiliates.....	(1,027,422)	(1,118,634)	19,606	2,126,450	-
Issuance of common stock .....	34,597	-	-	-	34,597
Stock repurchases .....	(4,344)	-	-	-	(4,344)
Dividends paid .....	(9,773)	(232,000)	(23,500)	255,500	(9,773)
<b>Net cash provided by (used in) financing activities .....</b>	<b><u>(819,672)</u></b>	<b><u>(128,136)</u></b>	<b><u>169,934</u></b>	<b><u>1,151,839</u></b>	<b><u>373,965</u></b>
Effect of exchange rate changes on cash and cash equivalents .....	-	-	(3,233)	-	(3,233)
<b>Net increase (decrease) in cash and equivalents .....</b>	<b>(15,621)</b>	<b>507,452</b>	<b>49,193</b>	<b>-</b>	<b>541,024</b>
Cash and equivalents at beginning of year ..	<u>15,621</u>	<u>33,643</u>	<u>22,880</u>	<u>-</u>	<u>72,144</u>
Cash and equivalents at end of year.....	<u>\$ -</u>	<u>\$ 541,095</u>	<u>\$ 72,073</u>	<u>\$ -</u>	<u>\$ 613,168</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**12. Supplemental Guarantor information (continued)**

**CONSOLIDATING STATEMENT OF CASH FLOWS**  
**For the year ended December 31, 2001**  
**(\$000's omitted)**

	<u>Unconsolidated</u>			<u>Eliminating</u> <u>Entries</u>	<u>Consolidated</u> <u>Pulte Homes, Inc.</u>
	<u>Pulte</u> <u>Homes, Inc.</u>	<u>Guarantor</u> <u>Subsidiaries</u>	<u>Non-Guarantor</u> <u>Subsidiaries</u>		
<b>Cash flows from operating activities:</b>					
Net income .....	\$ 301,393	\$ 334,859	\$ 264,789	\$(599,648)	\$ 301,393
Adjustments to reconcile net income to net cash flows used in operating activities:					
Equity in income of subsidiaries ..	(329,151)	(16,599)	(253,898)	599,648	-
Amortization and depreciation ....	-	31,026	1,358	-	32,384
Stock based compensation expense.....	1,699	(1,385)	-	-	314
Deferred income taxes .....	(8,176)	-	-	-	(8,176)
Other, net.....	746	173	(934)	-	(15)
Increase (decrease) in cash due to:					
Inventories.....	-	(622,835)	(23,755)	-	(646,590)
Residential mortgage loans available-for-sale .....	-	-	(157,325)	-	(157,325)
Other assets .....	(12,233)	74,203	(36,684)	-	25,286
Accounts payable, accrued and other liabilities .....	7,354	(25,864)	19,881	-	1,371
Income taxes .....	(26,594)	67,523	3,742	-	44,671
Net cash used in operating activities .....	<u>(64,962)</u>	<u>(158,899)</u>	<u>(182,826)</u>	<u>-</u>	<u>(406,687)</u>
<b>Cash flows from investing activities:</b>					
Cash paid for acquisitions, net of cash acquired .....	(10,963)	22,607	-	-	11,644
Dividends received from subsidiaries .....	200,000	1,000	200,000	(401,000)	-
Investment in subsidiaries.....	(24,250)	(994)	-	25,244	-
Advances to affiliates.....	(899,170)	(915,963)	(34,590)	1,849,723	-
Proceeds from sale of fixed assets .....	-	18,115	-	-	18,115
Capital expenditures.....	-	(27,091)	(3,105)	-	(30,196)
Other, net.....	-	-	1,285	-	1,285
Net cash provided by (used in) investing activities .....	<u>(734,383)</u>	<u>(902,326)</u>	<u>163,590</u>	<u>1,473,967</u>	<u>848</u>

**PULTE HOMES, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**

**12. Supplemental Guarantor information (continued)**

**CONSOLIDATING STATEMENT OF CASH FLOWS (continued)**

For the year ended December 31, 2001

(\$000's omitted)

	<u>Unconsolidated</u>			<u>Eliminating</u> <u>Entries</u>	<u>Consolidated</u> <u>Pulte Homes, Inc.</u>
	<u>Pulte</u> <u>Homes, Inc.</u>	<u>Guarantor</u> <u>Subsidiaries</u>	<u>Non-Guarantor</u> <u>Subsidiaries</u>		
Cash flows from financing activities:					
Payment of senior notes and subordinated notes .....	\$ -	\$(356,391)	\$ (7,000)	\$ -	\$ (363,391)
Proceeds from borrowings.....	804,248	797	175,261	-	980,306
Repayment of borrowings .....	-	(320,167)	(5,547)	-	(325,714)
Capital contributions from parent .....	-	24,250	994	(25,244)	-
Advances from affiliates.....	5,291	1,812,519	31,913	(1,849,723)	-
Issuance of common stock .....	13,537	-	-	-	13,537
Dividends paid.....	(8,110)	(200,000)	(201,000)	401,000	(8,110)
Net cash provided by (used in) financing activities .....	<u>814,966</u>	<u>961,008</u>	<u>(5,379)</u>	<u>(1,473,967)</u>	<u>296,628</u>
Effect of exchange rate changes on cash and cash equivalents .....	-	-	(2,630)	-	(2,630)
Net increase (decrease) in cash and equivalents .....	15,621	(100,217)	(27,245)	-	(111,841)
Cash and equivalents at beginning of year ..	<u>-</u>	<u>133,860</u>	<u>50,125</u>	<u>-</u>	<u>183,985</u>
Cash and equivalents at end of year .....	<u>\$ 15,621</u>	<u>\$ 33,643</u>	<u>\$ 22,880</u>	<u>\$ -</u>	<u>\$ 72,144</u>

## REPORT OF MANAGEMENT

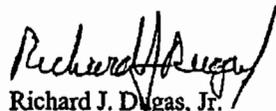
We, the management of Pulte Homes, Inc., are responsible for the integrity and objectivity of the accompanying consolidated financial statements and related information. The statements were prepared in accordance with accounting principles generally accepted in the United States, and, as such, include amounts that are based on our best judgments and estimates.

We maintain a system of internal accounting and disclosure controls designed to provide reasonable assurance that assets are safeguarded and that transactions and events are recorded properly and that accounting records may be relied upon for the preparation of the consolidated financial statements and other financial information. While the Company is organized on the principle of decentralized management, appropriate control measures are also evidenced by well-defined organizational responsibilities, management selection, development and evaluation processes, communication techniques, financial planning and reporting systems and formalized procedures. In addition, internal auditors monitor the operation of our internal control system and report findings and recommendations to management and the Audit Committee, and corrective actions are taken to remedy deficiencies if and when they are identified.

Ernst & Young LLP, independent auditors, is engaged to audit our consolidated financial statements. Ernst & Young LLP maintains an understanding of our internal controls and conducts such tests and other auditing procedures considered necessary in the circumstances to express their opinion on our consolidated financial statements in the report that follows.

Our Audit Committee of the Board of Directors is composed solely of independent directors with the financial knowledge and experience to provide oversight. We review internal control matters and key accounting and financial reporting issues with the Audit Committee on a regular basis. In addition, the independent auditors, management and internal auditors regularly meet in private sessions with our Audit Committee to discuss the results of their work including observations on the adequacy of internal financial controls, the quality of financial reporting, confirm that they are properly discharging their responsibilities and other relevant matters.

We are committed to providing timely, accurate and understandable information to our shareholders.



Richard J. Dugas, Jr.  
President and  
Chief Executive Officer



Roger A. Cregg  
Executive Vice President and  
Chief Financial Officer



Vincent J. Frees  
Vice President and  
Controller

## REPORT OF INDEPENDENT AUDITORS

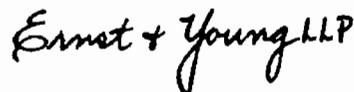
The Board of Directors and Shareholders  
Pulte Homes, Inc.

We have audited the accompanying consolidated balance sheets of Pulte Homes, Inc. as of December 31, 2003 and 2002, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2003. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Pulte Homes, Inc. at December 31, 2003 and 2002, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2003, in conformity with accounting principles generally accepted in the United States.

As discussed in Note 1 to the consolidated financial statements, the Company changed in 2003 its method of accounting for stock options and in 2002 its method of accounting for goodwill.



Detroit, Michigan  
January 23, 2004

**PULTE HOMES, INC.**  
**UNAUDITED QUARTERLY INFORMATION**  
(000's omitted, except per share data)

	<u>1st</u> <u>Quarter</u>	<u>2nd</u> <u>Quarter</u>	<u>3rd</u> <u>Quarter</u>	<u>4th</u> <u>Quarter</u>	<u>Total</u>
<b>2003</b>					
<b>Homebuilding:</b>					
Revenues.....	\$ 1,523,439	\$ 1,925,711	\$ 2,373,364	\$ 3,107,284	\$ 8,929,798
Income before income taxes.....	137,412	198,021	263,885	402,843	1,002,161
<b>Financial Services:</b>					
Revenues.....	\$ 27,596	\$ 31,774	\$ 25,851	\$ 30,626	\$ 115,847
Income before income taxes.....	17,116	20,858	13,381	17,491	68,846
<b>Corporate:</b>					
Revenues.....	\$ 1,555	\$ 700	\$ 588	\$ 438	\$ 3,281
Loss before income taxes.....	(15,369)	(22,046)	(17,601)	(20,335)	(75,351)
<b>Consolidated results:</b>					
Revenues.....	\$ 1,552,590	\$ 1,958,185	\$ 2,399,803	\$ 3,138,348	\$ 9,048,926
Income from continuing operations before income taxes.....	139,159	196,833	259,665	399,999	995,656
Income taxes.....	52,858	74,833	98,630	152,013	378,334
Income from continuing operations.....	86,301	122,000	161,035	247,986	617,322
Income (loss) from discontinued operations.....	(164)	(283)	7,851	(92)	7,312
Net income.....	\$ 86,137	\$ 121,717	\$ 168,886	\$ 247,894	\$ 624,634
<b>Per share data (a):</b>					
<b>Basic:</b>					
Income from continuing operations.....	\$ .71	\$ 1.00	\$ 1.32	\$ 2.01	\$ 5.05
Income (loss) from discontinued operations	-	-	.06	-	.06
Net income.....	\$ .71	\$ 1.00	\$ 1.38	\$ 2.01	\$ 5.11
Weighted-average common shares outstanding.....	121,426	121,506	122,248	123,444	122,162
<b>Assuming dilution:</b>					
Income from continuing operations.....	\$ .70	\$ .98	\$ 1.28	\$ 1.95	\$ 4.91
Income (loss) from discontinued operations	-	-	.06	-	.06
Net income.....	\$ .69	\$ .97	\$ 1.34	\$ 1.94	\$ 4.97
Adjusted weighted-average common shares and effect of dilutive securities.....	124,078	124,994	125,777	127,463	125,730

(a) All share and per share amounts have been restated to retroactively reflect the two-for-one stock split announced on December 11, 2003 and effected January 2, 2004.

**PULTE HOMES, INC.**  
**UNAUDITED QUARTERLY INFORMATION**  
(000's omitted, except per share data)

	<u>1st</u> <u>Quarter</u>	<u>2nd</u> <u>Quarter</u>	<u>3rd</u> <u>Quarter</u>	<u>4th</u> <u>Quarter</u>	<u>Total</u>
<b>2002</b>					
<b>Homebuilding:</b>					
Revenues.....	\$ 1,355,605	\$ 1,661,670	\$ 1,831,317	\$ 2,515,397	\$ 7,363,989
Income before income taxes.....	115,334	146,522	180,180	282,031	724,067
<b>Financial Services:</b>					
Revenues.....	\$ 23,024	\$ 23,842	\$ 27,836	\$ 31,926	\$ 106,628
Income before income taxes.....	12,254	16,162	19,168	19,139	66,723
<b>Corporate:</b>					
Revenues.....	\$ 112	\$ 51	\$ 353	\$ 686	\$ 1,202
Loss before income taxes.....	(15,054)	(14,462)	(13,254)	(19,198)	(61,968)
<b>Consolidated results:</b>					
Revenues.....	\$ 1,378,741	\$ 1,685,563	\$ 1,859,506	\$ 2,548,009	\$ 7,471,819
Income from continuing operations before income taxes.....	112,534	148,222	186,094	281,972	728,822
Income taxes.....	43,894	57,814	72,585	109,928	284,221
Income from continuing operations.....	68,640	90,408	113,509	172,044	444,601
Income (loss) from discontinued operations.....	(528)	(205)	9,937	(160)	9,044
Net income.....	\$ 68,112	\$ 90,203	\$ 123,446	\$ 171,884	\$ 453,645
<b>Per share data (a):</b>					
<b>Basic:</b>					
Income from continuing operations.....	\$ .57	\$ .75	\$ .93	\$ 1.42	\$ 3.68
Income (loss) from discontinued operations	-	-	.08	-	.07
Net income.....	\$ .57	\$ .75	\$ 1.02	\$ 1.41	\$ 3.75
Weighted-average common shares outstanding.....	119,726	121,001	121,584	121,552	120,906
<b>Assuming dilution:</b>					
Income from continuing operations.....	\$ .56	\$ .72	\$ .92	\$ 1.39	\$ 3.60
Income (loss) from discontinued operations	-	-	.08	-	.07
Net income.....	\$ .55	\$ .72	\$ 1.00	\$ 1.39	\$ 3.67
Adjusted weighted-average common shares and effect of dilutive securities.....	122,944	124,718	123,900	123,649	123,492

(a) All share and per share amounts have been restated to retroactively reflect the two-for-one stock split announced on December 11, 2003 and effected January 2, 2004.

**ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

This Item is not applicable.

**ITEM 9A. CONTROLS AND PROCEDURES**

Management, including our President & Chief Executive Officer and Executive Vice President & Chief Financial Officer, evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2003. Based upon, and as of the date of that evaluation, our President & Chief Executive Officer and Executive Vice President & Chief Financial Officer concluded that the disclosure controls and procedures were effective, in all material respects, to ensure that information required to be disclosed in the reports we file and submit under the Exchange Act is recorded, processed, summarized and reported as and when required.

There has been no change in our internal control over financial reporting during the quarter ended December 31, 2003 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**PART III**

**ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT**

Information required by this Item with respect to our executive officers is set forth in Item 4A. Information required by this Item with respect to members of our Board of Directors is contained in the Proxy Statement for the 2004 Annual Meeting of Shareholders (2004 Proxy Statement) under the caption "Election of Directors" and under the caption "Board of Directors" incorporated herein by this reference. Information required by this Item with respect to compliance with Section 16(a) of the Securities Exchange Act of 1934 is contained in the 2004 Proxy Statement under the caption "Section 16(a) Beneficial Ownership Reporting Compliance," incorporated herein by this reference. Information required by this Item with respect to our code of ethics is contained in the 2004 Proxy Statement under the caption "Code of Ethics / Business Practices Policy," incorporated herein by this reference.

**ITEM 11. EXECUTIVE COMPENSATION**

Information required by this Item is contained in the 2004 Proxy Statement under the caption "Compensation of Named Executive Officers" incorporated herein by this reference.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The following table provides information as of December 31, 2003, with respect to our shares of common stock that may be issued under our existing equity compensation plans:

<u>Plan Category</u>	<u>Number of Common Shares to be Issued Upon Exercise of Outstanding Options (a)</u>	<u>Weighted-Average Exercise Price of Outstanding Options (b)</u>	<u>Number of Common Shares Remaining Available for Future Issuance Under Equity Compensation Shares (excluding Common Shares Reflected in Column (a)) (c)</u>
Equity compensation plans approved by stockholders	10,776,764	\$ 23.38	3,123,350
Equity compensation plans not approved by stockholders	-	-	-
Total	<u>10,776,764</u>	<u>\$ 23.38</u>	<u>3,123,350</u>

All other information required by this Item is contained in the 2004 Proxy Statement under the caption "Beneficial Ownership of Significant Shareholders," under the caption "Election of Directors" and under the caption "Board of Directors," incorporated herein by this reference.

## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Information required by this Item is contained in the 2004 Proxy Statement under the caption "Compensation of Named Executive Officers" incorporated herein by this reference.

## ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information required by this Item is contained in the 2004 Proxy Statement under the captions "Approval Policies for Services Provided by the Independent Auditors" and "Other Important Committee Activities" incorporated herein by reference.

## PART IV

## ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

The following documents are filed as part of this Annual Report on Form 10-K.

### (a) Financial Statements and Schedules

(1) Financial Statements	<u>Page Herein</u>
Consolidated Balance Sheets at December 31, 2003 and 2002 .....	26
Consolidated Statements of Operations for the years ended December 31, 2003, 2002 and 2001 .....	27
Consolidated Statements of Shareholders' Equity for the years ended December 31, 2003, 2002 and 2001 .....	28
Consolidated Statements of Cash Flows for the years ended December 31, 2003, 2002 and 2001 .....	29
Notes to Consolidated Financial Statements .....	30

All schedules are omitted since the required information is not present, is not present in amounts sufficient to require submission of the schedule or because the required information is included in the financial statements or notes thereto.

### (2) Exhibits

#### Exhibit Number and Description

- |                 |     |   |
|-----------------|-----|---|
| (2) and<br>(10) | (a) | Plan and Agreement of merger dated as of April 30, 2001, among Del Webb Corporation, Pulte Corporation and Pulte Acquisition Corporation. (Incorporated by reference to Exhibit 2.1 to our Registration Statement on Form S-4, Registration No. 33-62518).  |
| (3)             | (a) | Articles of Incorporation, as amended, of Pulte Homes, Inc. (Incorporated by reference to Exhibit 3.1 to our Registration Statement on Form S-4, Registration No. 33-62518).  |
|                 | (b) | By-laws, as amended, of Pulte Homes, Inc. (Incorporated by reference to Exhibit 3(b) to our Annual Report on 10-K for the year ended December 31, 2002).  |
| (4)             | (a) | Senior Note Indenture dated as of December 31, 1993, among Pulte Corporation, certain of its subsidiaries, as Guarantors, and NationsBank of Georgia, National Association, as Trustee, including Form of Senior Guarantee, covering Pulte Corporation's 8.375% unsecured senior notes due 2004 (\$112,000,000 aggregate principal amount outstanding). (Incorporated by reference to Exhibit 4.1 to our Registration Statement on Form S-3, Registration No. 33-71742).  |
|                 | (b) | Senior Note Indenture dated as of October 24, 1995, among Pulte Corporation, certain of its subsidiaries, as Guarantors, and The First National Bank of Chicago, as Trustee, covering Pulte Corporation's 7.3% unsecured senior notes due 2005 (\$125,000,000 aggregate principal amount outstanding) and 7.625% unsecured senior notes due 2017 (\$150,000,000 aggregate principal amount outstanding). (Incorporated by reference to Exhibit (c) 1 to our Current Report on Form 8-K dated October 20, 1995). |

## Exhibit Number and Description

- (4) (c) Indenture Supplement dated as of August 27, 1997, among Pulte Corporation, Bank One Trust Company, National Association (as successor Trustee to The First National Bank of Chicago), and certain subsidiaries of Pulte Corporation. (Incorporated by reference to Exhibit 4.2 to our Current Report on Form 8-K dated October 6, 1997).
- (d) Indenture Supplement dated August 27, 1997, among Pulte Corporation, The Bank of New York (as successor Trustee to NationsBank of Georgia, National Association), Pulte Home Corporation and certain subsidiaries of Pulte Corporation. (Incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K dated October 6, 1997).
- (e) Indenture Supplement dated as of March 20, 1998, among Pulte Corporation, Bank One Trust Company, National Association (as successor Trustee to The First National Bank of Chicago), and certain subsidiaries of Pulte Corporation. (Incorporated by reference to Exhibit 4.2 to our Current Report on Form 8-K dated March 24, 1998).
- (f) Indenture Supplement dated as of March 20, 1998, among Pulte Corporation, The Bank of New York (as successor Trustee to NationsBank of Georgia, National Association), Pulte Home Corporation and certain subsidiaries of Pulte Corporation. (Incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K dated March 24, 1998).
- (g) Indenture Supplement dated January 31, 1999, among Pulte Corporation, Bank One Trust Company, National Association (as successor Trustee to The First National Bank of Chicago), and certain subsidiaries of Pulte Corporation. (Incorporated by reference to Exhibit 4.2 to our Current Report on Form 8-K dated March 3, 1999).
- (h) Indenture Supplement dated January 31, 1999, among Pulte Corporation, The Bank of New York (as successor Trustee to NationsBank of Georgia, National Association), Pulte Home Corporation and certain subsidiaries of Pulte Corporation. (Incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K dated March 3, 1999).
- (i) Indenture Supplement dated April 3, 2000, among Pulte Homes, Inc., Bank One Trust Company, National Association (as successor Trustee to The First National Bank of Chicago), and certain subsidiaries of Pulte Homes, Inc. (Filed herewith)
- (j) Indenture Supplement dated February 21, 2001, among Pulte Homes, Inc., Bank One Trust Company, National Association (as successor Trustee to The First National Bank of Chicago), and certain subsidiaries of Pulte Homes, Inc. (Filed herewith)
- (k) Indenture Supplement dated July 31, 2001, among Pulte Homes, Inc., the Bank of New York and certain subsidiaries of Pulte Homes, Inc. (Incorporated by reference to Exhibit 4.13 to our Registration Statement on Form S-4, Registration No. 33-70786).
- (l) Indenture Supplement dated August 6, 2001, among Pulte Homes, Inc., Bank One Trust Company, National Association (as successor Trustee to The First National Bank of Chicago), and certain subsidiaries of Pulte Homes, Inc. (Incorporated by reference to Exhibit 4.8 to our Registration Statement on Form S-4, Registration No. 33-70786).
- (m) Indenture Supplement dated June 12, 2002, among Pulte Homes, Inc., Bank One Trust Company, National Association (as successor Trustee to The First National Bank of Chicago), and certain subsidiaries of Pulte Homes, Inc. (Filed herewith)
- (n) Indenture Supplement dated February 3, 2003, among Pulte Homes, Inc., Bank One Trust Company, National Association (as successor Trustee to The First National Bank of Chicago), and certain subsidiaries of Pulte Homes, Inc. (Filed herewith)
- (o) Indenture Supplement dated May 22, 2003, among Pulte Homes, Inc., Bank One Trust Company, National Association (as successor Trustee to The First National Bank of Chicago), and certain subsidiaries of Pulte Homes, Inc. (Filed herewith)

**Exhibit Number and Description**

- (4) (p) Indenture Supplement dated January 16, 2004, among Pulte Homes, Inc., J.P. Morgan Trust Company, National Association (as successor Trustee to Bank One Trust Company, National Association, which was successor Trustee to The First National Bank of Chicago), and certain subsidiaries of Pulte Homes, Inc. (Filed herewith)
- (q) Registration Rights Agreement dated August 6, 2001, among Pulte Homes, Inc. and Solomon Smith Barney, Inc. as the Initial Purchaser Representative. (Incorporated by reference to Exhibit 4.23 to our Registration Statement on Form S-4, Registration No. 33-70786).
- (r) Form of Pulte Homes, Inc. Guarantee Agreement. (Incorporated by reference to Exhibit 4.32 to our Registration Statement on Form S-3, Registration No. 333-86806).
- (10) (a) 1990 Stock Incentive Plan for Key Employees (Filed with the Proxy Statement dated April 3, 1990 and as an exhibit to the Registrant's Registration Statement on Form S-8, Registration No. 33-40102).
- (b) 1994 Stock Incentive Plan for Key Employees (Incorporated by reference to our Proxy Statement dated March 31, 1994, and an exhibit to our Registration Statement on Form S-8, Registration No. 33-98944).
- (c) 1995 Stock Incentive Plan for Key Employees. (Incorporated by reference to our Proxy Statement dated March 31, 1995, and an exhibit to our Registration Statement on Form S-8, Registration No. 33-99218).
- (d) 1997 Stock Plan for Nonemployee Directors. (Incorporated by reference to our Proxy Statement dated March 27, 1998 and as Exhibit 4.3 to the Registrant's Registration Statement on Form S-8, Registration No. 33-51019).
- (e) Credit Agreement among Pulte Homes, Inc. as Borrower, the Lenders Identified Herein, and Bank One, NA, as Administrative Agent, dated as of October 1, 2003. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (f) Intercreditor and Subordination Agreement, dated October 1, 2003, among Asset Seven Corp., Pulte Realty Corporation, certain subsidiaries of Pulte Homes, Inc., Bank One, NA, as Administrative Agent, and Bank One Trust Company, National Association, as Trustee. (Filed herewith)
- (g) Long Term Incentive Plan. (Incorporated by reference to our Proxy Statement dated March 31, 2000).
- (h) Employment Separation Agreement and Release of all Liability, dated May 11, 2001, between Pulte Corporation and Robert K. Burgess. (Incorporated by reference to Exhibit 10.13 to our Registration Statement on Form S-4, Registration No. 33-62518).
- (i) Pulte Corporation 2000 Stock Plan for Nonemployee Directors. (Incorporated by reference to Exhibit 4.3 to our Registration Statement on Form S-8, Registration No. 33-66286).
- (j) Pulte Corporation 2000 Incentive Plan for Key Employees. (Incorporated by reference to Exhibit 4.3 to our Registration Statement on Form S-8, Registration No. 33-66284).
- (k) Pulte Homes, Inc. 2002 Stock Incentive Plan. (Incorporated by reference to our Proxy Statement dated April 15, 2002).
- (l) Del Webb Corporation Director Stock Plan. (Incorporated by reference to Exhibit 4.3 to our Registration Statement on Form S-8, Registration No. 33-66322).
- (m) Del Webb Corporation 1993 Executive Long-Term Incentive Plan. (Incorporated by reference to Exhibit 4.7 to our Registration Statement on Form S-8, Registration No. 33-66322).
- (n) Del Webb Corporation 1995 Director Stock Plan. (Incorporated by reference to Exhibit 4.4 to our Registration Statement on Form S-8, Registration No. 33-66322).

**Exhibit Number and Description**

- (10) (o) Del Webb Corporation 1995 Executive Long-Term Incentive Plan. (Incorporated by reference to Exhibit 4.8 to our Registration Statement on Form S-8, Registration No. 33-66322).
- (p) Employment Separation Agreement and Release of Liability, dated January 17, 2003, between Pulte Homes, Inc. and Michael A. O'Brien. (Incorporated by reference to Exhibit 3(b) to our Annual Report on Form 10-K for the year ended December 31, 2002).
- (q) Employment Separation Agreement and Release of All Liability, dated as of May 13, 2003, between Pulte Homes, Inc. and Mark J. O'Brien. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (r) Master Repurchase Agreement, dated as of December 22, 2000, between Pulte Mortgage Corporation and Pulte Funding, Inc. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (s) Amended and Restated Addendum to Master Repurchase Agreement, dated as of August 23, 2002, between Pulte Mortgage Corporation and Pulte Funding, Inc. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (t) Amended and Restated Loan Agreement, dated as of August 23, 2002, by and among Pulte Funding, Inc., Atlantic Asset Securitization Corp., Jupiter Securitization Corporation, Credit Lyonnais New York Branch, Bank One, NA (Main Office Chicago), Lloyds TSB Bank PLC and Pulte Mortgage Corporation. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (u) Amended and Restated Collateral Agency Agreement, dated as of August 23, 2002, by and among Pulte Funding, Inc., Credit Lyonnais New York Branch and LaSalle Bank National Association. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (v) Omnibus Amendment, dated as of December 31, 2002, by and among Pulte Funding, Inc., Pulte Mortgage Corporation, Pulte Homes, Inc., Atlantic Asset Securitization Corp., Credit Lyonnais New York Branch, Lloyds TSB Bank PLC, Bank One, NA (Main Office Chicago), Jupiter Securitization Corporation and LaSalle Bank National Association. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (w) Second Omnibus Amendment, dated as of August 25, 2003, by and among Pulte Funding, Inc., Pulte Mortgage Corporation, Credit Lyonnais New York Branch, Atlantic Asset Securitization Corp., Bank One, NA (Main Office Chicago), Jupiter Securitization Corporation, Lloyds TSB Bank PLC and LaSalle Bank National Association. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (x) Third Omnibus Amendment, dated as of September 30, 2003, by and among Pulte Funding, Inc., Pulte Mortgage LLC, Atlantic Asset Securitization Corp., Credit Lyonnais New York Branch, Lloyds TSB Bank PLC, Bank One, NA (Main Office Chicago), Jupiter Securitization Corporation and LaSalle Bank National Association. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (y) Fourth Amended and Restated Revolving Credit Agreement, dated as of March 31, 2003, among Pulte Mortgage LLC, as the Borrower, the banks identified on the signature pages hereof, as the Lenders, and Bank One, NA, as administrative agent for the Lenders. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (z) First Amendment to Credit Agreement, made as of July 31, 2003, by and among Pulte Mortgage LLC, as the Borrower, Bank One, NA, as the Increasing Lender, and Bank One, NA, as Agent. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).

## Exhibit Number and Description

- (10) (aa) Second Amendment to Credit Agreement, made as of October 6, 2003, by and among Pulte Mortgage LLC, as the Borrower, Bank One, NA, as the Agent, and Bank One, NA, Bank of America, N.A. and Credit Lyonnais New York Branch, as the Supplemental Lenders. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (ab) Third Amendment to Credit Agreement, made as of October 27, 2003, by and among Pulte Mortgage LLC, as the Borrower, Bank One, NA, as the Agent and Washington Mutual Bank, FA and National City Bank of Kentucky, as the Supplemental Lenders. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003).
- (ac) Third Amended and Restated Security and Collateral Agency Agreement, dated as of March 31, 2003, by and among Pulte Mortgage LLC, Bank One, NA and LaSalle Bank National Association. (Incorporated by reference to Exhibit 10 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2003 ).
- (ad) Fourth Amendment to Credit Agreement, made as of November 7, 2003, by and among Pulte Mortgage LLC, as the Borrower, Bank One, NA, as the Agent and LaSalle Bank National Association, as Supplemental Lender. (Filed herewith)
- (21) Subsidiaries of the Registrant. (Filed herewith)
- (23) Consent of Independent Auditors. (Filed herewith)
- (31) (a) Rule 13a-14(a) Certification by Richard J. Dugas, Jr., President and Chief Executive Officer (Filed herewith)
- (b) Rule 13a-14(a) Certification by Roger A. Cregg, Executive Vice President and Chief Financial Officer (Filed herewith)
- (32) (a) Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Filed herewith)
- (b) Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Filed herewith)
- (99) (a) Settlement and Termination Agreement, dated October 12, 2001, between Federal Deposit Insurance Corporation, as Manager of the FSLIC Resolution Fund; First Heights Bank, a Federal Savings Bank; Pulte Diversified Companies, Inc.; and Pulte Homes, Inc. f/k/a Pulte Corporation. (Incorporated by reference to Exhibit 99(a) to our Annual Report on Form 10-K for the year ended December 31, 2001).

### **(b) Reports on Form 8-K**

On November 20, 2003, we filed a Current Report on Form 8-K, which included a press release dated the same day, announcing the redemption of Del Webb Corporation Senior Subordinated Debentures.

On December 15, 2003, we filed a Current Report on Form 8-K, which included a press release dated the same day, announcing the Board's approval of a two-for-one stock split.

On January 9, 2004, we filed a Current Report on Form 8-K, which included a press release dated the same day, announcing net new home orders for the three months and the year ended December 31, 2003.

On January 28, 2004, we furnished a Current Report on Form 8-K, reporting the information required by Item 12 in connection with our press release dated January 28, 2004, announcing our earnings for the year ended December 31, 2003. No financial statements were filed, although we furnished the financial information included in the press release with the Form 8-K.

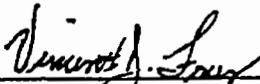
**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

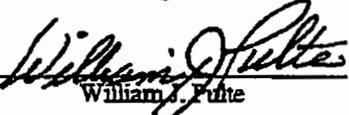
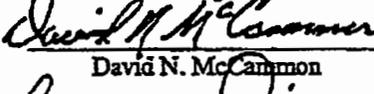
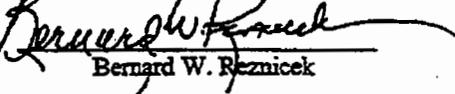
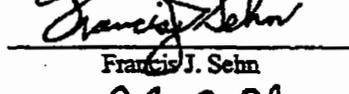
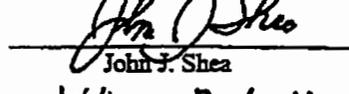
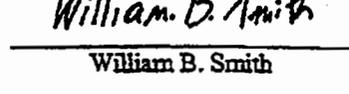
PULTE HOMES, INC.  
(Registrant)

February 27, 2004

  
Roger A. Cregg  
Executive Vice President  
and Chief Financial Officer  
(Principal Financial Officer)

  
Vincent J. Frees  
Vice President and Controller  
(Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capabilities and on the dates indicated:

Signature	Title	Date
 William J. Pulte	Chairman of the Board of Directors	February 27, 2004
 Richard N. Dugas, Jr.	President, Chief Executive Officer and Member of the Board of Directors (Principal Executive Officer)	February 27, 2004
 D. Kent Anderson	Member of Board of Directors	February 27, 2004
 Debra Kelly-Ennis	Member of Board of Directors	February 27, 2004
 David N. McCammon	Member of Board of Directors	February 27, 2004
 Bernard W. Reznicek	Member of Board of Directors	February 27, 2004
 Michael E. Rossi	Member of Board of Directors	February 27, 2004
 Alan E. Schwartz	Member of Board of Directors	February 27, 2004
 Francis J. Sehn	Member of Board of Directors	February 27, 2004
 John J. Shea	Member of Board of Directors	February 27, 2004
 William B. Smith	Member of Board of Directors	February 27, 2004

**PULTE HOMES, INC.**  
**SUBSIDIARIES OF THE REGISTRANT**  
**At December 31, 2003**

Pulte Homes, Inc. (the Company) owns 100% of the capital stock of Pulte Diversified Companies, Inc., Pulte Financial Companies, Inc. (PFCI), Radnor Homes, Inc., Pulte.com, Inc., PH1 Corporation, and Pulte Realty Holdings, Inc., Inc., all Michigan corporations, North American Builders Indemnity Company, a Colorado corporation, Marquette Title Insurance Company, a Vermont corporation, RN Acquisition 2 Corp., a Nevada corporation, Del Webb Corporation (Del Webb), a Delaware corporation and 100% of PB Venture L.L.C., Pulte Land Company, LLC, Pulte Michigan Services, LLC, Pulte Homes of Michigan, LLC and Pulte Homes of Ohio, LLC, all Michigan limited liability companies. The Company is a member of the following corporation and limited liability companies:

<u>Entity Name</u>	<u>Place of Formation</u>	<u>Percentage Ownership</u>
Grayhaven Estates Limited, L.L.C.	Michigan	99%
City Homes Development L.L.C.	Michigan	50%
Shorepointe Village Homes, L.L.C.	Michigan	82.5%
Contractors Insurance Company of North America, Inc., a Risk Retention Group	Hawaii	.01%

Pulte Diversified Companies, Inc. owns 100% of the capital stock of Pulte International Corporation, Pulte Home Corporation (PHC) and American Title of the Palm Beaches Corporation, all Michigan corporations, First Heights Bank, a federal savings bank and PH5 Corporation, a Delaware corporation.

Pulte International Corporation owns 100% of the capital stock of Pulte International-Mexico, Inc., Pulte International Caribbean Corp., Pulte Chile Corporation, Pulte SA Corporation, Pulte Argentina Corporation and Pulte SRL Corporation, all Michigan corporations, PIMI Holdings LLC, a Michigan limited liability company and 99% of Pulte International Mexico Limited Partnership, a Michigan limited partnership. Pulte SRL Corporation and Pulte Argentina Corporation each own 50% of Pulte S.R.L., an Argentine limited partnership. PIMI Holdings LLC owns 1% of Pulte International Mexico Limited Partnership, a Michigan limited partnership. Pulte International Mexico Limited Partnership owns 100% of Pulte SRL Holdings, LLC, a Michigan limited liability company.

Pulte International-Mexico, Inc. and PHC own 99.99% and .01%, respectively, of the capital stock of Controladora PHC, S.A. de C.V. (Controladora), a Mexican corporation and Pulte International-Mexico, Inc. owns 3.3% of Pulte Mexico Division Norte, S. de R.L. de C.V., also a Mexican corporation. Pulte International-Mexico, Inc. owns .1% of Nantar S. de R.L. de C.V., .01% of Pulte Bajio Construcciones S. de R.L. de C.V. and .01% of Pulte Mexico Division Centro Sur S. de R.L. de C.V., 1% of Pulte Internacional Mexico S. de R.L. de C.V., all Mexican limited liability companies. Controladora owns 99.9% of Nantar, S. de R.L. de C.V., a Mexican limited liability company, 63.8% of Pulte Mexico S. de R.L. de C.V. (Pulte Mexico), and 99% of Pulte Internacional Mexico S. de R.L. de C.V., both Mexican limited liability companies, 25% of Residencial Riviera, S.A. de C.V., a Mexican corporation, and 25% of Ciudad Riviera, S.A. de C.V., a Mexican corporation. Pulte Mexico owns 99.99% of Pulte Mexico Division Centro Sur S. de R.L. de C.V. and 99.99% of Pulte Bajio Construcciones S. de R.L. de C.V., both Mexican limited liability companies, and 96.7% of Pulte Mexico Division Norte, S. de R.L. de C.V., a Mexican corporation.

Pulte International Caribbean Corp. owns 100% of the capital stock of Pulte International Building Corporation, a Michigan corporation. Pulte International Building Corporation owns 50% of Desarrolladores Urbanos (Canovanas) SE, 50% of Mayaguez Partners, S.E., and 50% of Andrea's Court, S.E., all Puerto Rican general partnerships.

Pulte Chile Corporation owns 99% and Pulte SA Corporation owns 1% of Pulte de Chile Limitada, a Chilean limited partnership. Pulte Chile Corporation owns 99.9% and Pulte SA Corporation owns .1% of Residencias del Norte Limitada, a Chilean limited liability company.

PH5 Corporation owns 100% of the capital stock of DiVosta Homes Holdings, LLC a Delaware limited liability company and 99% of DiVosta Homes, LP, a Delaware limited partnership. DiVosta Home Holdings, LLC owns 1% of DiVosta Homes, L.P., a Delaware limited liability company.

**PULTE HOMES, INC.**  
**SUBSIDIARIES OF THE REGISTRANT (continued)**

DiVosta Homes, L.P. owns 100% of the capital stock of Abacoa Homes, Inc., DiVosta Homes Marketing, Inc., Florida Building Products, Inc., Florida Club Homes, Inc., Hammock Reserve Development Company, Island Walk Development Company, RiverWalk of the Palm Beaches Development Company, Inc., DiVosta Building Corporation, Village Walk Development Company, Inc., Island Walk Realty, Inc. and DiVosta Home Sales, Inc., all Florida corporations. DiVosta Homes, L.P. owns 100% of the capital stock of PH3 Corporation, a Michigan corporation.

PFCI owns 100% of the capital stock of Guaranteed Mortgage Corporation III, a Michigan corporation.

Radnor Homes, Inc. owns 25.6% and RN Acquisition 2 Corp. owns 74.4% of Pulte Homes Tennessee Limited Partnership, a Nevada limited partnership.

Pulte Realty Holdings, Inc. owns 100% of the capital stock of Pulte RC, LLC, a Michigan limited liability company, Pulte Realty Corporation, an Arizona corporation and 99% of Pulte International Caribbean II, Limited Partnership, a Michigan limited partnership. Pulte RC, LLC owns 1% of Pulte International Caribbean II, Limited Partnership, a Michigan limited partnership.

North American Builders Indemnity Company owns 99.99% of the capital stock of Contractors Insurance Company of North America, Inc., a Risk Retention Group, a Hawaii Corporation.

PB Venture L.L.C. owns 100% of PC/BRE Venture L.L.C., a Delaware limited liability company.

PC/BRE Venture L.L.C. owns 100% of PC/BRE Development L.L.C., PC/BRE Whitney Oaks L.L.C., PC/BRE Winfield L.L.C. and PC/BRE Springfield L.L.C., all Delaware limited liability companies.

PC/BRE Springfield L.L.C. owns 88% of Springfield Golf Resort, L.L.C., an Arizona limited liability company.

Marquette Title Insurance Company owns 100% of Pulte Services California, LLC, a Michigan limited liability company.

Pulte Homes of Michigan, LLC owns 100% of the capital stock of Pulte IN-Corporation and Sean/Christopher Homes, Inc., both Michigan corporations, Pulte Home Sciences, LLC, a Michigan limited liability company and 99% of Pulte Homes of Michigan I Limited Partnership, a Michigan limited partnership. Pulte In-Corporation and Sean/Christopher Homes, Inc. each own 50% of Pulte Homes of Indiana, LLC, an Indiana limited liability company.

Pulte Homes of Ohio, LLC owns 100% of the capital stock of Butterfield Properties, LLC, an Ohio limited liability company.

PHC owns 100% of the capital stock or is sole member of the following subsidiaries:

<u>Company Name</u>	<u>Place of Incorporation/Formation</u>
Pulte Mortgage LLC (1) .....	Delaware
Lexington Oaks Golf Club, Inc. ....	Florida
Preserve I, Inc. (2) .....	Michigan
Preserve II, Inc. (2) .....	Michigan
TVM Corporation (3) .....	Michigan
Pulte Homes of Minnesota Corporation .....	Minnesota
Pulte Home Corporation of The Delaware Valley (4) .....	Michigan
PBW Corporation (5) .....	Michigan
Wil Corporation (5) .....	Michigan
Homesite Solutions Corporation .....	Michigan
Pulte Homes of South Carolina, Inc. ....	Michigan
Pulte Lifestyle Communities, Inc. ....	Michigan
Pulte Payroll Corporation .....	Michigan
PHC Title Corporation (6) .....	Michigan

**PULTE HOMES, INC.**  
**SUBSIDIARIES OF THE REGISTRANT (continued)**

<u>Company Name</u>	<u>Place of Incorporation/Formation</u>
Pulte Land Development Corporation .....	Michigan
Pulte Homes of Greater Kansas City, Inc. ....	Michigan
PN I, Inc. (7) .....	Nevada
PN II, Inc. (7) .....	Nevada
PHT Title Corporation (8) .....	Michigan
Frederick Holding Corp .....	Michigan
Lone Tree Golf Club, LLC .....	Michigan
Pulte Michigan Holdings Corporation (9) .....	Michigan
Chandler Natural Resources Corporation (10) .....	Michigan
Edinburgh Realty Corporation .....	Michigan
Pulte Homes of New York, Inc. ....	Michigan
PH2 Corporation .....	Michigan
PHNE Business Trust (11) .....	Massachusetts
Fox Glen Retreat, L.L.C. ....	Michigan
Gatestone, L.L.C. ....	Michigan
Pulte Development Corporation (12) .....	Michigan
Pulte Services Corporation .....	Michigan
Grand Place Hayward, LLC .....	California
Clairmont, L.L.C. ....	Michigan
Corte Bella Golf Club, LLC .....	Michigan
JNN Properties, LLC .....	Michigan
Pulte Development New Mexico, Inc. ....	Michigan
Pulte Homes of New Mexico, Inc. ....	Michigan
Pulte Realty of New York, Inc. ....	New York
Pulte Realty of South Jersey, Inc. ....	Michigan
Pulte Trades of North Carolina, LLC .....	Michigan
Pulte Georgia Holdings, LLC (14) .....	Michigan

**PULTE HOMES, INC.**  
**SUBSIDIARIES OF THE REGISTRANT (continued)**

- 1) Pulte Mortgage LLC owns 100% of the capital stock of PCIC Corporation and Pulte Funding, Inc., both Michigan corporations, Joliet Mortgage Reinsurance Company, a Vermont corporation, Del Webb Mortgage LLC, a Delaware limited liability company, 22.2% of the capital stock of Hipotecaria Su Casita, S.A. de C.V., a Mexican corporation, and 22.19% of Fideicomiso 102412, a Mexican business trust. Fideicomiso 102412 owns 55.15% of Interesa, S.A. de C.V., Sociedad Operadora de Sociadados de Inversion, a Mexican corporation.
- 2) Preserve II, Inc. owns 99% and Preserve I, Inc. owns 1% of Pulte Communities NJ, Limited Partnership, a Michigan partnership. Preserve II, Inc. also owns 99% of Pulte Homes of NJ, Limited Partnership and 99% of Pulte Homes of PA, Limited Partnership, both Michigan partnerships. Preserve I, Inc. also owns 100% of the capital stock of HydroSource Acquisitions, Inc., a Michigan corporation, and Jersey Meadows, LLC, a New Jersey limited liability company.
- 3) TVM Corporation owns 63% of PHM Title Agency L.L.C., a Delaware limited liability company.
- 4) Pulte Home Corporation of The Delaware Valley owns 1% of Pulte Homes of NJ, Limited Partnership and 1% of Pulte Homes of PA, Limited Partnership, both Michigan partnerships.
- 5) PBW Corporation owns 99% and Wil Corporation owns 1% of Wilben II Limited Partnership, a Maryland limited partnership. PBW Corporation owns 5% and Wil Corporation owns 95% of Wilben, LLLP, a Maryland limited partnership. PBW Corporation and Wil Corporation each own 50% of One Willowbrook, LLC, a Maryland limited liability company. Wil Corporation also owns 100% of Highlands One, H.D. Investments I, L.L.C., Bel North, LLC, William's Field at Perry Hall, L.L.C., Carr's Grant, LLC, Harrison Hills, LLC, Campus Lakes, LLC, August Woods, LLC and Lyons, LC, all Maryland limited liability companies.
- 6) PHC Title Corporation owns 80% of Pulte Title Agency of Minnesota, L.L.C., a Minnesota limited liability company, 99% of PHT Title Agency, L.P., a Texas limited partnership, 49% of Pulte Title Agency of Ohio, LLC, an Ohio limited liability company and 49% of Pulte Title Agency of Michigan, L.L.C., a Michigan limited liability company.
- 7) PN I, Inc., owns .1% and PN II, Inc. owns 99.9% of Devtex Land, L.P. and Pulte Homes of Texas, L.P., both Texas limited partnerships. PN II, Inc. also owns 100% of the capital stock of Pulte Texas Holdings, Inc., a Michigan corporation and 100% of Pratte Acquisition, LLC, a Michigan limited liability company. Pulte Homes of Texas, L.P. owns 100% of PHT Operating Company LLC, a Michigan limited liability company. Pulte Homes of Texas, L.P. owns 99.9% and PHT Operating Company LLC owns .1% of PHT Building Materials Limited Partnership, a Michigan limited partnership. PNI, Inc. also owns 1% of Grayhaven Estates Limited, L.L.C., a Michigan limited liability company.
- 8) PHT Title Corporation owns 1% of PHT Title Agency, L.P., a Texas limited partnership.
- 9) Pulte Michigan Holdings Corporation owns 1% of Pulte Homes of Michigan I Limited Partnership, a Michigan limited partnership.
- 10) Chandler Natural Resources Corporation owns 100% of Chandler DJ Basin LLC, a Michigan limited liability company.
- 11) PHNE Business Trust owns 100% of Pulte Homes of New England LLC, PHS Virginia Holdings, LLC, and BMD Development, LLC, all Michigan limited liability companies, 100% of GI Development Business Trust, a Massachusetts business trust and 99% of PHS Virginia Limited Partnership, a Michigan limited partnership.  

Pulte Homes of New England, LLC owns 100% of the capital stock of Coachman Development, LLC, Hilltop Farms Development, LLC, Oceanside Village, LLC and South Natick Hills, LLC, all Michigan limited liability companies. Pulte Homes of New England, LLC also owns 100% of Herring Pond Development Corporation and MALDP Development Corporation, both Michigan corporations, and 99% of Willow Brook Associates Limited Partnership, a Massachusetts limited partnership.

PHS Virginia Holdings, LLC owns 1% of PHS Virginia Limited Partnership, a Michigan limited partnership.

GI Development Business Trust owns 100% of the capital stock of Great Island Community, LLC, a Michigan limited liability company. PHS Virginia Limited Partnership owns 100% of the capital stock of Pulte Home Sciences of Virginia, LLC, a Michigan limited liability company.

**PULTE HOMES, INC.**  
**SUBSIDIARIES OF THE REGISTRANT (continued)**

- 12) Pulte Development Corporation owns 50% of PH Arizona LLC, a Michigan limited liability company. PH Arizona LLC owns 100% of the capital stock of Pulte Arizona Services, Inc., a Michigan corporation. Pulte Arizona Services, Inc. owns 100% of the capital stock of Dean Realty Company, Springfield Realty Corporation and PQL Realty Corporation, all Michigan corporations, and Del Webb Community Management Co., an Arizona Corporation. Dean Realty Company owns 100% of Pulte Real Estate Company, a Florida corporation.
- 13) Pulte Georgia Holdings, LLC, owns 100% of RCC Georgia Investor III, LLC, a Delaware limited liability company.

PHC is a member or owns capital stock in the following entities:

<u>Entity Name</u>	<u>Place of Formation</u>	<u>Percentage Ownership</u>
Spa L Builders LLC.....	California	38.60%
Fallsgrove Associates LLC.....	Maryland	35.36%
Chase Triple M, LLC.....	Delaware	51.61%
Fieldstone Estates, L.L.C.....	Arizona	50.00%
PH Arizona LLC.....	Michigan	50.00%
Stetson Venture II, LLC .....	Arizona	50.00%

Del Webb owns 100% of the capital stock or is sole member of the following subsidiaries:

<u>Company Name</u>	<u>Place of Incorporation/Formation</u>
Del Webb's Coventry Homes, Inc. (1).....	Arizona
Del Webb's Spruce Creek Communities, Inc. (2) .....	Arizona
Sun City Homes, Inc. (3).....	Nevada
Del Webb Construction Services Co. (4).....	Arizona
Del Webb Commercial Properties Corporation (5) .....	Arizona
New Mexico Asset Corporation (6) .....	Arizona
Del Webb Communities, Inc. (7) .....	Arizona
Asset One Corp. (8) .....	Arizona
Asset Five Corp .....	Arizona
Del Webb California Corp.....	Arizona
Del E. Webb Financial Corporation.....	Arizona
Del Webb Golf Corp.....	Arizona
Del Webb Homes, Inc .....	Arizona
Del Webb Purchasing Company of Illinois, Inc. ....	Arizona
Del Webb Property Corp. ....	Arizona
Del Webb Title Company of Nevada, Inc.....	Nevada
Del Webb MidAtlantic Corp .....	Arizona
DW Aviation Co .....	Arizona
DW Homebuilding Co.....	Arizona
Mountain View Two, LLC.....	Arizona
Sun City Title Agency of Illinois, Inc. ....	Arizona
Terravita Corp.....	Arizona
Terravita Home Construction Co. ....	Arizona
PH4 Corporation.....	Michigan
Del Webb Communities of Illinois, Inc. (9) .....	Arizona

Del Webb also owns 100% of Asset Seven Corp., an Arizona corporation, and 1% of New Mexico Asset Limited Partnership, an Arizona limited partnership.

**PULTE HOMES, INC.**  
**SUBSIDIARIES OF THE REGISTRANT (continued)**

- 1) Del Webb's Coventry Homes, Inc. owns 100% of the capital stock of Del Webb's Coventry Homes Construction Co., Del Webb's Coventry Homes of Nevada, Inc. and Del Webb communities of Virginia, Inc., all Arizona corporations and 50% of 56<sup>th</sup> and Lone Mountain, L.L.C. an Arizona limited liability company.
- 2) Del Webb's Spruce Creek Communities, Inc. owns 100% of the capital stock of Spruce Creek South Utilities, Inc., a Florida corporation.
- 3) Sun City Homes, Inc. owns 100% of the capital stock of Marina Operations Corp., an Arizona corporation.
- 4) Del Webb Construction Services, Co. owns 100% of the capital stock of Del Webb Southwest Co., an Arizona corporation and .1% of Del E. Webb Development Co., L.P., a Delaware limited partnership. Del Webb Southwest Co. owns 100% of the capital stock of Del Webb Texas Title Agency Co., an Arizona corporation and 1% of Del Webb Texas Limited Partnership, an Arizona limited partnership.
- 5) Del Webb Commercial Properties Corporation owns 100% of the capital stock of Del E. Webb Foothills Corporation, an Arizona corporation.
- 6) New Mexico Asset Corporation owns 99% of New Mexico Asset Limited Partnership, an Arizona limited partnership.
- 7) Del Webb Communities, Inc., owns 100% of the capital stock of Del Webb Limited Holding Co., Del Webb Home Construction, Inc., Thunderbird Lodge Holding Corp., Del Webb's Contracting Services, Inc., Sun City Title Agency Co., Sun State Insulation Co. Inc., Del Webb's Sunflower of Tucson, Inc., all Arizona corporations, and Sun City Sales Corporation, a Michigan corporation. Del Webb Communities, Inc. also owns 99.9% of Del E. Webb Development Co. L.P., a Delaware limited partnership, and 50% of North Valley Enterprises, LLC, a Nevada limited liability company. Del Webb Limited Holding Co. owns 99% of Del Webb Texas Limited Partnership, an Arizona limited partnership.
- 8) Asset One Corp. owns 50% of Mountain View One LLC, an Arizona limited liability company.
- 9) Del Webb Communities of Illinois, Inc. owns 100% of Anthem Arizona, LLC, an Arizona limited liability company.

**CONSENT OF INDEPENDENT AUDITORS**

We consent to the incorporation by reference in the Registration Statements (Form S-8 No. 33-40102, Form S-8 No. 33-98944, Form S-8 No. 33-99218, Form S-8 No. 33-51019, Form S-8 No. 33-52047, Form S-8 No. 33-66284, Form S-8 No. 33-66286, Form S-8 No. 33-66322, Form S-8 No. 33-102255 and Form S-3 No. 33-109029) of Pulte Homes, Inc. and in the related Prospectuses of our report dated January 23, 2004, with respect to the consolidated financial statements of Pulte Homes, Inc. included in this Annual Report (Form 10-K) for the year ended December 31, 2003.

Detroit, Michigan  
February 24, 2004

## CHIEF EXECUTIVE OFFICER'S CERTIFICATION

I, Richard J. Dugas, Jr., certify that:

1. I have reviewed this annual report on Form 10-K of Pulte Homes, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and we have:
  - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - c. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2004

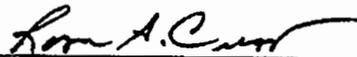
  
Richard J. Dugas, Jr.  
President and Chief Executive Officer

## CHIEF FINANCIAL OFFICER'S CERTIFICATION

I, Roger A. Cregg, certify that:

1. I have reviewed this annual report on Form 10-K of Pulte Homes, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and we have:
  - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - c. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

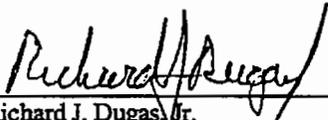
Date: February 27, 2004

  
Roger A. Cregg  
Executive Vice President and  
Chief Financial Officer

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Pulte Homes, Inc. (the "Company") on Form 10-K for the period ended December 31, 2003, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard J. Dugas, Jr., President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

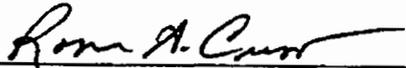
- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

  
\_\_\_\_\_  
Richard J. Dugas, Jr.  
President and Chief Executive Officer  
February 27, 2004

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Pulte Homes, Inc. (the "Company") on Form 10-K for the period ended December 31, 2003, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Roger A. Cregg, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.



\_\_\_\_\_  
Roger A. Cregg  
Executive Vice President and  
Chief Financial Officer  
February 27, 2004

## CORPORATE OFFICERS

**William J. Pulte**  
*Chairman of the Board*

**Richard J. Dugas, Jr.**  
*President and Chief Executive Officer*

**Steven C. Petruska**  
*Executive Vice President and Chief Operating Officer*

**Roger A. Cregg**  
*Executive Vice President and Chief Financial Officer*

**Leo J. Taylor**  
*Executive Vice President, Human Resources*

**John R. Stoller**  
*Senior Vice President, General Counsel and Secretary*

**Jerry R. Batt**  
*Vice President, Chief Information Officer*

**Steven A. Burch**  
*Vice President, Segmentation*

**Cristopher D. Cash**  
*Vice President, Construction*

**Thomas M. Chisholm**  
*Vice President, Sales and Marketing*

**Sean J. Degen**  
*Vice President, Architectural Services*

**Vincent J. Frees**  
*Vice President and Controller*

**Elaine A. Kramer**  
*Vice President, Leadership Development and Training*

**Daniel P. Lynch**  
*Vice President, Compensation and Process Improvement*

**Norma J. Machado**  
*Vice President, H.R. Planning and Development*

**Reginald C. McCoy**  
*Vice President, Supply Chain and Purchasing*

**Gregory M. Nelson**  
*Vice President and Assistant Secretary*

**Erik R. Pekarski**  
*Vice President, Customer Relations*

**Bruce E. Robinson**  
*Vice President and Treasurer*

**Robert P. Schafer**  
*Vice President, Finance and Homebuilding Operations*

**David G. Schreiner**  
*Vice President, Active Adult Development*

**Wayne B. Williams**  
*Vice President, Manufacturing Services*

**James P. Zeumer**  
*Vice President, Investor and Corporate Communications*

## AREA MANAGEMENT

### **Patrick J. Beirne** REGIONAL PRESIDENT—WEST

#### **Arizona Area**

##### **ARIZONA AREA PRESIDENT**

John J. Chadwick

**Phoenix Active Adult**  
*Benjamin S. Redman—President*

**Phoenix Lifestyles**  
*Curtis H. VanHylfte—President*

**Phoenix Traditional**  
*Michael H. Nuessle—President*

**Tucson President**  
*Joseph L. Whatley—President*

#### **Nevada Area**

##### **NEVADA AREA PRESIDENT**

Sheryl D. Palmer

**Las Vegas Active Adult**  
*Christopher Haines—President*

**Las Vegas Traditional**  
*Randall M. Bury—President*

#### **Northern California Area**

##### **NORTHERN CALIFORNIA AREA PRESIDENT**

Matthew W. Koart

**Central Valley**  
*Christopher C. Schimunek—President*

**N. California**  
*J. Steven Kalmbach—President*

**Sacramento**  
*Christopher B. Cady—President*

**Sacramento Active Adult**  
*Mark E. Kaushagen—President*

#### **Rocky Mountain Area**

##### **ROCKY MOUNTAIN AREA PRESIDENT**

C. Dean Amann II

**Colorado**  
*Bruce F. Stokes—President*

**Kansas City**  
*Todd Lipschutz—President*

**Minnesota**  
*Keith W. Tomlinson—President*

**New Mexico**  
*Gerardo Sanchez—President*

#### **Southern California Area**

##### **SOUTHERN CALIFORNIA AREA PRESIDENT**

Igor M. Noriega

**N. Inland Empire**  
*Ronald J. Rakunas—President*

**N. LA/Ventura County**  
*Roderick C. Flint—President*

**San Diego**  
*Leonard Steinberg—President*

**S. Riverside/Orange County**  
*L.J. Edgcomb—President*

#### **Texas Area**

##### **TEXAS AREA PRESIDENT**

Mark A. Thomas

**Austin**  
*Arra Yerganian—President*

**Dallas**  
*Richard B. Dix—President*

**Houston**  
*Steven S. Atchison—President*

**San Antonio**  
*Bart J. Swider—President*

**Sun City Texas**  
*Gary L. Newman—President*

### **Jeffrey K. Parsigian** REGIONAL PRESIDENT—EAST

#### **Florida Area**

##### **FLORIDA AREA PRESIDENT**

James C. Leiferman

**DiVosta**  
*Harmon D. Smith—President*

**Fort Meyers**  
*Gregory G. Wolpert—President*

**Jacksonville**  
*David A. Smith—President*

**Orlando**  
*Marc Tindall—President*

**Spruce Creek**  
*Jay A. Thompson—President*

**Tampa**  
*Scott H. Campbell—President*

#### **Great Lakes Area**

##### **GREAT LAKES AREA PRESIDENT**

Peter Keane

**Chicago Active Adult**  
*Karen L. Brunhofer—President*

**Chicago Traditional**  
*Brian M. Brunhofer—President*

**Cleveland**  
*Gregory J. Schmidt—President*

**Grand Rapids**  
*Jeffrey D. Chamberlain—President*

**Indianapolis**  
*Greg Huff—President*

**Metro Detroit**  
*James J. Bagley, Jr.—President*

#### **Northeast Area**

##### **NORTHEAST AREA PRESIDENT**

Richard D. DiBella

**Baltimore**  
*G. Louis Baker, III—President*

**Delaware Valley**  
*William E. Reiser, Jr.—President*

**Fredericksburg**  
*Christopher J. Ryan—President*

**Long Island**  
*Donald Cowdell—President*

**Metro NY/NJ**  
*William E. Weber—President*

**New England**  
*James R. McCabe—President*

**Washington**  
*David R. Graham—President*

#### **Southeast Area**

##### **SOUTHEAST AREA PRESIDENT**

Greg Duriez

**Charlotte**  
*Thomas W. Bruce—President*

**Georgia**  
*Casey Hill—President*

**Nashville**  
*Joseph S. Bars, Jr.—President*

**Raleigh**  
*Stephen P. Schlageter—President*

**Sun City Hilton Head**  
*Kenneth R. Hull—President*

### **Pulte Mortgage LLC**

**Roger C. Pastore**  
*President and Chief Executive Officer*

**Debra W. Still**  
*Executive Vice President and Chief Operating Officer*

### **International**

#### **INTERNATIONAL**

<b>Argentina</b> <i>Carlos D. Bordo</i>	<b>Mexico</b> <i>Juan C. Diaz</i>	<b>Puerto Rico</b> <i>Francisco J. Arrivi</i>
<b>Enrique Solari</b>		

# CORPORATE INFORMATION

## Senior Corporate Officers

William J. Pulte  
*Chairman of the Board*

Richard J. Dugas, Jr.  
*President and Chief Executive Officer*

Steven C. Petruska  
*Executive Vice President and Chief Operating Officer*

Roger A. Cregg  
*Executive Vice President and Chief Financial Officer*

Leo J. Taylor  
*Executive Vice President, Human Resources*

John R. Stoller  
*Senior Vice President, General Counsel and Secretary*

## Directors

D. Kent Anderson, Chairman<sup>(2)</sup>  
*Beacon Management Corporation*

Richard J. Dugas, Jr.  
*President and Chief Executive Officer*

Debra Kelly-Ennis<sup>(1)(3)</sup>  
*President/COO Saab Cars USA, Inc.*

David N. McCammon<sup>(1)(3)</sup>  
*Senior Partner  
Strength Capital Management  
Retired Vice President of Finance  
Ford Motor Company*

William J. Pulte  
*Chairman of the Board & Founder  
Pulte Homes, Inc.*

Bernard W. Reznicek<sup>(1)(3)</sup>  
*President/CEO  
Premier Enterprises, Inc.*

Michael E. Rossi<sup>(1)</sup>  
*Retired Vice Chairman, Bank of America*

Alan E. Schwartz  
*Partner  
Honigman, Miller, Schwartz and Cohn, Attorneys  
Counsel to the Company*

Francis J. Sehn<sup>(1)(3)</sup>  
*Chief Executive Officer  
The Fran Sehn Company, Inc.*

John J. Shea<sup>(2)(3)</sup>  
*Retired Vice Chairman, President and  
Chief Executive Officer  
Spiegel, Inc.*

William B. Smith<sup>(2)</sup>  
*Advisory Director  
Morgan Stanley Dean Witter & Co.*

(1) Audit Committee Member

(2) Compensation Committee Member

(3) Nominating Committee Member

## Operating Subsidiaries

Pulte Homes, Inc.  
100 Bloomfield Hills Parkway  
Suite 300  
Bloomfield Hills, Michigan 48304

Pulte Mortgage LLC  
7475 South Joliet Street  
Englewood, Colorado 80112

## Investor Information

### Information Requests

The Company's annual report to stockholders and proxy statement together contain substantially all the information presented in the Form 10-K report filed with the Securities and Exchange Commission. Individuals interested in receiving the annual report, Form 10-K, Form 10-Qs or other printed corporate literature should write to the Investor Relations Department at the corporate office or call (248) 647-2750.

### Investor Inquiries

Shareholders, securities analysts, portfolio managers and others with inquiries about the Company should contact James P. Zeumer, Vice President of Investor and Corporate Communications, at the corporate office or call (248) 433-4597. Shareholders with inquiries relating to shareholder records, stock transfers, change of ownership, change of address and dividend payments should contact:

State Street Bank and Trust Company  
% EquiServe  
150 Royall Street  
Canton, MA 02021  
(877) 282-1168  
[www.equiserve.com](http://www.equiserve.com)

## Internet Address

Additional information about Pulte Homes may be obtained by visiting our website at <http://www.pulte.com>.

## Annual Meeting of the Shareholders

The annual meeting of shareholders of Pulte Homes, Inc., will be held at 8:30 a.m. (EDT), Thursday, May 13, 2004, at the Hilton Northfield in Troy, Michigan.

## Common Stock Information

Ticker Symbol: PHM

Pulte Homes, Inc., is a component of the S&P 500 Composite Stock Price Index. Common stock of Pulte Homes, Inc., is listed and traded on the New York Stock Exchange, which is the principal market for the common stock, and is also traded on the Boston, Cincinnati, Midwest, Pacific and Philadelphia stock exchanges. Option trading in Pulte is conducted on the Chicago Board of Exchange.



# Join our growing family of satisfied customers.

Together, Pulte Homes, Del Webb and DiVosta form a family of builders that's dedicated to satisfying customers. And thanks to our homeowners, we have been honored in return with 21 recent J.D. Power and Associates Customer Satisfaction Awards, far more than any other homebuilder. Visit us online to find out more about who we are and where we build. When you work with us, you'll find that we're not satisfied until you are.

*Del Webb*<sup>®</sup>

delwebb.com

*Pulte  
Homes*

pulte.com

**DiVOSTA**<sup>™</sup>  
AND COMPANY

divosta.com

Pulte Homes ranked Highest in Customer Satisfaction With New Home Builders in Las Vegas, Four Years in a Row; Houston, Minneapolis/St Paul, San Francisco Bay Area, Two Years in a Row; Phoenix, Two Years in a Row (Tied in 2002); Raleigh/Durham, Tucson; Dallas/Ft Worth (in a tie) and Tampa Bay (in a tie). • Del Webb ranked Highest in Customer Satisfaction With New Home Builders in Southern California (Tied Three Years in a Row); Sacramento (in a tie). • DiVosta Homes ranked Highest in Customer Satisfaction With New Home Builders in Palm Beach. • Pulte Homes ranked in the Top 3 for Customer Satisfaction With New Home Builders in Chicago, Two Years in a Row; Austin, Charlotte, Philadelphia, and Washington D.C. • Del Webb ranked in the Top 3 for Customer Satisfaction With New Home Builders in Chicago, Las Vegas and Phoenix, Three Years in a Row, and Tucson (in a tie).



J.D. Power and Associates 2000-2004 New Home Builder Customer Satisfaction Studies<sup>SM</sup>. 2003 study based on responses from 71,312 buyers of newly constructed homes in 21 of the largest U.S. markets. For counties in each market, visit [www.jdpower.com](http://www.jdpower.com).

## **Appendix C**

### **Letters and Documents**



## TOWN OF BUCKEYE

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May 10, 2005

Dale Bodiya  
Program Manager  
Water & Waste Management  
Maricopa Department of Environmental Services  
1001 N. Central Ave, Suite 595  
Phoenix, Arizona 85004

**Subject: Sundance MAG 208 AMENDMENT – BUCKEYE, ARIZONA**  
Letter of no objection.

Dear Mr. Bodiya:

The Town of Buckeye is requesting a letter of no objection associated with the Sundance MAG 208 Amendment. The Sundance treatment facility is in the beginning stages of planning for a service area that includes certain county properties. In order for the process to proceed forward it is necessary that the County provide a letter of no objection.

We look forward to your assistance in facilitating the MAG approval process for this 208 Amendment.

Sincerely,  
Town of Buckeye

A handwritten signature in cursive script, appearing to read 'C. Reynolds'.

Carroll Reynolds  
Town Manager

Cc: Michael Worlton, RBF Consulting



August 4, 2005

JN 45-102159

**Maricopa Association of Governments**  
302 North 1<sup>st</sup> Avenue, Suite 300  
Phoenix, AZ 85003

**Re: Town of Buckeye Proposed MAG 208 Amendment for the Sundance WWTP Expansion.**  
**Attention: Julie Hoffman, Environmental Planning Program**

Dear Julie Hoffman,

RBF Consulting is submitting a MAG 208 Water Quality Management Plan Amendment for the expansion of the Sundance Wastewater Treatment Plant in the Town of Buckeye. The proposed service area for the Sundance Wastewater Treatment Plant falls within 3 miles of the City of Glendale's municipal planning area. In accordance with the requirements of the Maricopa Association of Governments and a request placed by RBF Consulting, we are submitting this letter, which implies that the City of Glendale has no objections regarding the proposed sewer service area.

If you have any questions or comments, please feel free to contact me at 623-930-2702.

Sincerely,

A handwritten signature in cursive script that reads "Chris Ochs".

Chris Ochs  
Assistant Utilities Director  
City of Glendale

cc: Russel Fletcher



# Maricopa County

Environmental Services  
Water and Waste Management Division

June 02, 2005

1001 N. Central Ave., Suite 150  
Phoenix, AZ 85004  
Phone: (602) 506-6666  
Fax: (602) 506-6925  
TDD: 602 506 6704  
www.maricopa.gov/envsvc

Maricopa Association of Governments  
302 North 1<sup>st</sup> Avenue, Suite 300  
Phoenix, AZ 85003

Attention: Ms. Lindy Bauer, Environmental Program Coordinator

Re: Town of Buckeye, Sundance Wastewater Treatment Plant Expansion  
**Clean Water Act, MAG 208 Amendment**

Dear Ms. Bauer:

In a letter dated May 27, 2005, RBF Consulting submitted a proposed 208 Amendment for expansion of the Town of Buckeye, Sundance Wastewater Treatment Plant to Maricopa County Environmental Services Department (Department). The Facility is located at the northeast corner of Dean Road and the Roosevelt Canal, in Township 01N, Range 03W, Section 13, NW $\frac{1}{4}$ , SW $\frac{1}{4}$ , NW $\frac{1}{4}$ , in the Town of Buckeye.

The document was submitted to the Department because it is located within three miles of unincorporated areas of Maricopa County.

Based on a review of the proposed 208 MAG 208 Amendment, Submittal #2, dated May, 2005, the Department has determined that the proposed plant is acceptable and complies with the MAG 208 Review and Approval Process under the MAG 208 Areawide Water Quality Management Plan. The proposed plant expansion is not in conflict with Maricopa County plans for the area.

Please note that the Department has not reviewed, nor approved, the design of the facilities as part of the 208 review. Any technical issues that remain will need to be resolved during the design phase of the project. Approval to Construct (ATC) and Approval of Construction (AOC) must be obtained from this Department prior to start of construction and startup, respectively, of all treatment, discharge, recharge, and reuse facilities, including all conveyance facilities and final end user facilities.

If you have any questions or comments, please feel free to contact Mr. Kenneth James, PE, or myself at 506-6666.

Sincerely,

*Kenneth R. James FOR*

Dale Bodiya, P.E.  
Acting Manager, Water and Waste Management Division

cc: Carroll Reynolds, Town Manager, Town of Buckeye, 100 N. Apache, Buckeye, AZ 85326  
Michael Worlton, PE, RBF Consulting, 16605 N. 28<sup>th</sup> Ave., Suite 100, Phoenix, AZ 85053-7550  
File



February 17, 2005

Maricopa Association of Governments  
Brenda Day, Environmental Planning Program Manager  
302 North 1<sup>st</sup> Avenue, Suite 300  
Phoenix, AZ 85003

**RE: PROPOSED MAG 208 AMENDMENT FOR THE TOWN OF BUCKEYE'S  
SUNDANCE WWTP EXPANSION**

Dear Ms. Day:

RBF Consulting is submitting a MAG 208 Water Quality Management Plan Amendment for the expansion of the Sundance Wastewater Treatment Plant in the Town of Buckeye. The proposed service area for the Sundance Wastewater Treatment Plant falls within 3 miles of the City of Goodyear. In accordance with the requirements of the Maricopa Association of Governments and a request placed by RBF Consulting, we are submitting this letter, which confirms that the City of Goodyear has no objections regarding the proposed sewer service area.

If you have any questions or comments, please feel free to contact me at 623-932-3010.

Sincerely,

CITY OF GOODYEAR

A handwritten signature in cursive script that reads "Charles McDowell".

Charles McDowell  
Water Management Director

CMmp: Buckeye Sundance WWTP MAG 208 Amendment

cc: Grant I. Anderson, Deputy City Manager  
Ajay Kashi, RBF Consulting  
File

*Proud past. Vibrant future!*

Water Management Department  
P.O. Box 5100 Goodyear, Arizona 85338  
623-932-3010 Fax 623-932-2171 1-800-872-1749 TDD 623-932-6500  
[www.goodyearaz.gov](http://www.goodyearaz.gov)

**Ajay Kashi - Verrado-DMB White Tank LLC Property south of I-10. NE Quarter of Section 6**

---

**From:** "Bob Kammerle" <BKammerle@dmbinc.com>  
**To:** "Mike Worlton (E-mail)" <mworlton@rbf.com>  
**Date:** 5/11/2005 5:08 PM  
**Subject:** Verrado-DMB White Tank LLC Property south of I-10. NE Quarter of Section 6  
**CC:** "Karrin Taylor @ Biskind Hunt Taylor" <karrint@biskindlaw.com>

---

Mike-  
This e-mail will confirm our conversation that we would like you to include the DMB White Tank LLC property that is South of I-10 in the MAG 208 Amendment application that you intend to file with Maricopa County on 5-13-05.

It is our understanding that the 208 amendment will allow the Sundance plant capacity to increase from 1.2 MGD to 2.4MGD. The additional plant capacity is currently under construction.

We will proceed with Arizona-American Water Company and the Arizona Corporation Commission to exclude the NE Quarter of Section 6 from the current CC&N

Thanks and let me know if you have further questions or need additional clarification.

Robert F. Kammerle  
Director of Forward Planning  
523-388-4230 Office  
523-388-4271 Fax

**From:** "H. David Stensel" <stensel@u.washington.edu>  
**To:** "Jared Carr" <JCARR@rbf.com>  
**Date:** 12/22/2004 5:33:08 PM  
**Subject:** Re: Clarifier designs for Sundance Expansion

Jared,  
the purpose of this email is to summarize our evaluation and my recommendations for the secondary clarifier conceptual design for the Sundance plant expansion, which includes converting the system from an SBR process to the MLE process.

1. We have sized the clarifiers to handle an average flow condition of less than or equal to 600 gpd/ft<sup>2</sup> hydraulic application rate. This will be adequate for the 2:1 transient peak flow ratio. To minimize the impact of solids loading at peak flows the final design in the SBR conversion should allow excess flows to be step fed to a final stage of the aeration tank.
2. A rectangular clarifier configuration with 4 tanks can be provided as an alternative to 4 circular clarifiers to reduce space requirements and to reduce construction costs by using a common wall arrangement. These clarifiers can be located next to the SBR tanks.
3. In the final design effluent weir boxes will have to be installed into the SBR tanks to collect effluent from the different SBR tanks into a common effluent line. The mixed liquor would then be directed to a common pipe or channel located in the middle of the four clarifiers, with the inlet to two clarifiers on each side of this feed line. In this way the feed can be directed to a selected number of clarifiers.
4. The clarifier return sludge would be directed to a common wet well and pump station for return sludge feed to the MLE process.
5. Effluent from the clarifier arrangements would be collected at each end of the two-clarifier modules and pumped to the appropriate polishing filters installed at different locations per the initial SBR systems.
6. We have discussed the preference for gravity flow from the aeration tanks (converted SBR tanks) to the clarifiers so as to prevent floc break up by pumping. This can be accommodated by selecting the appropriate elevation the clarifiers and some additional excavation below grade.

In summary I believe that a clarifier arrangement has been developed that will accommodate a retrofit of the SBR system with consideration for site constraints.

H David Stensel, Ph.D., P.E.  
Department of Civil and Environmental Engineering  
303 More Hall, Box 352700  
University of Washington  
Seattle, WA. 98195  
TN; 206 543-9358 FX: 206 685-9185

**CC:** <rchristensen@rbf.com>

<b>Application ID:</b>	34833
<b>Applicant:</b>	Buckeye, Town Of
<b>Place:</b>	Buckeye, Town Of - WWTP Buckeye
<b>License Category:</b>	APP, Individual Permit, Significant Amendment, No Public Hearing
<b>Current Status:</b>	Substantive Review phase
<b>ADEQ Staff Assigned:</b>	Matthew T. Hodge; mh6@azdeq.gov; (602) 771-4743

Recent Activities	Date
Administrative completeness review done	22-MAR-05
Applicant response to suspension due to deficiencies in ACR phase	08-MAR-05
Inadequate response to Notice of Administrative Deficiencies (with suspension)	24-FEB-05
Notification of administrative deficiencies with suspension	12-JAN-05
Receipt of license application	15-DEC-04

**Agreement between the Town of Buckeye and Buckeye Water  
Conservations and Drainage District (BWCCDD)**

**BEUS GILBERT**  
PLLC

ATTORNEYS AT LAW

4800 NORTH SCOTTSDALE ROAD  
SUITE 6000  
SCOTTSDALE, ARIZONA 85261-7630  
(480) 429-3000  
FAX (480) 429-3100WRITER'S DIRECT LINE  
(480) 429-3062

43142-036

4 November 2004

**VIA FACSIMILE**  
(480) 303-0338Rachel Cantor  
Meritage Corporation  
8501 E. Princess Ste. 200  
Scottsdale, AZ 85255Re: Signed Effluent Delivery and Acceptance Agreement

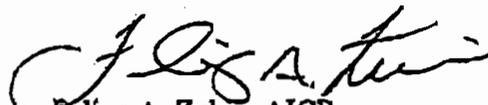
Dear Rachel:

Per our discussion earlier today, attached please find a copy of the Effluent Delivery and Acceptance Agreement.

You will note that this agreement is dated November 19, 2002. The copy I am providing you has been fully executed by all parties including the Buckeye Water Conservations and Drainage District, the Buckeye Irrigation Company and the Town of Buckeye. I do not have a recorded copy, however I do not know that it was necessary to record this agreement. I hope this information proves useful, however if you have any questions regarding this agreement or need additional information please feel free to contact me at the number referenced above.

Thank you,

BEUS GILBERT PLLC

Felipe A. Zubia, AICP  
Planning ConsultantFAZ:ich  
Attachment

cc: Paul E. Gilbert, Esq. (w/o attachment)

## **EFFLUENT DELIVERY AND ACCEPTANCE AGREEMENT**

This Effluent Delivery and Acceptance Agreement (this "Agreement") is entered into as of the 19<sup>th</sup> day of November, 2002, by and among the TOWN OF BUCKEYE, an Arizona municipal corporation (the "Town"), the BUCKEYE WATER CONSERVATION & DRAINAGE DISTRICT, an irrigation district organized as an Arizona municipal corporation ("BWCDD") and the BUCKEYE IRRIGATION COMPANY, a non-profit mutual irrigation corporation organized under the laws of the Arizona territory ("BIC") (BWCDD and BIC are hereinafter sometimes referred to collectively as the "Buckeye Group").

### **RECITALS**

A. The Town provides sewer services to domestic and commercial users within an area generally defined by Miller Road on the west, Dean Road on the east, Interstate 10 on the north and Durango Road on the south ("Sundance Service Area").

B. The Town owns and operates (or will own and operate) a wastewater treatment plant that services the Sundance Service Area, (the "Sundance WWTP"), more particularly described on Exhibit "A" hereto. The Town is the owner of the effluent generated by the Sundance WWTP (the "Effluent").

C. The Town, in its reasonable discretion, has identified certain priority uses for the Effluent ("Priority Uses"). The amount of Effluent, if any, available after the Priority Uses is the surplus effluent (the "Surplus Effluent").

D. BWCDD is an irrigation and drainage district operated in accordance with Title 48, Arizona Revised Statutes. BIC is the owner of irrigation canal rights of way within the boundaries of BWCDD. BWCDD has agreed to accept Surplus Effluent from the Sundance WWTP into its canal system for irrigation, agricultural and other lawful purposes and uses, in accordance with the terms and conditions of this Agreement.

E. A permit issued under the federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES) has been or will be obtained by the Town to authorize the discharge of Surplus Effluent into the BWCDD canal system and the Town will maintain or cause to be maintained the NPDES Permit, as required, during the term hereof.

F. The Town, BWCDD and BIC desire to enter into this Agreement to set forth the terms and conditions for the delivery by the Town to BWCDD, and acceptance by BWCDD, of Surplus Effluent.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree to the following:

## **AGREEMENT**

1. **Delivery of Surplus Effluent.** The Town agrees to deliver Surplus Effluent to BWCDD and BWCDD will accept all of the Surplus Effluent delivered by the Town in accordance with the terms and conditions of this Agreement. The Surplus Effluent will be delivered by the Town at no cost to BWCDD, and the Surplus Effluent that is delivered to BWCDD in accordance with the terms and conditions of this Agreement will be accepted by BWCDD without any payment from the Town to BWCDD.

2. **Quantity of Surplus Effluent and Initial Delivery.** There is no guaranteed minimum amount of Surplus Effluent that will be delivered to BWCDD. However, the amount of Surplus Effluent delivered to BWCDD will not exceed 7.2 million gallons per day without the express written consent of BWCDD. There is no guaranteed schedule for delivery of Surplus Effluent to BWCDD. The Town will provide BWCDD written notice of the estimated initial delivery date of Surplus Effluent, together with an estimate of the amount and flow rate of the Surplus Effluent, at least sixty (60) days prior to the estimated initial delivery date of Surplus Effluent.

3. **Quality of Surplus Effluent.** Prior to delivery to BWCDD, the Surplus Effluent will be treated by the Town to a minimum of Class A reclaimed water standards, as established by A.A.C. R18-11-304. In the event the Surplus Effluent delivered to BWCDD does not meet the Class A reclaimed water standards, Town will, as soon as reasonably possible after discovering that fact, notify BWCDD of the diminished quality of the Surplus Effluent. In such event, the sole remedy of BWCDD will be to refuse acceptance of the Surplus Effluent. In the event BWCDD refuses acceptance of the Surplus Effluent for any reason, however, the Buckeye Group will allow disposal of the Surplus Effluent into the lateral ditch system utilized by BWCDD to transport water to the Gila River ("Alternate Disposal"). Any permits, costs, or expenses required for or directly resulting from the Alternate Disposal will be obtained or provided by the Town, so long as the Surplus Effluent subject to the Alternate Disposal is not put to beneficial use by BWCDD. Any land use rights over or across lands or interests in lands owned by the Buckeye Group that are required for the Alternate Disposal will be obtained by BWCDD. BWCDD represents that the lateral ditch system utilized for the Alternate Disposal will reasonably accommodate the transport of up to 7.2 million gallons per day (i.e., 24 hours) of Surplus Effluent.

4. **Delivery System.** The Town will construct or cause to be constructed, at no cost or expense to the Buckeye Group, an effluent delivery pipeline to transport the Surplus Effluent to the Buckeye Group's Buckeye Canal (the "Delivery System"), and a pipeline through, across or under the Buckeye Canal for possible future Priority Uses of Effluent (the "Alternate System"). The operation, maintenance and any permits required for the Delivery System and the Alternate System will remain the responsibility of the Town. The Alternate System will extend to a point immediately south of the Buckeye Canal and will be constructed in accordance with all applicable governing standards and rules, including those of the BWCDD. The plans and specifications for the Alternate System shall be subject to the reasonable pre-approval of the BWCDD. The location of the Alternate System shall be subject to the reasonable approval by BWCDD in its sole discretion. The Town will transport Surplus Effluent, at its expense, to the Delivery Point (as hereinafter defined). With respect to that portion of the Delivery System and

the Alternate System located on BWCDD land or interests in land, BWCDD hereby grants the Town the necessary permits, licenses, or easements to construct, operate, and maintain the Delivery System and the Alternate System across, under, and through such BWCDD lands or interests in land, including but not limited to a license to cross the Buckeye Canal at or near Dean Road with necessary delivery pipe. Any land use rights over, under or across lands or interests in lands owned by the Buckeye Group that are granted to the Town by BWCDD pursuant to this Section 4 will survive the termination of this Agreement if, and only if, the subsequent use of such land use rights by the Town is limited to the transport and delivery of effluent via pipeline over, under or across lands or interests in lands owned by the Buckeye Group, and then to points of reuse or disposal other than the Buckeye Canal.

5. Delivery Point. The point to which the Surplus Effluent will be transported by the Town for delivery to BWCDD into the Buckeye Group's Buckeye Canal ("Delivery Point") will be located generally in the vicinity of the intersection of Dean Road and the Buckeye Canal. The exact location of the Delivery Point will be reasonably agreed upon by the parties at a date prior to completion of construction of the Delivery System, but in no event later than April 30, 2003.

6. Permits and Approvals. It shall be the responsibility of the Town to obtain or cause to be obtained any permits or approvals required to deliver the Surplus Effluent to BWCDD for beneficial use, or for the operation of the Delivery System or the Alternate System. BWCDD agrees not to oppose the Town's efforts or applications to obtain any such permits or approvals and to reasonably cooperate and assist, when necessary, in all such efforts. The BWCDD's consent to and cooperation with the issuance of permits will not be construed as a waiver of any rights of BWCDD, including, without limitation, BWCDD's position that the BWCDD canals are not "waters of the United States" as defined by the federal Clean Water Act (33 U.S.C. § 1251, *et seq.*, the "Clean Water Act") and implementing regulations. If either BWCDD or BIC is required to obtain any permits or approvals in order to place to beneficial use the Surplus Effluent downstream of the Delivery Point, the Town agrees to assist BWCDD or BIC in obtaining any such permits or approvals and reasonably cooperate and assist BWCDD or BIC, when necessary, in all such efforts.

7. Assignment of Rights. The Town hereby assigns to BWCDD all of the Town's right, title and interest in and to the Surplus Effluent upon actual physical delivery of the Surplus Effluent to the Delivery Point. Prior to deliver of Surplus Effluent to the Delivery Point, BWCDD will have no responsibility for or ownership rights in the Surplus Effluent. Upon delivery of the Surplus Effluent to the Delivery Point, the BWCDD will own the Surplus Effluent and have the right to use or otherwise dispose of Surplus Effluent delivered hereunder for any legal purpose.

8. Measuring Device and Reports. The Town will install and maintain during the term of this Agreement a water measuring device at the Delivery Point. The water measuring device will accurately measure the amount of Surplus Effluent that is delivered to the Delivery Point and will be of a type reasonably acceptable to BWCDD. The Town will provide BWCDD monthly a written report of the amount of Surplus Effluent delivered to BWCDD during the preceding calendar month. The Town also will provide, at BWCDD's request, copies of effluent quality reports the Town periodically submits to relevant regulatory agencies.

9. **Shutdowns.** The Town has the right, in its sole discretion, to shut down all or part of the Delivery System temporarily for purposes of routine maintenance and repair, and in the event of emergency. In the event of routine repair and maintenance of the Delivery System, the Town will give BWCDD reasonable notice no less than 48 hours prior to such shut down. In the event of an emergency, the Town will give as much notice as is reasonable under the circumstances prior to shutting down the affected portion of the Delivery System. BWCDD also has the right, in its sole discretion, to shut down all or part of the Buckeye Canal temporarily for routine maintenance and repair, and in the event of emergency, and may refuse to accept delivery of the Surplus Effluent during such periods. However, BWCDD will then provide the Alternate Disposal described in Section 3 above.

10. **Duration:** This Agreement will continue so long as the Sundance WWTP continues to operate. Any interruption in operations resulting from force majeure conditions will not terminate this Agreement.

11. **Town Indemnity.** The Town will indemnify and hold BWCDD harmless from and against liability, claims, losses, damages, or injuries to any person or to property, and expenses of investigating and defending against the same (including costs and reasonable attorneys fees), arising from or in any way connected with, in whole or in part, the operation or maintenance of the Sundance WWTP and the transport of the Surplus Effluent to the Delivery Point, only to the extent such liability, claims, losses, damages, or injuries, and such investigation and defense expenses are occurrences covered and paid under the Town's Municipal Risk Retention Pool and only up to the then applicable policy limits, which limits currently are Twenty-five Thousand Dollars (\$25,000.00) per occurrence limited to a total of One Hundred Thousand Dollars (\$100,000.00) per year.

12. **BWCDD Indemnity.** BWCDD will indemnify and hold Town harmless from and against liability, claims, losses, damages, or injuries to any person or to property, and expenses of investigating and defending against the same (including costs and reasonable attorneys fees), arising from or in any way connected with, in whole or in part, (a) the use, in any manner, by BWCDD of the Surplus Effluent after the Surplus Effluent has been delivered by the Town to the Delivery Point; and (b) the construction, operation, and/or maintenance of all ditches, pipes, conduits, gates, holding ponds, or other facilities used by BWCDD for transporting and placing to beneficial use the Surplus Effluent.

13. **Cooperation of Parties.** Each of the parties will reasonably cooperate with and assist one another in obtaining all licenses, permits, authorizations, approvals and consents in all judicial and administrative proceedings required in or related to the performance of this Agreement.

14. **Force Majeure.** If either party hereto is delayed or prevented from performing any act required hereunder by reason of acts of God, strikes, lockouts, labor troubles, civil disorder, inability to procure materials or other cause without fault and beyond the control of the party obligated hereunder (financial inability excepted), performance of such acts will be excused for the period of delay and the period for the performance of any such acts will be extended for a period equivalent to the period of such delay.



20. Time of the Essence: Gender. Time is of the essence of this Agreement. This Agreement will apply to the parties hereto according to the context hereof and without regard to the number or gender of words or expressions used herein.

21. No Third Party Beneficiary. This Agreement will not create any third party beneficiary rights to any person or entity who is not a party to this Agreement.

22. Compliance With Laws.

(a) The Town will, at its expense, comply with all applicable requirements of all municipal, county, state and federal authorities now or hereafter in force pertaining to the transport of the Surplus Effluent to the Delivery Point and the Town's other obligations under this Agreement.

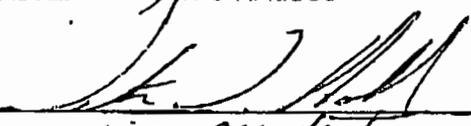
(b) BWCDD will, at its expense, comply with all applicable requirements of all municipal, county, state and federal authorities now or hereafter in force pertaining to the use of the Surplus Effluent after it is delivered to the Delivery Point.

23. Severability. It is understood and agreed by the parties hereto that if any part, term or provision of this Agreement is determined by a court of competent jurisdiction to be invalid, illegal or in conflict with any law of the State of Arizona, the validity of the remaining portions or provisions will not be affected, and the rights and obligations of the parties will be construed and enforced as if this Agreement did not contain the particular part, term or provision held to be invalid.

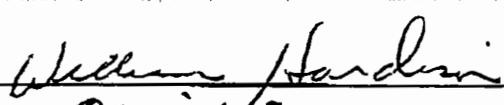
24. Signature. The parties have executed this Agreement on the date first above written.

IN WITNESS WHEREOF, the parties have executed this Agreement on the dates below written.

BUCKEYE WATER CONSERVATION AND  
DRAINAGE DISTRICT, AN ARIZONA  
MUNICIPAL CORPORATION

By:   
Its: vice president  
Date: 11-27-02

BUCKEYE IRRIGATION COMPANY, AN  
ARIZONA NON-PROFIT CORPORATION

By:   
Its: president  
Date: November 27, 2002

TOWN OF BUCKEYE, AN ARIZONA  
MUNICIPAL CORPORATION

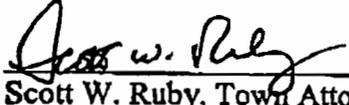
By: \_\_\_\_\_

  
Alan Newberry, Vice Mayor

ATTEST:

  
Joseph Blanton, Town Manager

Approved as to Form:

  
Scott W. Ruby, Town Attorney

# **East Buckeye Wastewater Master Plan**



**RBF**  
CONSULTING

# **EAST BUCKEYE WASTEWATER MASTER PLAN**

MAY 2004

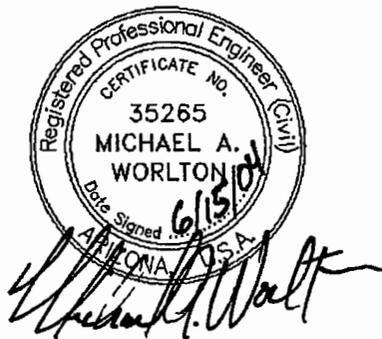


May 2004

FINAL

Town of Buckeye  
**East Buckeye Wastewater Master Plan**

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Prepared by:



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## **1 Introduction**

### **1.1 Purpose of Study**

The Town of Buckeye's eastern area is experiencing accelerated growth. Numerous developments are currently being proposed, planned, and entitled within this area. This master plan provides a foundation for the development of a regional wastewater system that is capable of meeting the current and future wastewater demands in this area. Specifically, this plan provides analysis and recommendations for the development of the Town's wastewater collection system, wastewater treatment, and beneficial use of the Town's wastewater treatment plant effluent within the eastern portion of the Town.

### **1.2 Scope of Work**

The scope of the East Buckeye Wastewater Master Plan includes an evaluation of the wastewater demands generated within the study area, a determination of the infrastructure required to service this area, and recommendations for reuse of effluent. This plan also identifies treatment plants that may provide service throughout the study area. A sewer system model was developed to analyze various demand scenarios and to determine the appropriate infrastructure to meet the demand conditions defined within this report.

In addition to identifying wastewater infrastructure throughout the study area, a reclaimed water system has also been proposed. The reclaimed water plan developed in this study will assist the Town of Buckeye in directing the effluent produced at their wastewater treatment plants (WWTP), within the study area, toward beneficial uses.

### **1.3 Background Information**

Various sources of information were utilized in developing this master plan. Background information was obtained from the Town of Buckeye Community Development Department, Arizona Department of Water Resources (ADWR), Arizona Department of Environmental Quality (ADEQ), Flood Control District of Maricopa County, and the Maricopa Association of Governments (MAG). The background information was analyzed and used in the development of this master plan. Much of the background information is provided in the appendix of this master plan.

### **1.4 Study Area**

The study area analyzed for this project consists of over 39 square miles located along the eastern boundary of the Town of Buckeye. The study area for the project was divided into two: the main study area, and the exception area. A detailed analysis was performed for the main study area south of Thomas Road.



The area north of Thomas Road is considered an exception area for the study and is addressed only conceptually within this master plan. A map showing the study boundary of the project is provided in Exhibit 1 Study Area.

**Exhibit 1  
Study Area**

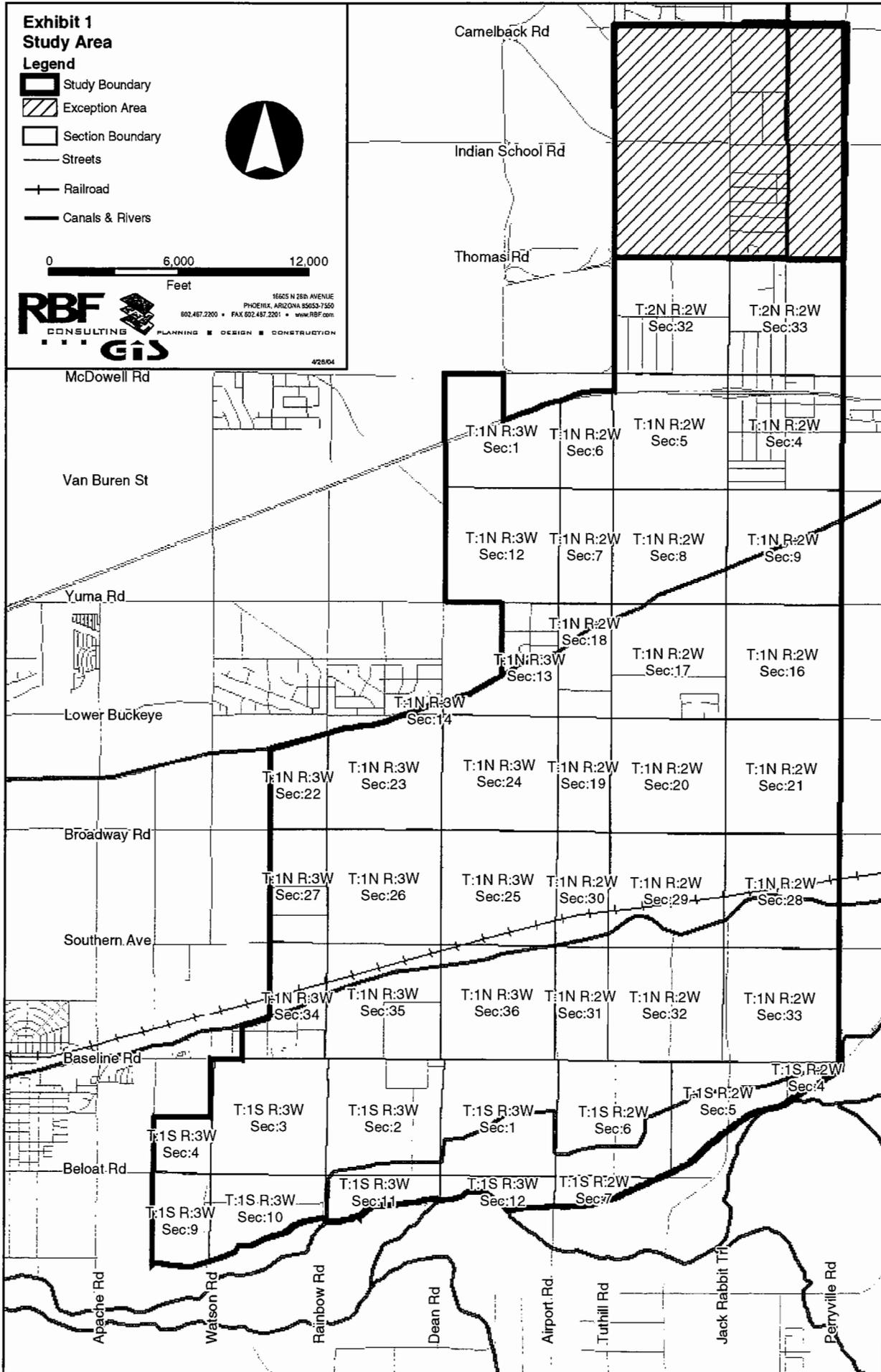
**Legend**

-  Study Boundary
-  Exception Area
-  Section Boundary
-  Streets
-  Railroad
-  Canals & Rivers



0 6,000 12,000  
Feet

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## **2 Land Use and Growth Projections**

### **2.1 Introduction**

The analysis, results, and conclusions contained in this master plan are all based on the growth projections discussed in this section. The purpose of this section is to explain projected growth values used to calculate the wastewater demands for the study. The following section provides an overview of the assumptions made, the data used, and the level of detail analyzed in the design of the Town's collection system.

#### **2.1.1 Growth Projections**

The Town of Buckeye is currently experiencing rapid growth. From 1980 to 2000 the Town saw its population increase by over 92 percent. Looking at a moderate growth projection scenario, the Town is anticipating a population increase of 110 percent by 2005 and 520 percent by 2015 (Town of Buckeye 2003). Commercial and employment growth is anticipated to occur along with this population growth.

Due to the amount of growth and change currently being experienced by the Town, and the anticipated future growth, the Town of Buckeye recommended that this wastewater master plan be developed for the east Buckeye area. It is important to note that the projections developed for this master plan should be updated and the plan refined as growth continues within the area. These projections provide an estimate, which is based on the best available data obtained from the Town. Also, the projections outlined are only the Town's best estimate and may differ from the growth that actually occurs within the area.

#### **2.1.2 Level of Detail**

The growth and flow projections for this study were analyzed at a level of detail broken down to the quarter section (160 acres). This level of detail is appropriate for the scope of this master planning study.

#### **2.1.3 Data Sources**

In developing the flow projections for this study, existing data sources were researched. The data analyzed consisted of the following:

1. Land use maps developed and refined by the Town of Buckeye Community Development Department
2. Planned and proposed development information
3. Existing development and parcel maps

This information was collected from the Town of Buckeye, developers, and the Maricopa County Assessor's Map. Each of the data sources, and its usage in computing the growth projections is described in greater detail within this Section.



The Town of Buckeye provided the land use data in a GIS format. This data consists of multiple overlapping shapefiles for various portions of the study area. In order to utilize this data, it was necessary to refine it by merging it into a single shapefile. The Town then reviewed the refined land use map for the east Buckeye study area. While refinements were made to the data, some small inconsistencies may exist within the final calculations, due to the quality of the data provided. It is assumed that these inconsistencies will have a negligible impact on the overall study.

## 2.2 Land Use

The majority of the information utilized for the development of the wastewater flow projections was based on the Town of Buckeye Land Use District Map. The Town of Buckeye developed this map, which outlines where the Town has planned different types of growth. The information provided by the Land Use District Map was used to compute the flow projections, for all areas within the study boundary, where specific development information was not available. The land use map for the study area is shown in Exhibit 2 Land Use and Developments.

### 2.2.1 Land Use Categories

The land use categories within the east Buckeye wastewater study area consist of the following: Commercial Center, General Commerce, Planned Community, Planned Residential, Rural Residential, and Special Use. The Town of Buckeye defines each of these categories as follows:

Commercial Center (CC): The Commercial Center Land Use District is designed to accommodate a variety of commerce and specialized development, including commercial uses, which comprise the central business district of Buckeye.

General Commerce (GC): The General Commerce Land Use District is designed to accommodate general commercial and employment uses and compatible industrial uses to which public services are available.

Planned Community (PC): The Planned Community Land Use District is designed to accommodate all land uses approved as part of a community master plan, where specific uses, public services, densities, and design criteria have been identified and adopted.

Planned Residential (PR): The Planned Residential Land Use District is designed to accommodate all subdivided residential developments to which public services are available.

Rural Residential (RR): The Rural Residential Land Use District is designed to accommodate low-density residential development in outlying areas where all public services may not be available.

**Exhibit 2  
Land Use & Developments**

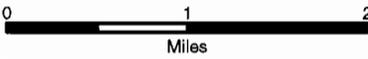
**Developments**

- |  |   |
|--|---|
|  Newport Dev                |  Vista de Montana  |
|  Ryland                     |  Blue Horizons     |
|  Southwest Ranch            |  Parkman Ranch     |
|  Buckeye/Perryville         |  Jackrabbit Trails |
|  Jackrabbit/Broadway        |  Paloma Vista      |
|  Lewis Industrial Warehouse |   |

-  Flood Retarding Structure (Excluded)
-  Existing Homes (Assume 10% of Landuse)

**LandUse**

-  Commercial Center
-  General Commerce
-  Planned Community
-  Planned Residential
-  Rural Residential
-  Special Use
-  Streets
-  Railroad
-  Canals & Rivers

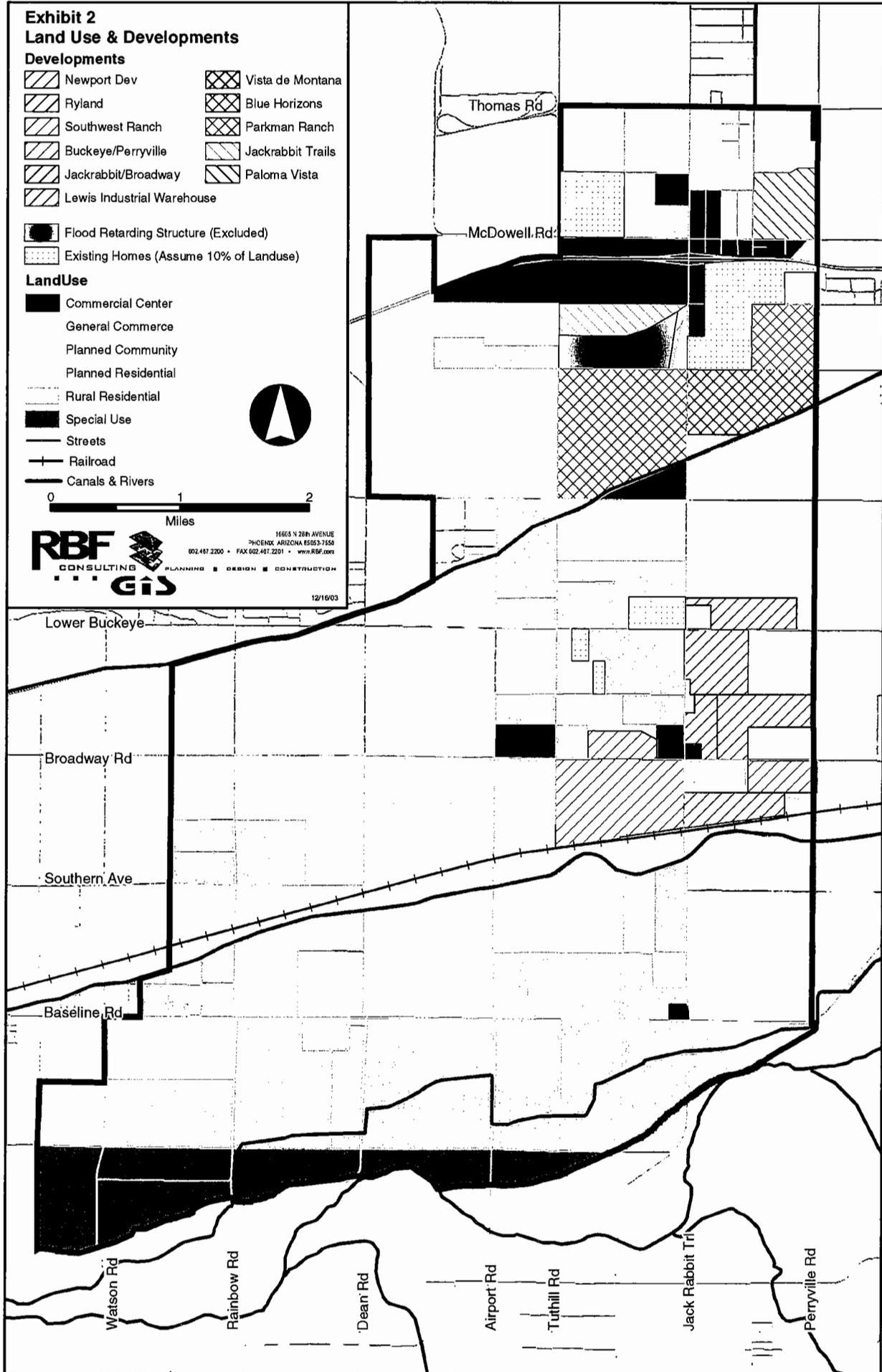


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**Special Use (SU):** The Special Use Land Use District is designed to accommodate uses in natural hazard or floodplain areas or those under public ownership where development may not be possible because of flooding or other constraints or if development is possible, the Town as a public purpose sponsors it.

The allowable density for each land use category was identified. Detailed distinctions between densities in the different land use categories were not considered. The densities used for the analysis of each category were established by Town staff, and are described in Table 1 Land Use Densities.

**Table 1 Land Use Densities**

Land Use	Density
Planned Community	4 du/ac
Planned Residential	4 du/ac
Rural Residential	1 du/ac

### 2.3 Developments

In addition to the Land Use District Map developed by the Town, information about various developments located within the study area was gathered. Research was performed to identify where significant existing and proposed developments are located within the study area. Due to the rate of growth that is currently projected within the study area, it is likely that not all planned developments were specifically identified.

The planned and proposed development information for the area was obtained through discussions with the Town of Buckeye and developers of property within the study area. The planned and proposed development information was finalized as of December 16, 2003. While additional development will occur and other developments may exist, no further modifications were made to the study calculations after this date. Proposed developments identified as part of this study are outlined in Table 2 Planned Development Summary.



**Table 2 Planned Development Summary**

Development	Dwelling Unit	Commercial (ac)
<b>Main Study Area</b>		
Blue Horizons	2,225	26
Buckeye/Perryville	280	
Jackrabbit Trails	343	
Jackrabbit/Broadway	228	
Lewis Industrial Warehouse		109
Newport	640	
Paloma Vista	650	16
Parkman Ranch	633	
Ryland	1,068	
Southwest Ranch	1,560	131
Vista de Montana	1,100	
<b>Exception Area</b>		
Arroyo Seco	950	
Beautiful Arizona Estates	286	
Camelback Garden Farms	66	
Litchfield Farms	237	
Litchfield Heights	67	
Pasqueletti Mountain Ranch	67	

## 2.4 Assumptions

In order to compute the projected growth within the study area, it was necessary to make various assumptions. Throughout the majority of the study area, projected growth was based on the Land Use Map developed by the Town of Buckeye. In areas of known development, growth projections were based on the planned development summary shown above. Throughout the majority of the study area, the gross acreage, rather than net acreage, was used to calculate the area for each quarter section, except as noted within Section 2.5.1, North of RID.

## 2.5 Growth Projections

Build-out growth projections were determined for each quarter section in the study area. The number of residential dwelling units, commercial acres, and Special Use acres (see Section 2.2.1, Land Use Categories) were summarized for each quarter section. These growth projections are shown in Exhibit 3 Growth Projections.

The method for determining growth varied based on the region where growth was being projected. For the majority of the study area, the growth projections were determined based on the area of each specific land use type within each



quarter section. Special considerations were made for determining the growth projections within the region of the study area north of the Roosevelt Irrigation District (RID) canal, and the region in the proposed Southwest Ranch WWTP service area. The method for projecting growth in these regions is discussed below.

### **2.5.1 North of RID**

A detailed analysis was performed to determine the existing developed acreage and additional land available for development within the study area north of the RID (East Buckeye – North Study Area). The additional information obtained from this analysis was utilized to determine the growth occurring within the area.

Within the East Buckeye- North Study Area, each section was individually evaluated to determine the potential amount of growth. Each section was studied to identify the areas where significant existing developments or land subdivisions had already occurred. Within these areas, the wastewater demand was calculated as described in Section 3.2.2 Existing Development Areas. In addition, within areas where the land has already been platted, the projected number of dwelling units was utilized.

In addition, each section was evaluated to determine the developable acreage within the section. For example the acreage from the I-10 freeway, as well as other existing roadways was subtracted from the developable acreage. The growth projections for the study area are shown in Exhibit 3 Growth Projections. A detailed breakdown of the growth projections within the East Buckeye- North Study area is provided in Appendix A-2 East Buckeye-North Growth Information.

### **2.5.2 Southwest Ranch**

A sewer master plan had been recently developed and submitted to the Town for the Southwest Ranch service area. Based on the Southwest Ranch Sewer Master Plan, a density of 3 du/ac was utilized for the Planned Community and Planned Residential land uses. In order to maintain consistency between the wastewater flows projected within this study and the Southwest Ranch Sewer Master Plan, a density of 3 du/ac was utilized in this study, for the Planned Community and Planned Residential land uses within the Southwest Ranch service area.

# Exhibit 3 Growth Projections

-  Study Boundary
-  Quarter-Section Boundary

- 100- Future Dwelling Units
- 100- Existing Dwelling Units
- 100- Commercial Acres
- 100- Special Use Acres

-  Streets
-  Railroad
-  Canals & Rivers



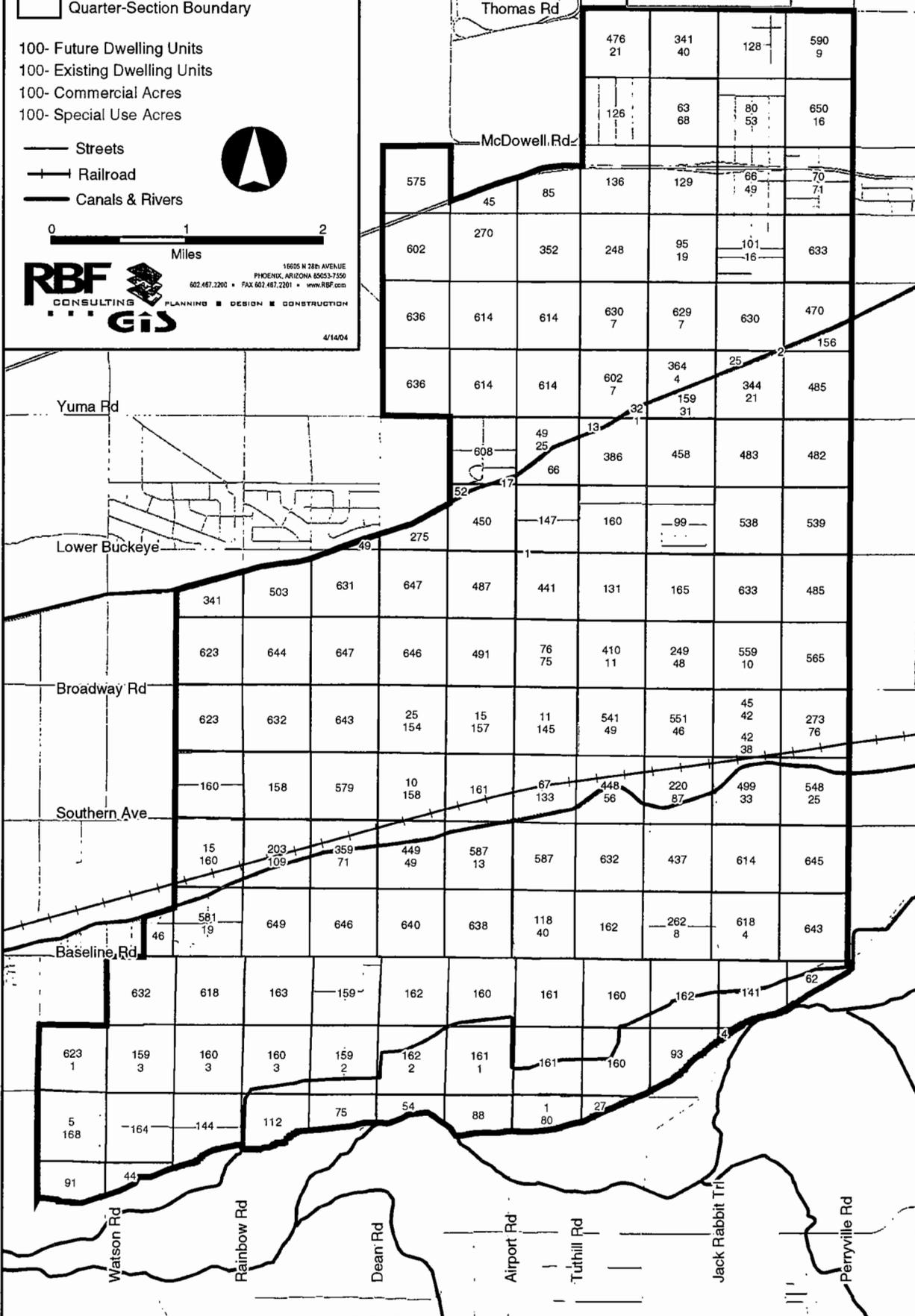
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Exception Area  
Future DU: 2,919  
Exist DU: 908  
Comm: 31.3





### 3 Flow Projections

#### 3.1 Introduction

The flow projections determined in this study were critical in determining the sizing of the sewer infrastructure. The assumptions that were made in determining the flow projections, along with a summary of the flows for each area of the study are provided within this section.

#### 3.2 Assumptions

##### 3.2.1 Wastewater Generation Factors

In order to determine the wastewater flow that is anticipated to be generated within the study area, it was necessary to determine demand factors. For this study, two sets of demand factors were determined. These demand factors include factors used for wastewater collection system design, and demand factors for sizing the treatment plants.

The demand factors that were utilized for the design of the wastewater collection system included a demand of 320 gallons per dwelling unit per day for residential developments, and 1,500 gallons per acre per day for commercial land use types. In addition, a demand of 350 gallons per acre per day was utilized for all *Special Use* land use types within the study area. The demand factors utilized for this study are summarized in Table 3 Wastewater Collection System Demand Factors.

Table 3 Wastewater Collection System Demand Factors

Land Use	Flow	Unit
Residential	320	Gallons/dwelling unit/day
Commercial	1,500	Gallons/acre/day
Special Use	350	Gallons/acre/day

##### 3.2.2 Existing Development Areas

Various portions of the study area contain significant existing developments. Based on discussions with the Town of Buckeye, and for the purposes of this study, it was assumed that 10% of the existing homes would eventually be connected to the wastewater system. The wastewater flow projections include a wastewater demand for 10% of the homes within those areas where significant existing development has occurred.



The locations within the study area where significant existing development has occurred were determined from aerial photos of the area. For the portion of the study area not located within the East Buckeye- North Study Area, the areas of significant development can be seen within Exhibit 2 Land Use and Developments.

### 3.2.3 Wastewater Collection System Sizing

The wastewater collection system was sized in order to adequately convey the projected peak flows through the system, without exceeding 90% of the full-flowing capacity. The full flowing capacities of all sewer lines within the study were calculated using a Manning's n value of 0.013.

### 3.2.4 Wastewater Treatment Plant Sizing

The WWTPs within the study area were sized based on the Maricopa County requirement of a combined residential and commercial flow of 350 gallons per dwelling unit per day. In addition, an anticipated actual WWTP capacity was also provided. The anticipated actual capacity was based on a unit flow of 220 gallons per dwelling unit per day. These flow factors are described in greater detail within Section 6.1.1, Demands.

## 3.3 Flow Summary

Using the demands outlined within Section 3.2.1, Wastewater Generation Factors and the growth projections outlined within Section 2.5, Growth Projections, the average day demands at build out were computed for each quarter section within the study area. These are the flow demands that were utilized in designing the wastewater collection system. These demands can be seen in Exhibit 4 Buildout Average Day Flows. The demands are also summarized within Table 4 Buildout Flows.

**Table 4 Buildout Flows**

Area	Avg Day Flow (MGD)
East Buckeye- North	6.19
Southwest Ranch	13.25
East Buckeye	4.64





## 4 Wastewater Design Criteria

### 4.1 Introduction

One of the key elements in developing this wastewater master plan was the determination of the design criteria that would be utilized for the development of the sewer model and master plan. The following section outlines the design criteria utilized for the development of this master plan.

### 4.2 Velocity

For the development of this master plan, the minimum full flowing velocity for each pipe segment was 2 (two) feet per second. The maximum full flowing velocity was not allowed to exceed 10 (ten) feet per second.

### 4.3 Minimum Slopes

In order to ensure that a minimum velocity of 2 (two) feet per second is maintained, the minimum slope for each diameter pipe was determined. The minimum pipe slopes are listed in Table 5 Sanitary Sewer Minimum Slopes. In addition, in order to maintain the constructibility of the sewer lines, the minimum allowable slope within this study was limited to 0.0007 feet/feet.

**Table 5 Sanitary Sewer Minimum Slopes**

Diameter (in)	Slope (ft/ft)
8	0.00400
10	0.00240
12	0.00190
15	0.00140
18	0.00110
21	0.00092
24	0.00077
27	0.0007
30	0.0007
33	0.0007
36	0.0007



#### 4.4 Peaking Factors

The demand placed on a wastewater collection system will vary depending on the time of day and the day of the week. In order to ensure that the system is capable of handling the various demands placed upon it, peaking factors are used to increase the average day flow to a peak flow. The peaking factors used within this study, are those factors outlined by ADEQ in Title 18, Chapter 9, Part E, Section D of the Arizona Revised Statutes. These factors are summarized in Table 6 ADEQ Peaking Factors.

Table 6 ADEQ Peaking Factors

Upstream Population	Peaking Factor
100	3.62
200	3.14
300	2.90
400	2.74
500	2.64
600	2.56
700	2.50
800	2.46
900	2.42
1,000	2.38
1,001 to 10,000	$PF=(6.330 \times p^{-0.231}) + 1.094$
10,001 to 100,000	$PF=(6.177 \times p^{-0.233}) + 1.128$
More than 100,000	$PF=(4.500 \times p^{-0.174}) + 0.945$

PF = Peaking Factor      p = Upstream Population

#### 4.5 Full Flow Design

The wastewater collection system designed for this master plan was based off of a full flowing pipe calculated using the Manning's equation. For the purposes of this study, all pipes were calculated using a Manning's n value of 0.013. In addition, the pipes were sized such that the peak flow (see Section 4.4, Peaking Factors) would not exceed 90% of the full flow of the pipe.



## **5 Wastewater Collection System**

Utilizing the buildout demands outlined within Section 3, Flow Projections and the design criteria outlined within Section 4, Wastewater Design Criteria a wastewater collection system was designed to convey the ultimate wastewater flows to the various WWTPs located within the study area. This section outlines the data that was analyzed, the assumptions that were made, and the collection system that was designed to meet the buildout system demands.

### **5.1 Topography**

One key piece of information in determining the conceptual alignment of the sewer collection system was the topography within the area. This study uses the existing grades to determine the manhole elevations and sewer line inverts. The existing ground surface data is described in greater detail within this section.

#### **5.1.1 Existing Grade**

Within the main study area, the existing grade tends to fall to the southeast, north of the Buckeye Irrigation District canal, and to the southwest, south of the canal. The existing ground surface elevation was utilized to establish the manhole rim elevations, and all invert depths are measured from the existing ground surface. The 10-foot contours within the study area are shown in Exhibit 5 Study Area Contours.

#### **5.1.2 Data Source**

The topography data was purchased from the Maricopa County Flood Control District for the main study area. The data obtained was the 2001 Digital Terrain Model (DTM). This data provides information on the study area at a 10-foot interval, with an accuracy of plus or minus 5-feet.

### **5.2 Physical Constraints**

In addition to the topography, there are several other physical constraints within the East Buckeye Wastewater Master Plan study area that must be considered. The physical constraints that were considered include irrigation canals, railroad lines, the APS effluent line, and the Buckeye waterlogged area. Each of these constraints are discussed in greater detail below.

One area that will require particular attention is the area near the Buckeye Irrigation District (BID) canal. The Union Pacific Railroad and the APS effluent line both run parallel to the canal. One of the goals in determining the sewer alignments was to minimize the sewer line crossings in this area.

# Exhibit 5 Study Area Contours

 Study Boundary

 Elevation Contours

 Streets

 Railroad

 Canals & Rivers

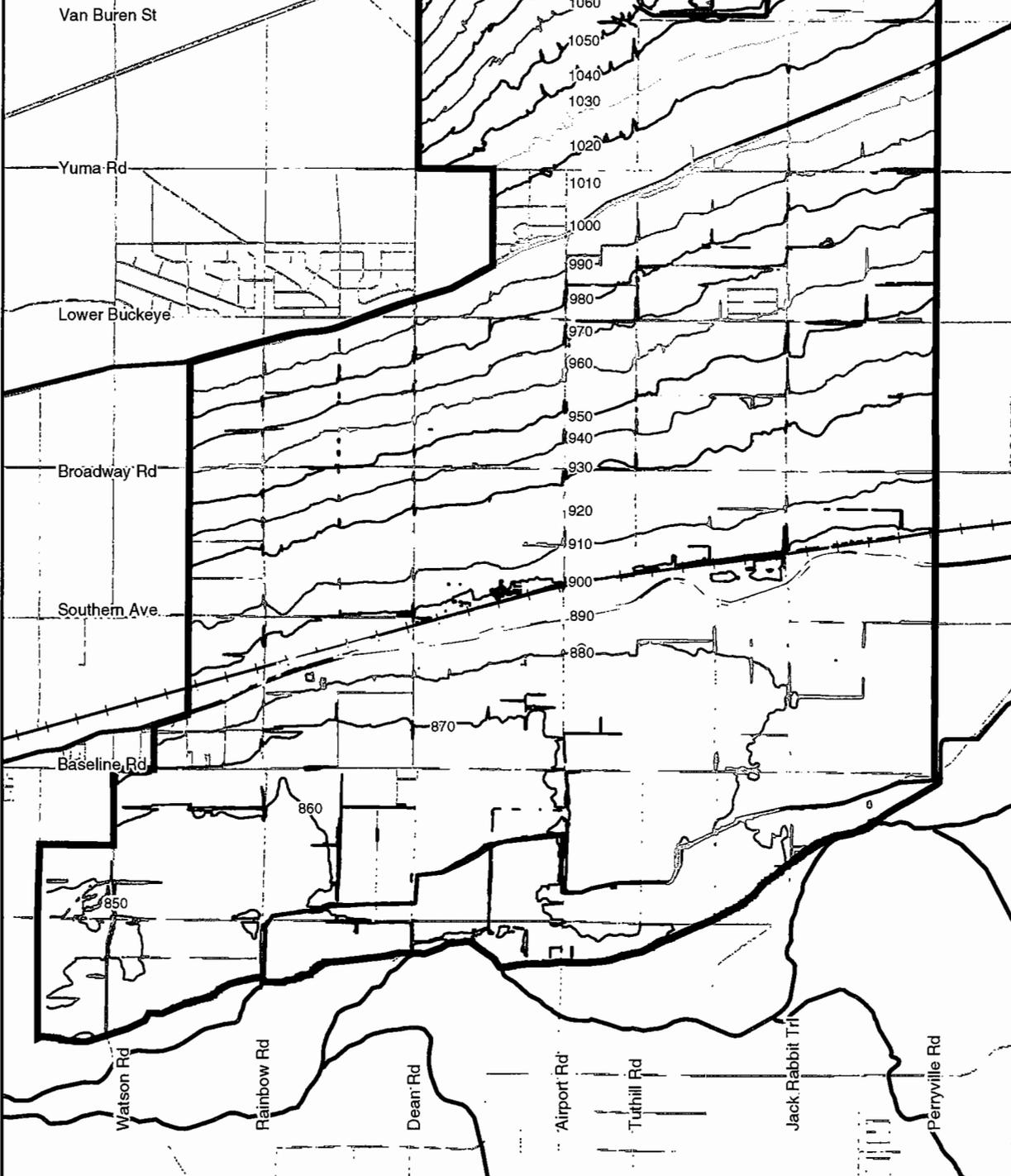


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### **5.2.1 Irrigation Canals**

Within the project study area are two main irrigation canals. These two canals, the Buckeye Irrigation District (BID) canal and the Roosevelt Irrigation District (RID) canal, intersect the study area from east to west. The location of these two canals was a major consideration in determining the location of the sewer collection lines. The locations of the irrigation canals are shown in Exhibit 6 Physical Constraints.

### **5.2.2 Railroad**

Just north of the BID canal is the Union Pacific Railroad. The railroad poses another physical obstacle that must be considered in determining the alignment of the sewer lines. Since it will be necessary to bore under the railroad, railroad crossings were minimized. The location of the railroad within the study area is shown in Exhibit 6 Physical Constraints.

### **5.2.3 Effluent Line**

In addition to the irrigation canals and the railroad, there is also a large diameter effluent line that runs through the study area. South of the railroad and north of the BID canal, is the effluent line that runs from the 91<sup>st</sup> Avenue wastewater treatment plant in Tolleson to the Palo Verde Nuclear Generating Station (PVNGS). Within the study area, the effluent line has a diameter of 96-inches. The crown of the effluent line is located at a depth approximately 6 to 7 feet below ground. As part of the conceptual alignment, one main effluent crossing was identified in Dean Road. The general location of the effluent line within the study area is shown in Exhibit 6 Physical Constraints.

### **5.2.4 Waterlogged Area**

South of the BID canal, within the study boundary, exists the Buckeye waterlogged area, as defined by ADWR. The location of the waterlogged area is shown on Exhibit 6 Physical Constraints. Waterlogging occurs where high groundwater levels create land use problems if they are not addressed. In December 2000, Errol L. Montgomery & Associates Inc, a hydrogeology-consulting firm, published a study confirming that waterlogged conditions within this area continue (Arizona State Senate).

The waterlogged area is an important consideration in determining the alignment of the sewer mains, since high groundwater levels within the area may preclude the location of various alignments. While determining the extent of waterlogging within the area is beyond the scope of this study, it is important to recognize the concern that exists with development south of the BID canal.

# Exhibit 6 Physical Constraints

-  Study Boundary
-  Waterlogged Area
-  96-Inch Effluent Line
-  Streets
-  Railroad
-  Canals & Rivers

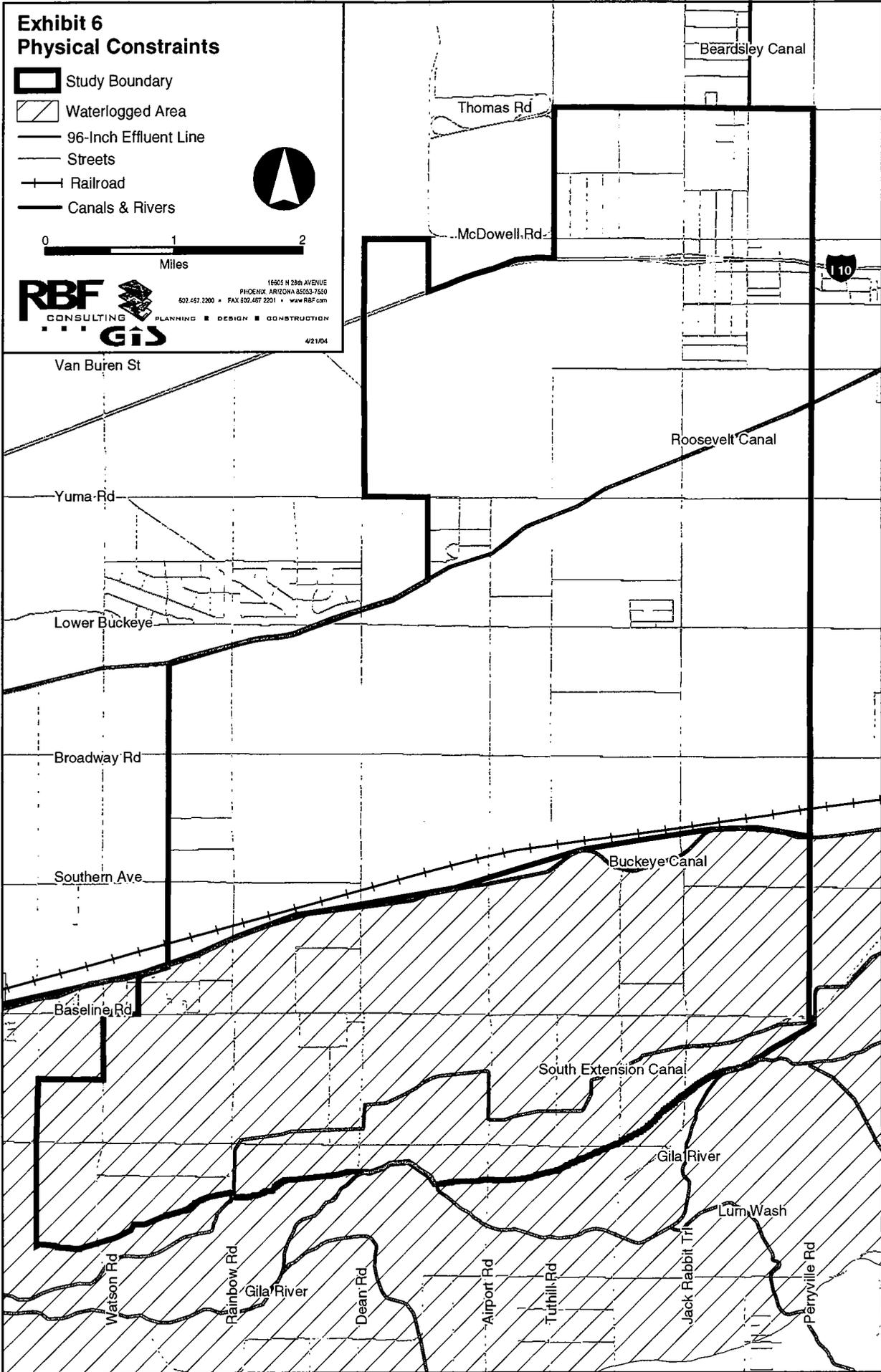


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### **5.3 Assumptions**

In designing the wastewater collection system, it was necessary to make various assumptions. This section outlines the assumptions that were made for this portion of the study.

#### **5.3.1 Study Time Frame**

The collection system developed as part of this wastewater master plan was designed for the ultimate buildout time frame. This is the time when each of the parcels shown in Exhibit 2 Land Use and Developments, have been developed according to the land use designated by the Town.

It is beyond the scope of this study to evaluate the ownership of each parcel, and the feasibility of constructing sewer mains within each parcel. It is assumed that land will be available for the defined sewer collection system when development occurs. Since this master plan is primarily focused on the buildout demand conditions, it is beyond the scope of this study to consider the scheduling or actual time of construction of proposed or future developments located within the study boundary.

The land use, development, and physical features information was based on data researched and analyzed through December 2003. No changes to the study based on new data have been made after this time.

#### **5.3.2 Level of Detail**

The wastewater collection system designed for this study consisted of the main sewer trunk lines. The sewer lines were located at a square mile interval. The manholes were placed at a minimum depth of 14.0 feet. This depth was provided to allow sufficient fall to serve the interior collection systems designed within each section. It is important to note that while this sewer master plan provides guidance as to the sizing and conceptual alignments of the wastewater infrastructure, a detailed engineering analysis must be performed before undertaking any project outlined within this study.

#### **5.3.3 Sewer Main Alignments**

Sewer line alignments were located within the existing road alignments. If a road did not exist within the area, then the section line boundaries were typically followed.

#### **5.3.4 Wastewater Treatment Plants**

One of the main assumptions required in the development of the conceptual sewer main alignments is the service area for treatment plants that will be receiving the wastewater flows. Based on discussions with Town Staff, and for the purposes of this study, all flow north of the RID canal generated within the study boundary will ultimately be served by the Sundance WWTP. The Southwest Ranch WWTP will serve the eastern half of the study area south of



the RID and north of the railroad. The remaining areas will be served by a future WWTP to be located within the southwest portion of the study area. For the purposes of this study, this WWTP has been conceptually located, and will be referred to as the East Buckeye WWTP. It is important to note that the actual location of the treatment plant may differ from our assumed location.

Another important consideration with the proposed location of the East Buckeye WWTP is the potential that exists for conveying the East Buckeye flows to the Town's existing WWTP located South of Beloit on 7<sup>th</sup> Street.

### **5.3.5 Waterlogged Area**

The sewer lines that were identified within the waterlogged area were based on the location of the mile streets and the projected demands from the Town's Land Use Map (see Exhibit 2 Land Use and Developments). While these lines have been conceptually located for this study, it may be necessary to relocate them based on actual field conditions within the waterlogged area. For the purposes of this study, the waterlogged area is shown; however, the extent of its impact on the sewer lines is not considered.

## **5.4 Hydraulic Model**

As part of this master plan, a computer hydraulic model was developed in order to analyze the buildout sewer system. The sewer modeling system that was utilized for this study was H2Omap Sewer GIS® developed by MWH Soft, Inc. The buildout sewer system was modeled to evaluate the peak flow conditions within the system.

The sewer model was used as a planning tool to ensure that the recommended sewer infrastructure would be properly sized to convey the peak wastewater flows. Additionally, the model was used to evaluate various sewer alignments.

### **5.4.1 Assumptions**

In developing a computer model of the sewer system, various assumptions were made. This section outlines those assumptions and the role they played in the development of the model.

One of the key assumptions in setting up the sewer model was the determination of the wastewater generation factors. The design factors used for the sewer sizing were described within Section 3.2.1, Wastewater Generation Factors. The demands were distributed throughout the study area as shown in Exhibit 4 Buildout Average Day Flows.

As described earlier within this report, the peak flow condition was modeled for the buildout condition. The peak flow was computed using the ADEQ peaking factors as described within Section 4.4, Peaking Factors.



## 5.5 Buildout Sewer System

The buildout sewer system was designed to convey the peak wastewater flows to the designated treatment plants. The sewer lines were designed to be at a sufficient depth such that the smaller interior sewer lines would be served by the main sewer infrastructure.

While considerations were taken to ensure that the interior sewer lines can be served by the main infrastructure shown in this report, due to the level of detail for this study, additional factors may exist that were not considered. For example, the Jackrabbit Trails development located within the East Buckeye-North Study Area is anticipated to flow under a Maricopa County Flood Control District canal to reach the main trunk line. While this situation was considered, and the design tried to provide adequate depth, the contour data being utilized has a vertical accuracy of +/- 5-feet which indicates additional study is required to ensure that this development can adequately connect to the main sewer infrastructure. It is strongly recommended that a detailed engineering analysis be performed before undertaking any design project.

### 5.5.1 Alignments

Utilizing the information that was researched in Section 5.2, Physical Constraints, and the assumptions that were outlined within Section 5.3, Assumptions, the sewer main alignments were determined. These alignments were identified within major road alignments, as well as the section line boundaries.

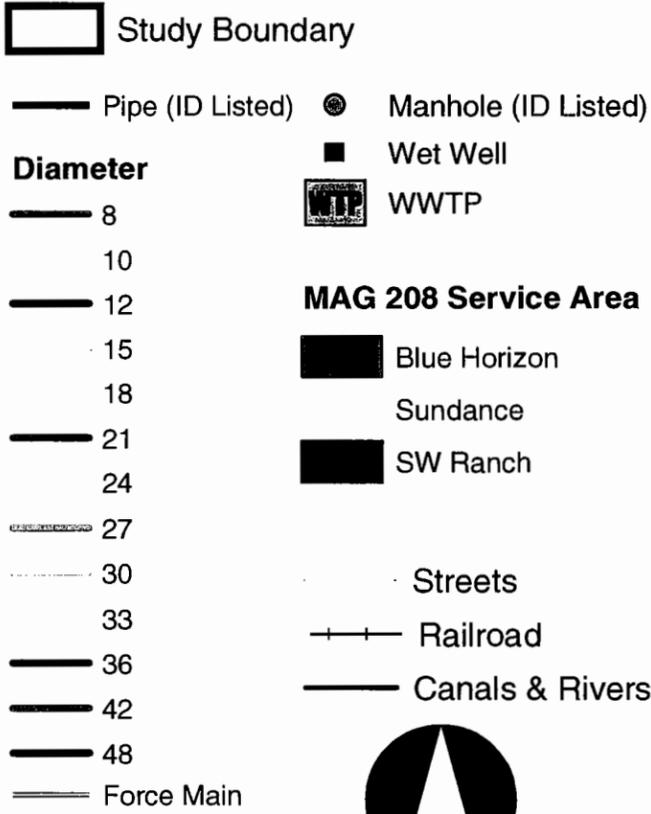
The goal of these alignments was to identify where sewer service will be provided throughout the area, while taking advantage of the existing grade and minimizing the need for lift stations. Based on discussions with Town Staff, a bypass line has been identified for the Sundance WWTP. In addition to the sewer main alignments, the WWTP anticipated to serve each sewer line is also identified.

The buildout sewer alignments and sizes are shown in Exhibit 7 Buildout Sewer System. The buildout sewer system results showing the manhole that is planned to serve each quarter section, along with manhole depths is provided for the East Buckeye- North Study Area in Exhibit 8 North Area Sewer System Results and for the remainder of the study area within Exhibit 9 East Buckeye Sewer System Results. Detailed results from the sewer system analysis are provided in Appendix C Model Results.

### 5.5.2 Bypass Line

Based on discussions with Town staff, a bypass line was provided at the Sundance WWTP in order to bypass flows south to the proposed WWTP. This bypass line was sized to convey an average day flow of 3.3 MGD. This is the amount of actual flow projected within the East Buckeye- North Study Area and exception area minus the excess capacity at the Sundance WWTP.

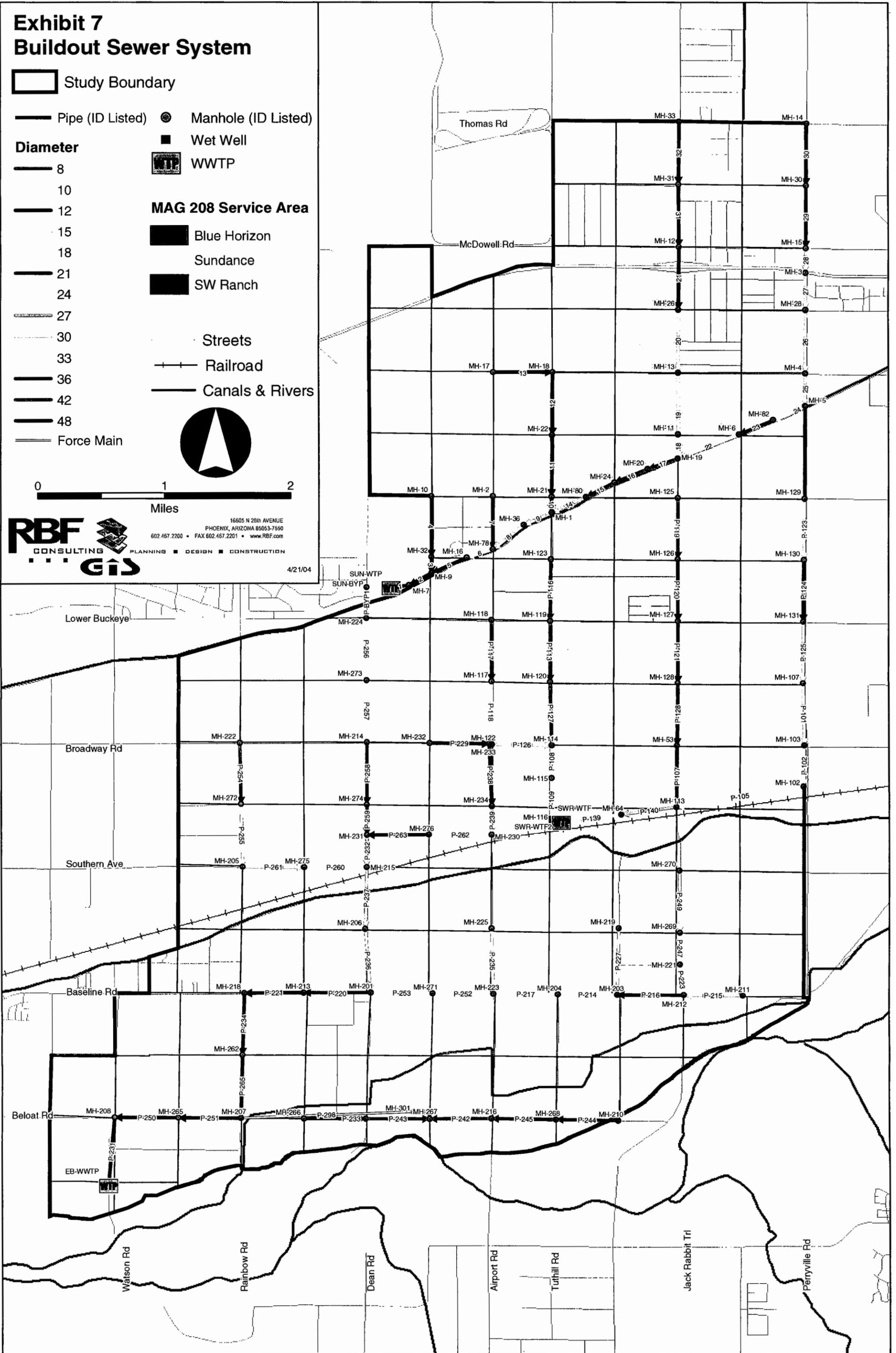
# Exhibit 7 Buildout Sewer System



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# Exhibit 8 North Area Sewer System

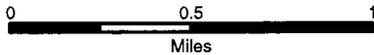
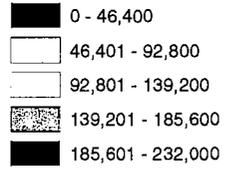
 Study Boundary

## Manhole Legend

Area ID  
Average Day Flow (gpd)

Manhole ID  
Depth (ft)

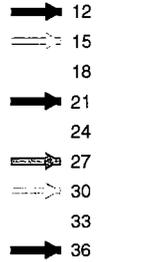
## Avg Day Flows



## Pipe Legend

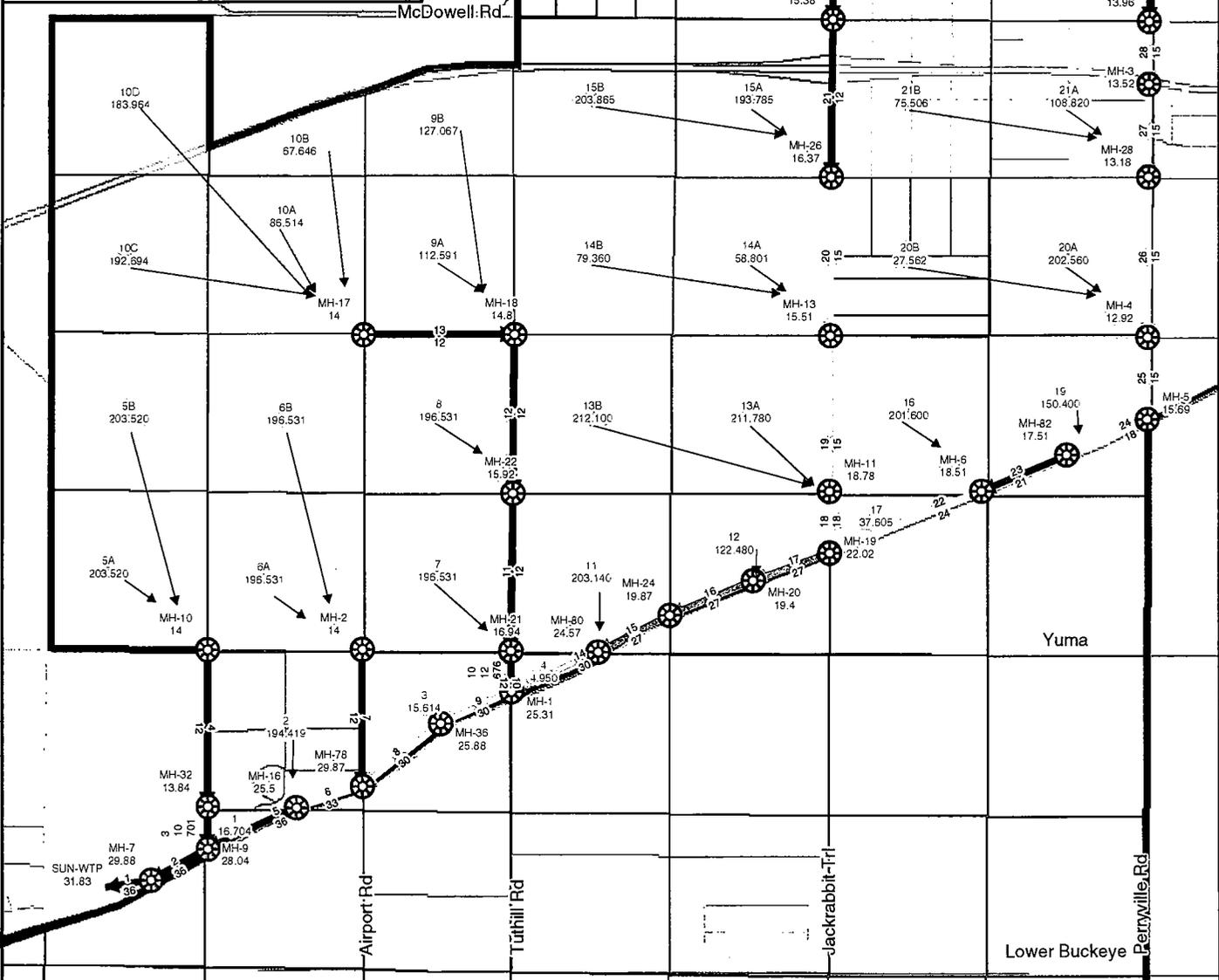
ID  
Pipe Diameter

## Diameter



Exception Demand  
394,954 gal/day

Exception Demand  
614,987 gal/day



# Exhibit 9 Sewer System Results

 Study Boundary

 Pipe

**Diameter**

-  8
-  10
-  12
-  15
-  18
-  21
-  24
-  27
-  30
-  33
-  36
-  42
-  48
-  Force Main

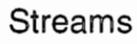
 Manhole ID  
Depth (ft)

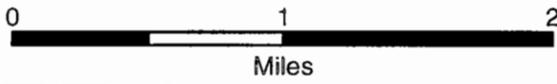
 Wet Well

 WWTP

 Streets

 Railroad

 Streams

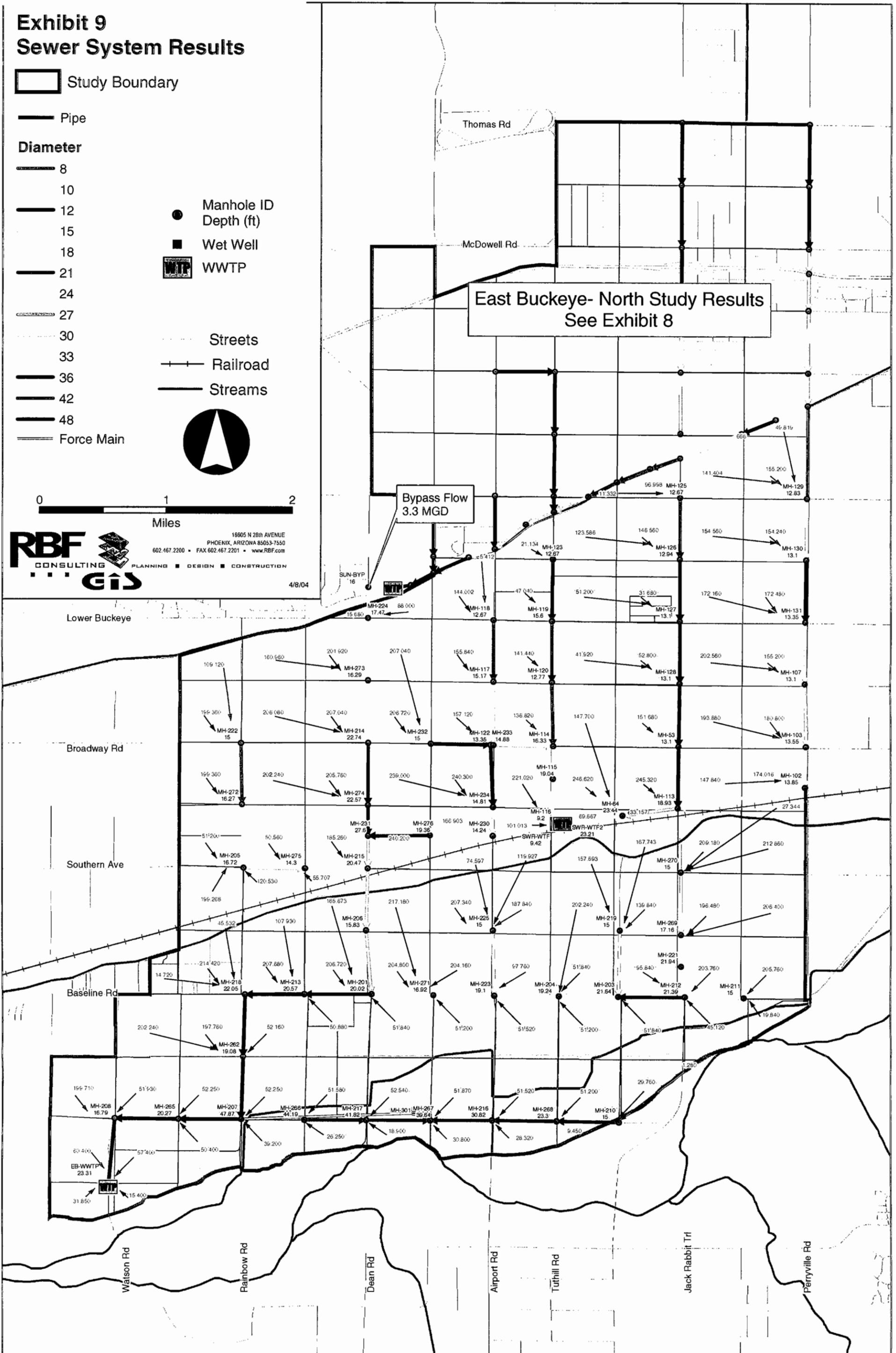


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East Buckeye- North Study Results  
See Exhibit 8

Bypass Flow  
3.3 MGD



Lower Buckeye

Broadway Rd

Southern Ave

Baseline Rd

Watson Rd

Rainbow Rd

Dean Rd

Airport Rd

Tutthill Rd

Jack Rabbit Trl

Perryville Rd



It is important to note that by including this bypass line, all infrastructure directly downstream of the bypass line must be upsized to convey an addition 3.3 MGD of flow. This significantly increased the size of many of the sewer lines directly downstream of the bypass line. The difference in size for each sewer line impacted by the Sundance flow bypass is shown in Table 7 Sundance Bypass Upsizing. The pipe ids listed in the table are shown in Exhibit 7 Buildout Sewer System.

**Table 7 Sundance Bypass Upsizing**

Pipe ID	Sundance Bypass 3.3 MGD	No Bypass Flow
	Diameter (in)	Diameter (in)
P-BYP1	18	Not Required
P-256	18	12
P-257	18	12
P-258	21	12
P-259	21	15
P-232	30	24
P-237	30	24
P-236	30	24
P-220	42	36
P-221	48	42
P-234	48	42
P-265	48	42
P-251	48	42
P-250	48	42
P-231	48	42

An additional consideration with the Sundance WWTP bypass line, is its starting depth. Information was unknown as to the depth of the Roosevelt Irrigation District Canal. For the purposes of this study, the bypass line was designed to cross under the canal at a depth of approximately 15-feet.

### 5.5.3 Lift Stations

The sewer system designed for this master plan, is a primarily gravity flow system. One location near the southern boundary of the sewer system in Beloit Rd has been identified as requiring a lift station. Due to the flat grade in the area and the minimum amount of wastewater that is projected to be generated, a lift station was identified as necessary if sewer service is provided within this area. The proposed location of this lift station is shown in Exhibit 7 Buildout Sewer System.



#### **5.5.4 Southwest Ranch Sewer Area**

A large portion of the study area is identified as being included within the Southwest Ranch MAG208 service area. While it is anticipated that this area will be provided sewer service by a WWTP constructed within the Southwest Ranch development. It is important to note that the developers of Southwest Ranch are currently analyzing the feasibility of constructing a bypass line from their development to the existing Town of Buckeye WWTP. The sizing and capacity of this sewer line along with the area that will be served by the sewer line is currently being studied. At the present time, no decision has been made to construct the bypass line to serve their development in place of the WWTP.

#### **5.5.5 Recommendations for Further Study**

Throughout the development of this master plan, various areas were identified where further study would be necessary. It was beyond the scope of this master plan to perform an in depth analysis of these items, however they should be considered before undertaking design projects within the area.

##### **5.5.5.1 RID Alignment**

In order to provide sewer service within the East Buckeye- North study area, the optimal alignment for conveying wastewater to the Sundance WWTP followed the RID canal. While a preliminary analysis of this alignment has been performed for this study, it is recommended that a detailed feasibility analysis be performed. This detailed analysis should address the issues of a specific sewer alignment, easements that may be required, and a detailed analysis of utility conflicts within the area.

##### **5.5.5.2 Railroad Crossing**

In order to convey the wastewater flows to the proposed WWTP located south of the BID canal, it will be necessary to cross the Union Pacific Railroad, BID canal, and APS effluent line. Within this area exists many critical utilities such as fiber optic lines and a petroleum gas line. For the purposes of this study, the crossing was identified as a gravity flow crossing within Dean Road.

While the crossing identified as part of this study was shown as a gravity crossing, it will be necessary to perform an in depth study to ensure that this crossing is feasible, as well as to identify the existing elevations and sizes of the fiber optic lines, petroleum gas line, APS effluent line, and any requirements for crossing under the railroad and BID canal. It is strongly recommended that an analysis be performed to determine the feasibility for crossing this area with a gravity sewer line, and also the necessary depths for this crossing.

##### **5.5.5.3 Waterlogged Area**

As described within Section 5.3.5, Waterlogged Area, the area south of the BID canal has been identified as waterlogged by the Arizona Department of Water Resources. Due to the potential for high groundwater within this area, it is recommended that additional study be performed in order to determine the extent



of the potential impact of the waterlogged area on the proposed sewer alignments. It is also recommended that this study address any special considerations for constructing sewer lines within the area.



## 6 Wastewater Treatment

One of the controlling factors in developing this sewer system master plan is determining the location and quantity of treatment plants to be located throughout the study area. Within the study area, two WWTP have currently been proposed. These WWTP's include the Southwest Ranch WWTP and the Blue Horizons WWTP. There are no existing WWTPs currently within the study area however, the Sundance WWTP is located just outside of the study area, north of the RID canal, and the Town of Buckeye WWTP is located approximately one mile west of the study area south of Beloat Road. The existing and proposed treatment plants located near the study area are shown in Exhibit 10 Existing and Proposed WWTPs.

### 6.1 Assumptions

In order to determine the location and sizing of the treatment plants that would serve the East Buckeye study area, it was necessary to make various assumptions. This section explains the assumptions that were made, as well as the role that they played in determining sewer treatment options within the study area.

#### 6.1.1 Demands

The Arizona Department of Environmental Quality (ADEQ) has developed a standard design factor for treatment plants of 350 gallons per dwelling unit per day (gal/du/day), as described in Section 3.2.1, Wastewater Generation Factors. This wastewater generation factor represents the average day residential and commercial flow summarized per dwelling unit. For the purposes of this study, the proposed treatment plant capacity was determined by multiplying the ADEQ factor of 350 gal/du/day by the number of dwelling units located within the service area. As described in greater detail within Section 3.2.2, Existing Development Areas, in areas where a significant amount of existing development has already occurred, only 10% of these dwelling units were included within the capacity calculations.

An additional consideration for sizing the treatment plants, was projecting the actual amount of wastewater that they would actually treat. Based on an analysis of existing treatment plants within the area (see Appendix B WWTP Flow Data) a conservative wastewater generation factor of 220 gal/du/day was selected to represent the projected amount of wastewater that would actually be treated at each treatment plant. The wastewater generation factors utilized for treatment plant sizing are summarized in Table 8 Wastewater Treatment Plant Sizing Factors.

**Exhibit 10  
Existing and Proposed WWTPs**

 Study Boundary

**WWTP Locations**

 Existing

 Proposed

 Streets

 Railroad

 Canals & Rivers

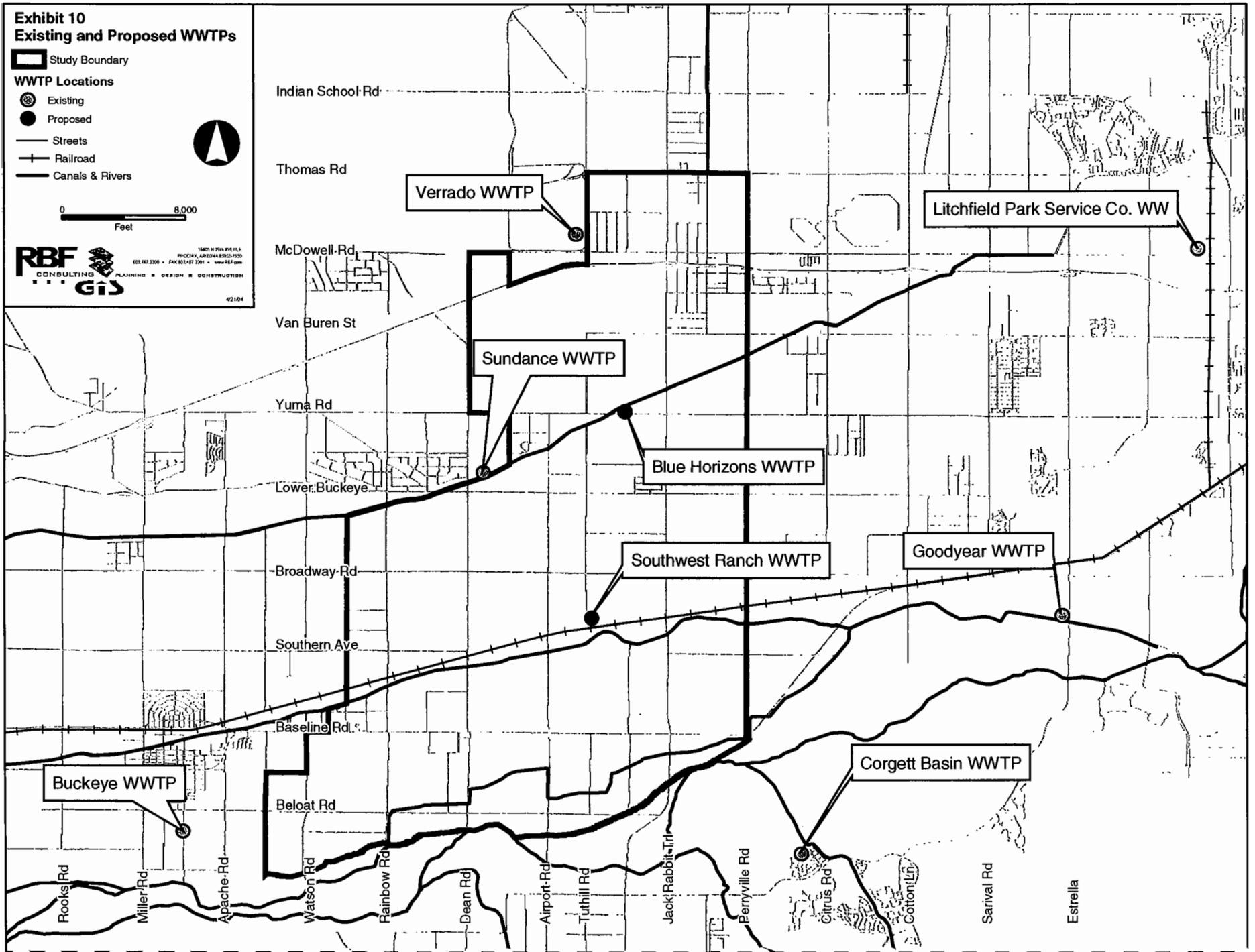


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**Table 8 Wastewater Treatment Plant Sizing Factors**

Description	Demand	Unit
ADEQ Design Factor	350	gal/du/day
Actual Use Factor	220	gal/du/day

## 6.2 Existing WWTPs

Near the study area is the Sundance WWTP. The Sundance WWTP is located east of Dean Road and north of the RID canal. The Sundance WWTP was designed to serve 3.6 MGD at buildout. As described in greater detail within Section 6.4, Recommended WWTP Service Areas, the Sundance WWTP is proposed to serve the portion of the study area located north of the RID canal, including the exception area. The existing MAG-208 service area for this WWTP is shown in Exhibit 11 MAG-208 Service Areas

## 6.3 Proposed WWTPs

Within the study area, two WWTPs have been proposed. These treatment plants include the Southwest Ranch WWTP located near Tuthill Road and the Union Pacific railroad, and the Blue Horizons WWTP located just south of the RID canal west of Jackrabbit Trail. The Southwest Ranch WWTP is proposed to serve 5.0 MGD at buildout, while the Blue Horizons WWTP is proposed to serve approximately 2.0 MGD. The existing MAG-208 service area for the Blue Horizons WWTP, and the proposed MAG-208 service area for the Southwest Ranch WWTP are shown in Exhibit 11 MAG-208 Service Areas.

## 6.4 Recommended WWTP Service Areas

It was the goal of Town staff as well as this study to minimize the number of treatment plants that would be constructed within the service area. Based on discussions with Town staff, and the analysis performed for this study, it has been proposed that the study area be served through three WWTPs. These treatment plants include the Sundance WWTP to serve the area north of the RID; the Southwest Ranch WWTP to serve the area north of the Union Pacific railroad, south of the RID canal, and approximately east of Airport Road; and the proposed East Buckeye WWTP to serve the remainder of the study area. It is important to note that it may be possible to serve the proposed East Buckeye WWTP service area through the existing Buckeye WWTP. The proposed service areas for each of these treatment plants is shown in Exhibit 12 Proposed WWTP Service Areas.

The Rancho Sonora area, the existing homes west of the Sundance WWTP bounded by Watson Rd on the west, Dean Rd on the east, Durango St on the north, and Lower Buckeye Rd on the south, may connect to the Sundance WWTP in the future. The area is currently served by individual septic systems.

**Exhibit 11  
MAG208 Service Areas**

**Legend**

 Study Boundary

**WWTP Service Area**

Blue Horizons

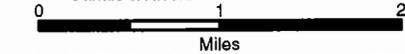
Sundance

Southwest Ranch (Proposed)

 Streets

 Railroad

 Canals & Rivers



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Indian School Rd

Van Buren St

Yuma Rd

Lower Buckeye

Broadway Rd

Southern Ave

Baseline Rd

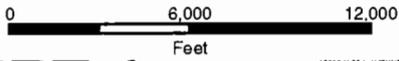
Beloat Rd

# Exhibit 12 Proposed WWTP Service Areas

-  Study Boundary
-  Exception Area

## WWTP Service Areas

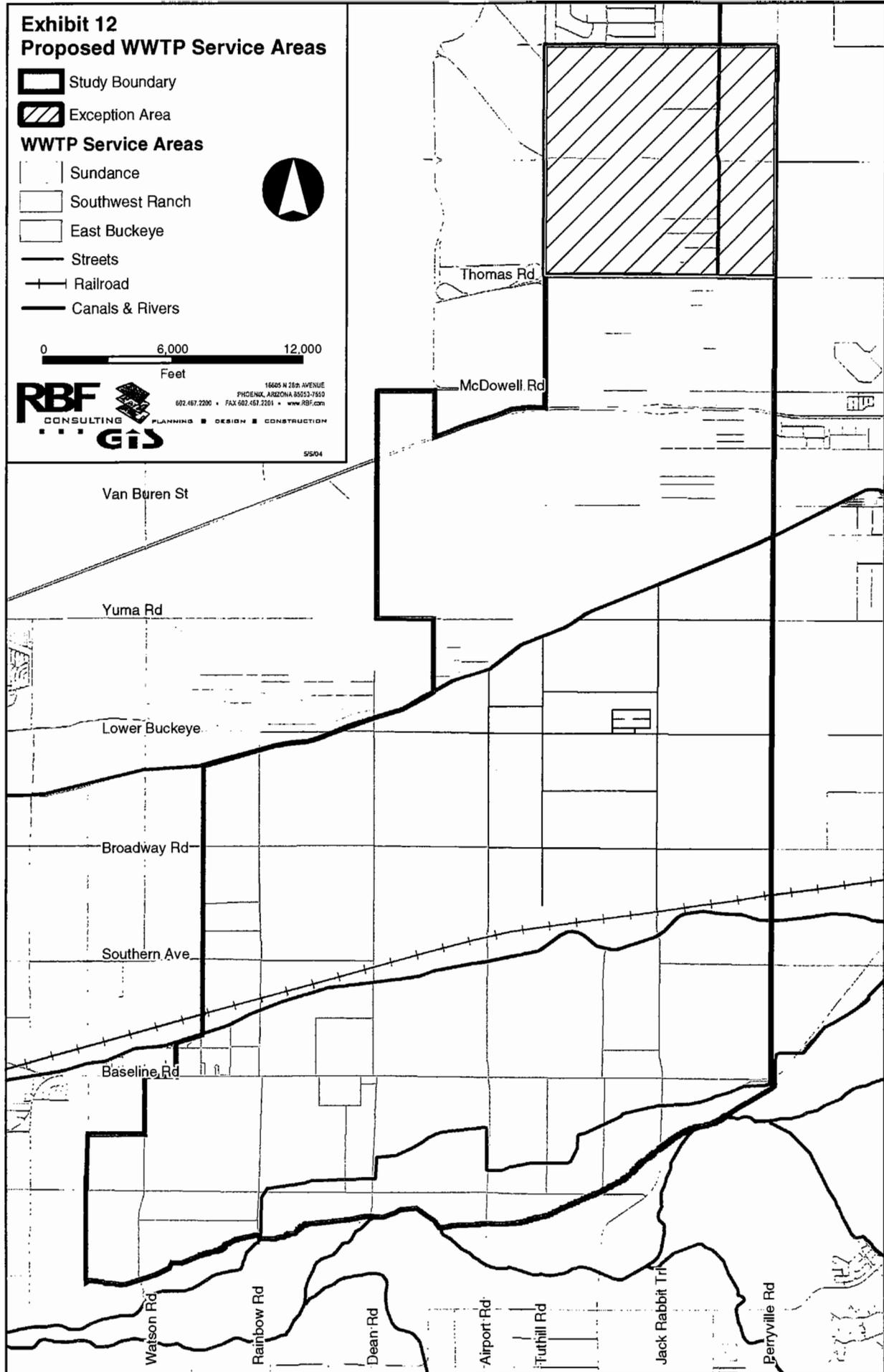
-  Sundance
-  Southwest Ranch
-  East Buckeye
-  Streets
-  Railroad
-  Canals & Rivers



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However, the homeowners have expressed an interest in sewerage and connecting to the Sundance WWTP. The buildout flows for the Sundance WWTP are shown in Table 9 Sundance WWTP Flow Summary.

While the Blue Horizons WWTP had been proposed within the study area, it is recommended that the area that would have been served by this WWTP be served at the Sundance WWTP. This will help the Town maintain their goal of consolidating treatment plants and minimizing the number of small treatment plants scattered throughout their Town.

### 6.5 WWTP Flows

Utilizing the demand factors that were described in Section 6.1.1, Demands, the wastewater flows that were projected to be generated for each treatment plant were computed. Two calculations were performed to determine the WWTP sizing. A design size for each WWTP was computed using the ADEQ factor of 350 gal/du/day, and an actual constructed WWTP size was computed using the design factor of 220 gal/du/day. The number of contributing dwelling units and the projected WWTP capacity required for each proposed treatment plant was computed and the treatment plant flows are summarized in Table 9 Sundance WWTP Flow Summary; Table 10 Southwest Ranch WWTP Capacity; and Table 11 East Buckeye WWTP Capacity.

**Table 9 Sundance WWTP Flow Summary**

Design Sizing				Proposed Actual Sizing			
Landuse	Dwelling Units	Design Demand (gal/du/day)	Design Total (gpd)	Landuse	Dwelling Units	Actual Demand (gal/du/day)	Actual Total (gpd)
Future DU	12,607	350	4,412,608	Future DU	12,607	220	2,773,639
Exist DU	720	35	25,200	Exist DU	720	22	15,840
Rancho Sonora	476	35	16,660	Rancho Sonora	476	22	10,472
<b>Subtotal</b>	<b>13,803</b>		<b>4,454,468</b>	<b>Subtotal</b>	<b>13,803</b>		<b>2,799,951</b>
Exception Future DU	2,919	350	1,021,549	Exception Future DU	2,919	220	642,116
Exception Exist DU	908	35	31,780	Exception Exist DU	908	22	19,976
<b>Subtotal</b>	<b>3,827</b>		<b>1,053,329</b>	<b>Subtotal</b>	<b>3,827</b>		<b>662,092</b>
Sundance Design Capacity			3,600,000	Sundance Design Capacity			2,262,857
Excess Sundance Capacity			-201,600	Excess Sundance Capacity			-126,720
<b>Total Capacity</b>			<b>8,906,196</b>	<b>Total Capacity</b>			<b>5,598,180</b>



**Table 10 Southwest Ranch WWTP Capacity**

Design Sizing			Proposed Actual Sizing		
Dwelling Units	Design Demand (gal/du/day)	Design Total (gpd)	Dwelling Units	Actual Demand (gal/du/day)	Actual Total (gpd)
11,347	350	3,971,450	11,347	220	2,496,340
<b>Total Capacity</b>		<b>3,971,450</b>	<b>Total Capacity</b>		<b>2,496,340</b>

The flows for the proposed East Buckeye WWTP are outlined in Table 11 East Buckeye WWTP Capacity. It is important to note that these flows do not include any additional capacity to treat the wastewater that may be bypassed from the Sundance WWTP (see Section 5.5.2, Bypass Line). These flows only consider the flows generated within the proposed East Buckeye WWTP area shown in Exhibit 12 Proposed WWTP Service Areas.

**Table 11 East Buckeye WWTP Capacity**

Design Sizing			Proposed Actual Sizing		
Dwelling Units	Design Demand (gal/du/day)	Design Total (gpd)	Dwelling Units	Actual Demand (gal/du/day)	Actual Total (gpd)
23,564	350	8,247,451	23,564	220	5,184,112
<b>Total Capacity</b>		<b>8,247,451</b>	<b>Total Capacity</b>		<b>5,184,112</b>

## 6.6 Sundance WWTP Recommendations

Due to the large amount of growth that is occurring within the study area north of the RID canal, a specific series of recommendations were formulated to address the wastewater that is generated within this area. This section describes these recommendations explaining the Sundance WWTP sizing, initial treatment plant participants, and methods for implementing these recommendations.

### 6.6.1 Sundance WWTP Sizing

As described in Section 6.2, Existing WWTPs the Sundance WWTP has a design capacity of 3.6 MGD. Based on an analysis of the current number of homes constructed within various phases of Sundance, it appears that there will be approximately 201,600 gallons per day (gpd) of excess capacity (when assuming 350 gpdud) or 126,720 gpd of excess capacity (when assuming 220 gpdud) at the treatment plant, due to fewer lots being developed than originally projected.



This section outlines three development scenarios for the Sundance WWTP. These scenarios include the buildout design size, the actual construction size, and the initial improvement size.

#### **6.6.1.1 Buildout Design Size**

As described in Section 6.1.1, Demands, two demand factors were used in computing the size of the treatment plants. The ADEQ requires the treatment plants to be designed to serve 350 gallons per dwelling unit per day. Based on the research performed for this study, it was calculated that the Sundance WWTP would need to be designed to serve a buildout capacity of 8.9 MGD. This would allow the Sundance WWTP to serve the Sundance development and its designated outparcels, as well as the East Buckeye Master Plan study area north of the RID including the exception area.

Based on discussions with Town staff, it is recommended that the Sundance WWTP MAG-208 application be amended, and the WWTP design revised to provide service to these areas. In order to serve this additional flow, it will be necessary to acquire additional land in the vicinity of the Sundance WWTP. Negotiations are currently taking place with Buckeye Land Management (BLM), the owners of the land within the area, to acquire the additional land (see Section 8.3, East Buckeye- North Study Area Cost Analysis). It is important to note that while the WWTP must be designed to accommodate 8.9 MGD, the actual constructed size and amount of flow that it will ultimately treat may be significantly smaller.

#### **6.6.1.2 Actual Construction Size**

While the ADEQ requires WWTPs to be designed to meet a demand of 350 gallons per dwelling unit per day, the WWTPs are typically constructed in phases as developments necessitates. This allows the developer to conserve capital, and also helps ensure that the treatment plant is appropriately sized to treat the flows that will be generated within its service area.

As described in Section 6.1.1, Demands, a conservative per dwelling unit demand factor of 220 gallons per dwelling unit per day was used. As shown in Table 9 Sundance WWTP Flow Summary the anticipated constructed buildout size for the Sundance WWTP is 6.9 MGD. It is important to note that this size was based on an analysis of historical flow patterns at various other WWTPs within the Phoenix Metropolitan Area, as well as future growth projections for the study area. It is recommended that the amount and type of growth within the area be reevaluated at a minimum five-year interval to ensure that the Sundance WWTP adequately serves the proposed service area.

#### **6.6.1.3 Initial Improvement Size**

While the buildout sizing of the Sundance WWTP is described in detail within this section, an important consideration is the initial sizing of the WWTP. Located within the East Buckeye- North Study Area, are six developments, which are in



the final planning and design stages. These developments include: Blue Horizons, Jackrabbit Trails, Paloma Vista, Parkman Ranch, Vista de Montana, and Arroyo Seco.

Based on discussions with Town staff, it has been recommended that these developments be provided sewer service at the Sundance WWTP. In order to serve these developments, it will be necessary to increase the size of the Sundance WWTP. The Sundance WWTP would need to be designed to treat 5.5 MGD based on the ADEQ standards. However, it is anticipated that the addition of these developments would ultimately require treatment capacity of 3.5 MGD at the Sundance WWTP. A breakdown of these wastewater flows is provided in Table 12 Sundance WWTP Initial Development Flows.

**Table 12 Sundance WWTP Initial Development Flows**

Design Sizing				Proposed Actual			
Development	Units	Demand	Total	Development	Units	Demand	Total
Blue Horizons	2,225	350	778,750	Blue Horizons	2,225	220	489,500
Jackrabbit Trails	343	350	120,050	Jackrabbit Trails	343	220	75,460
Paloma Vista	650	350	227,500	Paloma Vista	650	220	143,000
Parkman Ranch	633	350	221,550	Parkman Ranch	633	220	139,260
Vista de Montana	1,100	350	385,000	Vista de Montana	1,100	220	242,000
Arroyo Seco	950	350	332,500	Arroyo Seco	950	220	209,000
<b>Subtotal</b>	<b>5,901</b>	<b>-</b>	<b>2,065,350</b>	<b>Subtotal</b>	<b>5,901</b>	<b>-</b>	<b>1,298,220</b>
Sundance Design Capacity			3,600,000	Sundance Design Capacity			2,262,857
Excess Sundance Capacity			-201,600	Excess Sundance Capacity			-126,720
<b>Total Capacity</b>			<b>5,463,750</b>	<b>Total Capacity</b>			<b>3,434,357</b>



## 7 Reclaimed Water System

Being located in the desert southwest, the Town of Buckeye recognizes that water is a finite resource and must be conserved. In order to better utilize their existing water resources, Buckeye is striving to identify potential uses for their wastewater effluent. This section provides a conceptual overview of a potential system that will allow the Town to put their effluent to beneficial use.

Two potential categories of uses exist for the Town's effluent. These two categories include direct reuse, and recharge and recovery. Direct reuse has been utilized within the Town of Buckeye to satisfy water demands such as golf course irrigation. In order to directly reuse water, it must be sufficiently treated. The potential uses for reclaimed water are described in Section 7.1, Potential Reclaimed Water Uses.

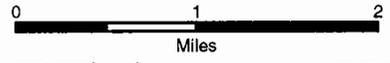
By directly reusing effluent, the Town can reduce the amount of potable water used within their system. It is important to note that various private water companies are located within the master plan study area. While directly reusing effluent within these areas would provide a conservation benefit, it will not directly benefit the Town of Buckeye's water system. The private water company service areas are shown in Exhibit 13 Water Companies.

When considering directly reusing effluent, it is beneficial to provide adequate flow to supply the peak demands. In evaluating the turf irrigation demand, it is important to note that the demand can vary significantly depending on the time of year. According to the City of Phoenix Design Standards Manual, turf water demands can vary by a factor of 10 between the summer and winter demand conditions. During those times of the year when the effluent cannot be utilized through direct reuse, it will be necessary for an alternative form of disposal to be utilized.

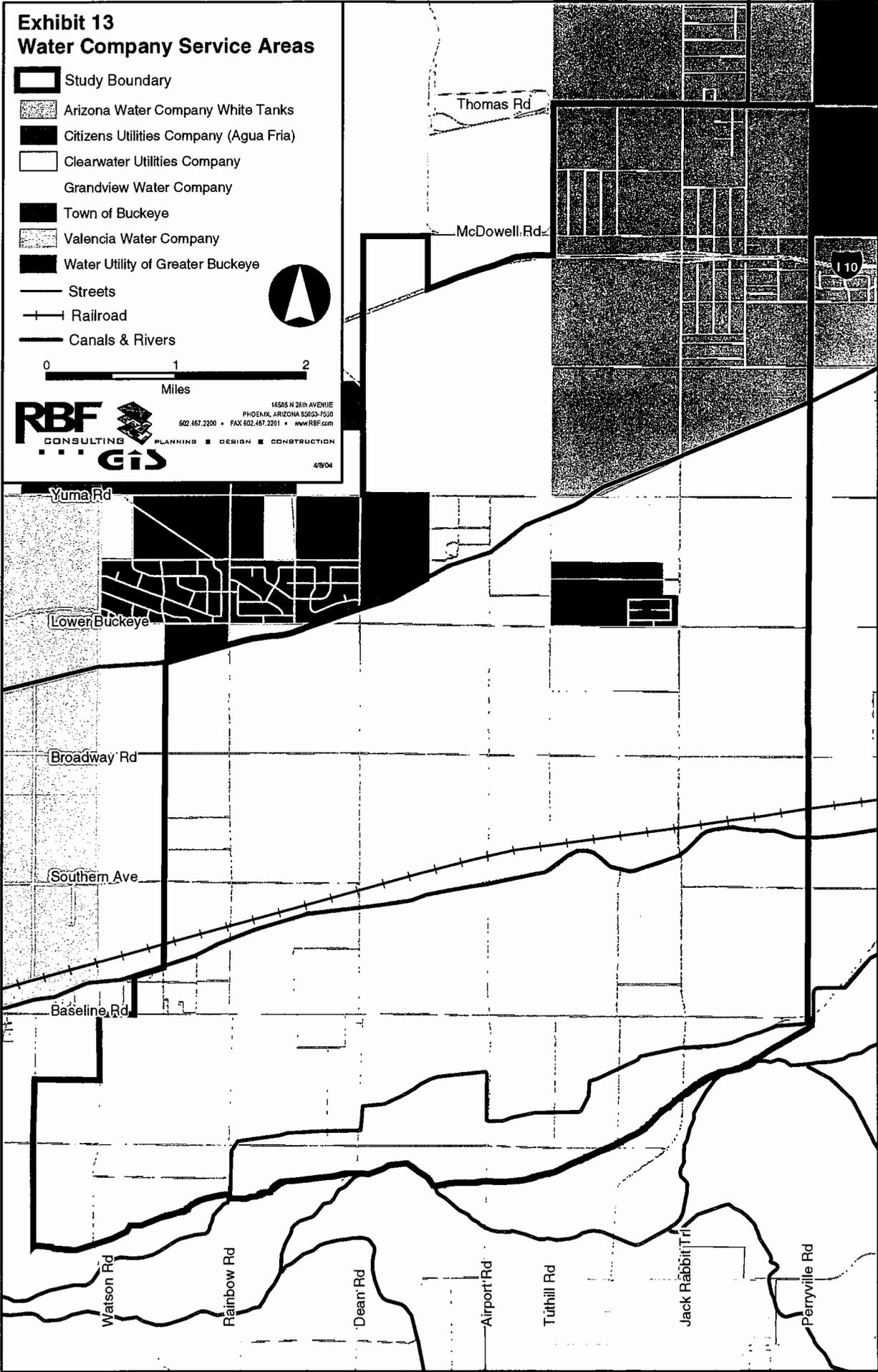
Recharging effluent provides a dual benefit as a method for disposing of effluent and also receiving recharge credits from the Arizona Department of Water Resources. Due to the fact that it will be necessary to recharge the effluent during a portion of the year, for the purposes of this master plan, only a recharge program is being recommended. Before undertaking any recharge project within the Town, it is recommended that a detailed study be performed identifying the quantity and quality of effluent that will be produced, the quantity of effluent that must be recharged, as well as the soil conditions for accepting recharge in each location. Additionally, with the waterlogged area located south of the BID canal (see Exhibit 6 Physical Constraints), it would not be feasible or beneficial to recharge water within this area.

# Exhibit 13 Water Company Service Areas

-  Study Boundary
-  Arizona Water Company White Tanks
-  Citizens Utilities Company (Agua Fria)
-  Clearwater Utilities Company
-  Grandview Water Company
-  Town of Buckeye
-  Valencia Water Company
-  Water Utility of Greater Buckeye
-  Streets
-  Railroad
-  Canals & Rivers



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## 7.1 Potential Reclaimed Water Uses

The potential uses for reclaimed water vary depending on the class of effluent that is discharged from the Town's WWTP's. Each class of effluent may be used for its designated potential uses, and any potential uses for classes lower than itself. The potential uses for effluent are as follows:

Class A effluent is suitable for irrigation of food crops, recreational impoundments, residential landscape irrigation, school ground landscape irrigation, open access landscape irrigation, toilet and urinal flushing, fire protection systems, spray irrigation of an orchard or vineyard, commercial closed loop air conditioning systems, vehicle and equipment washing as well as those uses approved for Class B and Class C effluent.

Class B effluent is suitable for recharge, irrigation of an orchard, irrigation of golf courses, restricted access landscape irrigation, landscape impoundment, dust control, construction water, milking animal pasture irrigation and livestock watering, and street cleaning as well as those uses approved for Class C effluent.

Class C effluent can be used for pasture or livestock watering for non-dairy animals; irrigation of sod farms; irrigation of fiber, forage, seed or other similar crops and silviculture.

The recommendations outlined in this reclaimed water master plan are based on the assumption that the Town of Buckeye will discharge Class A effluent from the wastewater treatment plants located within the master plan study area.

## 7.2 Recharge Assumptions

In order to develop a conceptual plan for recharge, it was necessary to make various assumptions. These assumptions are summarized within this section.

In order to recharge effluent, it is necessary to construct recharge wells or basins. Many different designs of recharge wells may be available. Recharge wells require a site-specific design that considers the soils, aquifer, effluent makeup, depth of well, and various other parameters. For the purposes of this recharge master plan, it was necessary to make various simplifying assumptions regarding the recharge well. These assumptions were made to provide an overview of what may be necessary in the area in terms of effluent recharge, and in no way are meant to serve as a recommendation on the ideal type of recharge system for the East Buckeye Sewer Wastewater Master Plan study area. It is recommended that a site-specific recharge study be performed before undertaking any recharge project in the area.



For the purposes of this master plan, it was assumed that the recharge wells would be designed and equipped similar to a potable water well, only the design and construction will be such that the effluent will be recharged into the ground rather than extracted. A simplifying assumption was that the recharge well could recharge 50% what a groundwater well could extract. For the purposes of this study, it was assumed that the recharge wells could recharge 500gpm. Due to the potential differences in soils throughout the special planning areas, it is important to note that the actual performance of any recharge well may differ considerably from the standard recharge well parameters assumed for this study. Therefore more or less recharge wells may be required.

This recharge master plan also assumes that the ground in the areas where the recharge wells will be located will be conducive to the recharge of effluent.

### 7.2.1 Effluent Generation

An important consideration in determining reclaimed water usage, is understanding the quantity of effluent that will be generated. As described in Section 6.1.1, Demands, a proposed actual demand of 220 gallons per dwelling unit per day was utilized. It is important to note that based on the ADWR Third Management Plan, greater conservation methods will be required in the future. These conservation methods may have some effect on the actual amount of wastewater treated at each WWTP. For the purposes of this study, it was assumed that 220 gallons of effluent would be produced for each dwelling unit. The effluent produced at each WWTP is summarized in Table 13 WWTP Effluent Production.

Table 13 WWTP Effluent Production

WWTP	Effluent (MGD)
Sundance	5.6
Southwest Ranch	2.5
East Buckeye	5.2

### 7.3 Recharge Plan

As part of this recharge plan, the quantity of recharge wells that would be required for each WWTP service area were computed. It is important to note that while injection wells are described for this analysis, it may also be possible to recharge the water through percolation basins. The actual method of recharging effluent should be determined based on a site specific analysis. An important consideration when developing a recharge plan is identifying locations to recharge the effluent. The number of recharge wells that would be required to recharge the effluent generated at each treatment plant, based on the assumptions outlined in Section 7.2, Recharge Assumptions is summarized in Table 14 Recharge Wells.



**Table 14 Recharge Wells**

WWTP	Effluent (MGD)	Effluent (gpm)	Recharge Wells
Sundance	5.6	3,880	8
Southwest Ranch	2.5	1,734	4
East Buckeye	5.2	3,600	7

It is also recommended that a detailed site-specific study be performed to determine the best location for each recharge well along with the potential quantity of effluent that can be recharged in each location. It is recommended that a recharge program be pursued in order to take advantage of the Town's effluent as a potential water resource.

#### **7.4 Existing Sundance Effluent Disposal**

Due to the intensity of development in the East Buckeye- North Study Area, the existing method for utilizing the effluent generated at the Sundance WWTP is discussed. At the present time, a 20-inch low-pressure effluent line has been designed to convey effluent from the Sundance WWTP to the BID canal. The effluent line was designed to convey 7.2 MGD or two times the design flow from the Sundance WWTP. Based on calculations for the effluent line, it is estimated that the effluent line can convey 10.46 MGD (see Appendix F Sundance Effluent Line).

The proposed actual build-out flow from the Sundance WWTP is estimated at 5.6 MGD (see Section 6.6.1, Sundance WWTP Sizing). Assuming the effluent line must be capable of conveying two times the capacity of the plant, the effluent line would need to convey 11.2 MGD at build-out. Since the Sundance effluent line was designed as a pressurized line, it is estimated that 11.2 MGD could be conveyed through the line by adding an additional 7psi of pressure to the line (see Appendix F Sundance Effluent Line). It is important to note that a detailed analysis of the effluent line should be prepared before increasing the flows in the effluent line beyond its design capacity.



## 8 Probable Costs

In order to assist the Town in planning for the future, planning level cost estimates were developed for each of the improvements outlined in this master plan. These cost estimates are meant to serve as a planning level guide only. Before beginning any project recommended in this master plan, it is recommended that a detailed cost analysis be performed for the project.

### 8.1 Cost Estimate Background

The cost estimates that are provided in this Section and within this master plan in general have been developed as general planning level costs. It is recommended that a detailed cost analysis be performed as part of the design of each of these projects. The costs were computed based on similar construction projects completed within the area. All costs are provided as present day costs. The construction costs for each sewer line identified within this project were computed based on a cost per linear foot. In addition to the construction costs, mobilization & contingency were included at 20%, engineering at 12%, construction management at 5% legal fees at 4% and permits/fees at 2%. A total pipe cost per foot was computed from these factors. These costs are shown in Table 15 Sewer Pipe Costs. Manhole costs of \$3,800 each were added to these costs, assuming a 500-foot spacing. It is important to note that an additional cost of \$175,000 was added to pipe P-237 to take into consideration the costs of crossing the Union Pacific Railroad, APS effluent line, and BID canal. An additional cost of \$75,000 was added to pipe P-BYP1 (Sundance bypass line) to take into consideration the cost of crossing the RID canal.

**Table 15 Sewer Pipe Costs**

Diameter	Const Cost (\$/ft)	Mob + Cont	Engineering	Const Mgmt	Legal	Permits/Fees	Total Cost (\$/ft)
		20%	12%	5%	4%	2%	
8	30	6.00	4.32	1.80	1.44	0.72	44.28
10	33	6.60	4.75	1.98	1.58	0.79	48.71
12	35	7.00	5.04	2.10	1.68	0.84	51.66
15	39	7.80	5.62	2.34	1.87	0.94	57.56
18	50	10.00	7.20	3.00	2.40	1.20	73.80
21	75	15.00	10.80	4.50	3.60	1.80	110.70
24	93	18.60	13.39	5.58	4.46	2.23	137.27
27	110	22.00	15.84	6.60	5.28	2.64	162.36
30	120	24.00	17.28	7.20	5.76	2.88	177.12
33	140	28.00	20.16	8.40	6.72	3.36	206.64
36	160	32.00	23.04	9.60	7.68	3.84	236.16
42	180	36.00	25.92	10.80	8.64	4.32	265.68
48	200	40.00	28.80	12.00	9.60	4.80	295.20



In addition to the sewer pipe costs, planning level costs were calculated for each WWTP. For the Sundance WWTP expansion, the additional capacity required at the treatment plant was included. The WWTP costs were computed assuming 5 acres of land would be required for each 1,000,000 gallons of flow treated. A land cost of \$30,000 per acre was assumed for this study. The costs of the treatment plants were computed using a cost formula developed by the U.S. Environmental Protection Agency. The cost formula utilized is shown in Equation 1 WWTP Cost Estimate Formula. The result provided by the cost formula was multiplied by a factor of 1.41 to bring the costs to present day costs.

**Equation 1 WWTP Cost Estimate Formula**

$$C = 11,400 \times Q^{0.72}$$

$C$  : Cost(1,000\$)  
 $1 \leq Q \leq 100mgd$

**8.2 Cost Summary**

Utilizing the cost information that was outlined in Section 8.1, Cost Estimate Background, the costs for each sewer line were computed. The costs for each sewer pipe are provided in Appendix D Pipeline Costs. These costs were summarized for each treatment plant service area. The cost summary is shown in Table 16 Wastewater Infrastructure Cost Summary. In addition, the wastewater treatment plant costs are summarized and shown in Table 17 WWTP Cost Summary. Due to the intensity of the development occurring north of the RID canal, a more detailed breakdown of the costs for this area is provided. This analysis is described in Section 8.3, East Buckeye- North Study Area Cost Analysis.

**Table 16 Wastewater Infrastructure Cost Summary**

Area	Pipes	WWTP	Total
East Buckeye-North	8,154,567	54,202,542	62,357,109
Southwest Ranch	4,476,972	44,212,116	48,689,088
Proposed East Buckeye	13,274,824	74,355,683	87,630,508
<b>Total</b>	<b>\$25,906,363</b>	<b>\$172,770,341</b>	<b>\$198,676,705</b>



**Table 17 WWTP Cost Summary**

WWTP	Flow	Plant	Land	Total	\$/gal
Sundance	5.30	53,407,542	795,000	\$54,202,542	\$10.23
Southwest Ranch	4.00	43,612,116	600,000	\$44,212,116	\$11.05
East Buckeye	8.20	73,125,683	1,230,000	\$74,355,683	\$9.07
<b>Total</b>				<b>\$172,770,341</b>	

### **8.3 East Buckeye- North Study Area Cost Analysis**

Due to the intense development occurring within the East Buckeye- North study area, a cost analysis was performed in greater detail for this area. This cost differs slightly from the cost analysis described earlier in this Section. The detailed North Study Area cost analysis estimates the costs associated with construction, engineering, easements, construction management, and permits. The cost estimate per pipe is shown in Appendix E-1 North Area Pipe Costs. In addition, the cost estimates were further broken down to reflect the cost responsibilities for each quarter section shown within the East Buckeye-North study area. The quarter section id's are shown in Exhibit 8 North Area Sewer System Results, while the cost responsibilities are outlined in Appendix E-2 North Area Cost Breakdown.

In addition to the cost breakdowns, an additional cost exhibit has been prepared outlining the locations and costs of anticipated easements within the East Buckeye- North Study Area. This information is included in Appendix E-3 North Area Easement Costs.

It is important to note that the costs outlined within this section are provided as present day costs. These costs should be adjusted to account for inflation as well as market changes when evaluating the costs of these projects at a future date.

#### **8.3.1 Financing and Reimbursement**

##### **8.3.1.1 Sewer Line Expansion Financing**

The new sewer mainlines that will serve the East Buckeye-North Sewer Service Area, ("EBNSSA") as shown in Exhibit 8 North Area Sewer System Results, will be developed over time and as needed by Initial Developers and Secondary Developers (each as defined below and collectively referred to as "Developers") within the EBNSSA. The new sewer mainlines will be developed in locations and at sizes as generally depicted Exhibit 8 North Area Sewer System Results. At the sole discretion and request of the individual Developers, the Town of Buckeye ("Town") will cooperate to facilitate the Developers' financing of the sewer line improvements and other eligible improvements within the EBNSSA by



approving the use of Special Taxing Districts (i.e. Improvement Districts and/or Community Facilities Districts ("Districts")).

### **8.3.1.2 Sundance Wastewater Treatment Plant Future Management and Expansion Financing**

Buckeye Land Management ("BLM"), the master developer of the Sundance development, is currently responsible for managing the expansion of the Sundance Waste Water Treatment Plant ("SWWTP") to its current planned capacity of 3.6 MGD. The Sundance development, as currently planned, upon build-out, may utilize all of the current capacity and currently planned expansion capacity of the SWWTP. The SWWTP will require significant capacity expansion to accommodate the development of other properties within the EBNSSA beyond BLM's current capacity and original planned expansion capacity. In order to accommodate the development of additional properties within the EBNSSA, BLM's two currently-planned 1.2 MGD expansions of the SWWTP will be modified to increase the total capacity of the SWWTP to 7.2 MGD (9.1 MGD using high-rate treatment methods). Additional land area north and east of the SWWTP will be acquired as soon as possible to accommodate the expansion of the SWWTP. As the future SWWTP expansions are intended to benefit a much larger service area than that originally intended, it is recommended that the supervision and management of the SWWTP expansions be transferred from BLM to the Town. [BLM has indicated that it supports transfer of this function to the Town.] The incremental increase of the SWWTP expansion will be subject to agreement among the Town and the Initial Developers. The Town, BLM and the Initial Developers will agree upon an allocation of current and future SWWTP capacity, as expanded from time to time, to accommodate the reasonable needs of BLM and the Initial Developers.

Within the Sundance development, homebuilders now pay approximately \$2,200 per house, at building permit issuance, as a wastewater treatment fee. These funds are utilized to pay for the existing SWWTP improvements and for the currently planned future expansion of the SWWTP. In its new role as the entity responsible for managing the completion of the SWWTP, the Town and the Developers within EBNSSA and within the Sundance development will meet and agree on an equitable system by which Developers pay to the Town, in a manner similar to the current process for homebuilders in the Sundance development, wastewater treatment fees that will be used to incrementally expand the SWWTP in order to serve the various developments within the proposed and expanded 208 service area.

### **8.3.1.3 Future SWWTP Treatment**

The Town will institute a fee payable at issuance of the building permit to pay for the expansion of the SWWTP. The Town will be responsible for ensuring that the SWWTP is adequately designed, constructed, and operated such that treatment capacity is readily available for those developments located within the SWWTP service area.



#### **8.3.1.4 Reimbursement Agreement**

The Town will enter into a reimbursement agreement with the Initial Developers, to reimburse them for oversizing of the sewer line improvements. The reimbursement agreement between the Town and the Initial Developers will be established pursuant to existing Town ordinances. The reimbursement agreement will provide reimbursement to the Initial Developers at the earlier of the Secondary Developers receiving preliminary plat approval, final plat approval, or issuance of a building permit.

#### **8.3.1.5 Easement Acquisition**

At the request of the Town and with the agreement of the Initial Developers, the alignment of the proposed sewer line infrastructure was planned to utilize an alignment north of the north side of the Roosevelt Irrigation District canal (the "RID-North Alignment"). It was also agreed that additional land north and east of the SWWTP (the "SWWTP Expansion Area") would be needed to facilitate the proposed expansion of the SWWTP. Since neither the Town nor the parties likely to be designated as the Initial Developers owns or controls all of the Proposed RID-North Alignment and the SWWTP Expansion Area, the Town agrees to utilize any of its powers to acquire any necessary easements within the RID-North Alignment and/or the SWWTP Expansion Area. All costs associated with the acquisition of the RID-North Alignment and/or the SWWTP Expansion Area, including all costs of the Town to acquire property and/or easements, will be paid for by the Initial Developers and those costs, as with all others, will be subject to the Reimbursement Agreement. The RID-North Alignment is shown in detail in Appendix E-3 North Area Easement Costs.

### **8.4 Reclaimed Costs**

In order to assist the Town in planning for the future, planning level cost estimates were developed for the improvements outlined in this master plan. These cost estimates are meant to serve as a planning level guide only. Before beginning any project recommended in this master plan, it is recommended that a detailed cost analysis be performed for the project. The cost estimates prepared for the recharge master plan were developed to provide a planning level overview for the recommendations outlined in this section.

For the reclaimed master plan, the cost estimates are based on the cost to equip and construct an injection recharge well. For the purposes here, it was assumed that a recharge well would cost approximately double the cost of a potable water well. A value of \$500,000 per recharge well was assumed. This value does not include the costs for additional piping to transfer the water from the transmission mains to the recharge site. The recharge costs are summarized in Table 18 Reclaimed Cost Summary.



**Table 18 Reclaimed Cost Summary**

<b>WWTP</b>	<b>Recharge Wells</b>	<b>Costs</b>
Sundance	8	4,000,000
Southwest Ranch	4	2,000,000
East Buckeye	7	3,500,000
<b>Total</b>		<b>\$9,500,000</b>



## 9 East Buckeye- North Action Plan

As discussed throughout this report, due to the large amount of development that is occurring within the East Buckeye- North area, additional study was performed in this area. This section outlines various actions that should be undertaken in order to ensure that development within the East Buckeye- North Study Area proceeds as planned.

Items that should be undertaken immediately include:

- Acquire easements/right-of-Way along the RID alignment for sewer collector line (see Appendix E-3 North Area Easement Costs).
- Prepare MAG208 application for sewer service areas (see Exhibit 12 Proposed WWTP Service Areas). It is recommended that an individual MAG208 application be prepared for each service area, such that the application can be prepared for each area as required. This will avoid any delays that may arise if issues need to be resolved in other service areas.
- Reserve or acquire additional land area for the Sundance WWTP.
- Begin design of sewer collector line following RID alignment (see Exhibit 8 North Area Sewer System Results).

Additional actions include:

- Design Sundance WWTP expansion.
- Apply for Aquifer Protection Permit for expanded Sundance WWTP.
- Update National Pollutant Discharge Elimination System (NPDES) permit for Sundance WWTP.
- Develop an effluent reuse/disposal plan.



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## Appendix

### Appendix A Growth Data

Appendix A-1 Town of Buckeye Land Use Map

Appendix A-2 East Buckeye-North Growth Information

### Appendix B WWTP Flow Data

Appendix C Model Results

### Appendix D Pipeline Costs

### Appendix E East Buckeye- North Study Area Costs

Appendix E-1 North Area Pipe Costs

Appendix E-2 North Area Cost Breakdown

Appendix E-3 North Area Easement Costs

### Appendix F Sundance Effluent Line

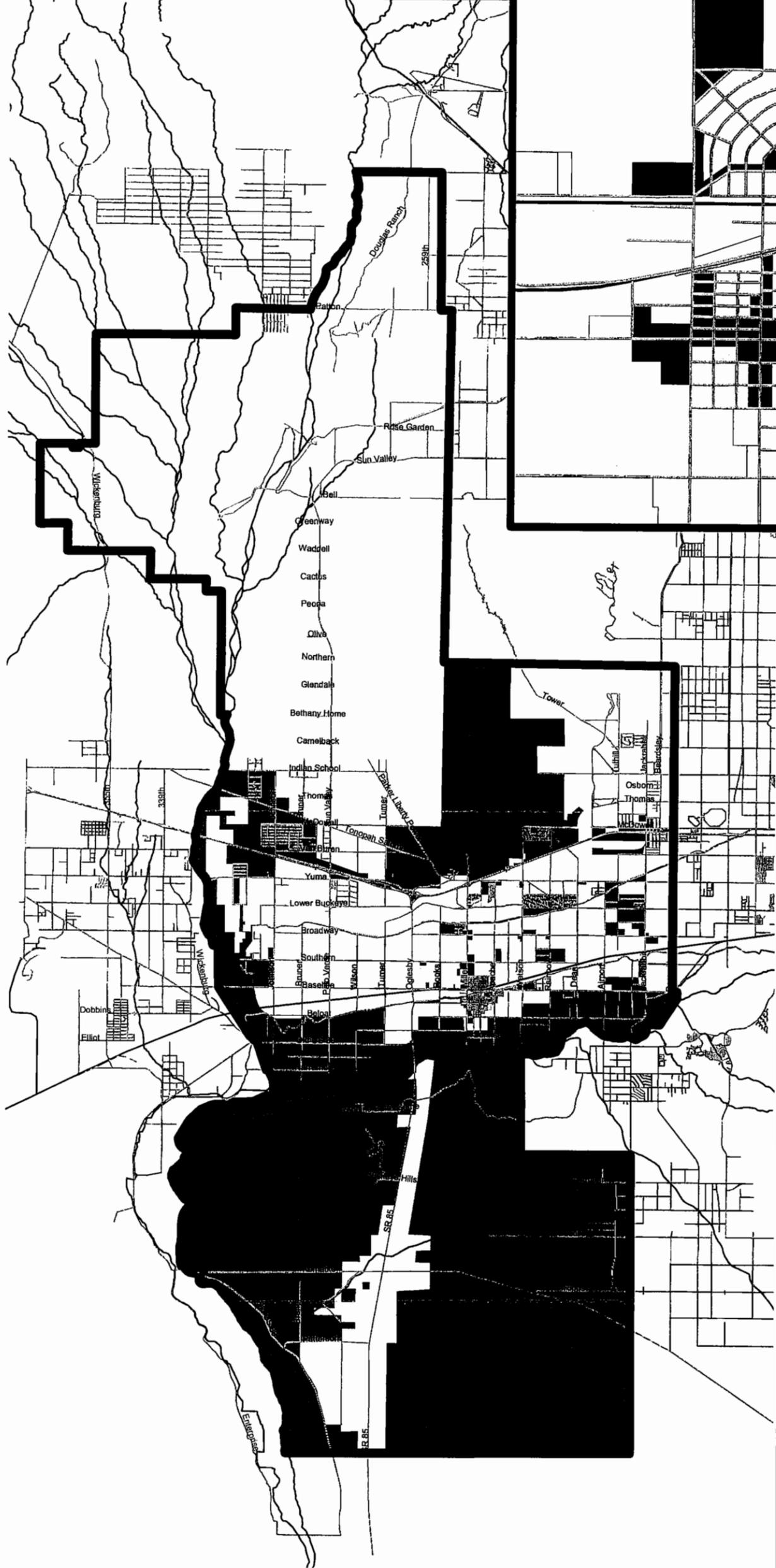
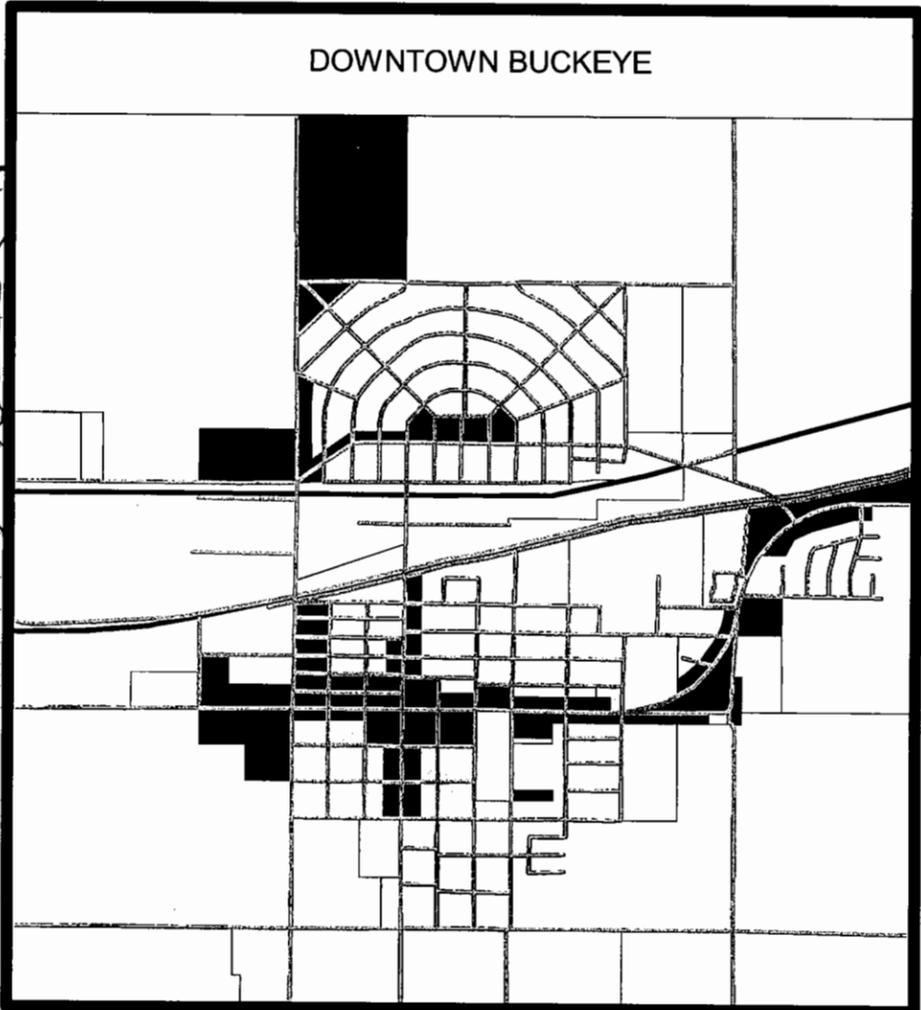


## Appendix A Growth Data



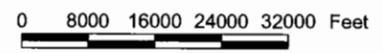
## **Appendix A-1 Town of Buckeye Land Use Map**

**TOWN OF BUCKEYE  
LAND USE DISTRICT MAP  
UPDATE 1/19/04**



**LAND USE DISTRICTS**

-  RURAL RESIDENTIAL
-  PLANNED RESIDENTIAL
-  MIXED RESIDENTIAL
-  PLANNED COMMUNITY
-  COMMERCIAL CENTER
-  GENERAL COMMERCE
-  SPECIAL USE
-  PLANNING AREA
-  MAJOR STREETS
-  RAILROAD
-  MAJOR WASHES



Prepared for the Town of Buckeye  
by Community Sciences Corporation  
Modified 1/04 by RBF



## Appendix A-2 East Buckeye-North Growth Information

East Buckeye-North Growth Information

Service Area	Undeveloped Medium Density Residential			Undeveloped Low Density Residential			Existing (Probable) Residential Lots		Commercial Land		TOTALS	
	Acerage	DU's @ 4.0 DU/AC	Future Flows @ 320 Gal/DU	Acerage	DU's @ 1.0 DU/AC	Future Flows @ 320 Gal/DU	Lots	Future Flows @ 1/10x320 Gal	Acerage	Future Flow @ 1,500/AC	Future DU's	Flows
1	13.050	52.200	16,704		0.000	-		-		-	52	16,704.00
2	151.890	607.560	194,419		0.000	-		-		-	608	194,419.20
3		0.000	-	48.795	48.795	15,614.40		-		-	0	15,614.40
4		0.000	-	12.970	12.970	4,539.50	25	800.00		-	25	5,339.50
5A	159.000	636.000	203,520		0.000	-		-		-	636	203,520.00
5B	159.000	636.000	203,520		0.000	-		-		-	636	203,520.00
6A	153.54	614.160	196,531		0.000	-		-		-	614	196,531.20
6B	153.54	614.160	196,531		0.000	-		-		-	614	196,531.20
7	153.540	614.160	196,531		0.000	-		-		-	614	196,531.20
8	153.540	614.160	196,531		0.000	-		-		-	614	196,531.20
9A	74.132	296.528	94,889	55.320	55.320	17,702.40		-		-	297	112,591.36
9B		0.000	-		0.000	-		-	84.711	127,066.50	0	127,066.50
10A	37.589	150.356	48,114	120.000	120.000	38,400.00		-		-	150	86,513.92
10B		0.000	-		0.000	-		-	45.097	67,645.50	0	67,645.50
10C	150.542	602.168	192,694		0.000	-		-		-	602	192,693.76
10D	143.722	574.888	183,964		0.000	-		-		-	575	183,964.16
11	144.000	602.000	192,640		0.000	-		-	7.000	10,500.00	602	203,140.00
12	87.430	364.000	116,480		0.000	-		-	4.000	6,000.00	364	122,480.00
13A	150.870	629.000	201,280		0.000	-		-	7.000	10,500.00	629	211,780.00
13B	150.890	630.000	201,600		0.000	-		-	7.000	10,500.00	630	212,100.00
14A	21.920	95.000	30,400		0.000	-		-	18.934	28,401.00	95	58,801.00
14B	56.740	248.000	79,360		0.000	-		-		-	248	79,360.00
15A		0.000	-		0.000	-		-	129.190	193,785.00	0	193,785.00
15B		0.000	-		0.000	-		-	135.910	203,865.00	0	203,865.00
16A		0.000	-		0.000	-	63	2,016.00	68.327	102,490.50	63	104,506.50
16B	85.141	340.564	108,980		0.000	-	40	1,280.00		-	381	110,260.48
16C		0.000	-		0.000	-	126	4,032.00		-	126	4,032.00
16D	119.001	476.004	152,321		0.000	-	21	672.00		-	497	152,993.28
17		0.000	-		0.000	-		-	25.070	37,605.00	0	37,605.00
18	158.370	630.000	201,600		0.000	-		-		-	630	201,600.00
19	117.980	470.000	150,400		0.000	-		-		-	470	150,400.00
20A	153.430	633.000	202,560		0.000	-		-		-	633	202,560.00
20B		0.000	-		0.000	-	101	3,232.00	16.220	24,330.00	101	27,562.00
21A		0.000	-		0.000	-	70	2,240.00	71.053	106,579.50	70	108,819.50
21B		0.000	-		0.000	-	66	2,112.00	48.929	73,393.50	66	75,505.50
22A	143.800	650.000	208,000		0.000	-		-	16.000	24,000.00	650	232,000.00
22B		0.000	-		0.000	-	80	2,560.00	52.794	79,191.00	80	81,751.00
23A	147.614	590.456	188,946		0.000	-		-	8.998	13,497.00	590	202,442.92
23B		0.000	-		0.000	-	128	4,096.00		-	128	4,096.00
Exception # 1												614,987.00
Exception # 2												394,954.00
<b>Totals</b>	<b>3,040.251</b>	<b>12,370</b>	<b>3,958,516</b>	<b>237</b>	<b>237</b>	<b>76,256</b>	<b>720</b>	<b>23,040</b>	<b>746</b>	<b>1,119,350</b>	<b>13,090</b>	<b>6,187,103</b>

Notes

55.34 acres owned by Buckeye HS District shown as Low Density; 19.39 Acres owned by MCFCD not shown.

120.0 acres owned by Buckeye HS District shown as Low Density.

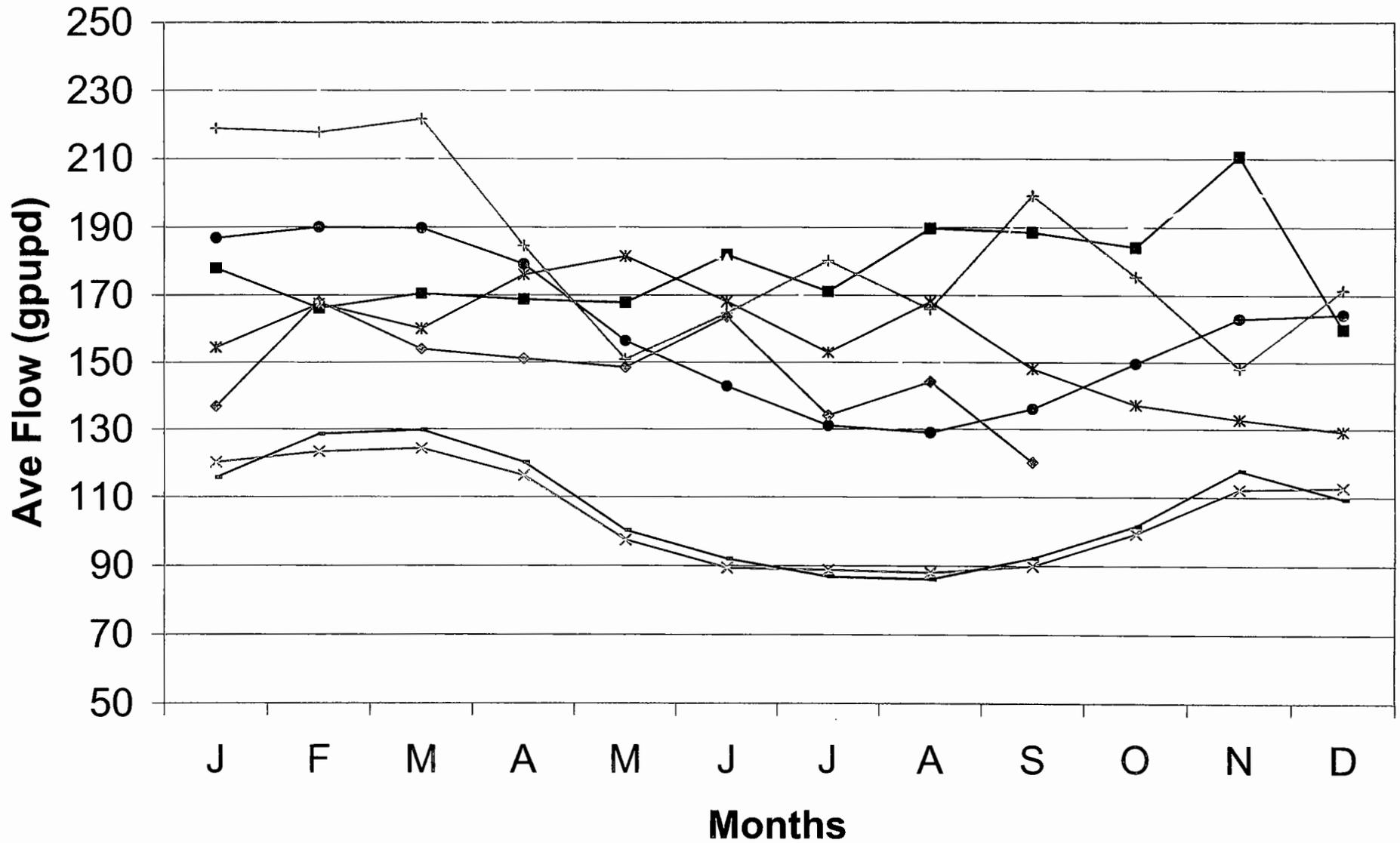
101.15 Acres owned by MCFCD not shown.  
117.02 Acres owned by MCFCD not shown.

135.64 Acres owned by the Litchfield School District.



## Appendix B WWTP Flow Data

# Summary of Average Flows



- |                 |            |                    |                     |
|-----------------|------------|--------------------|---------------------|
| ■ Anthem        | LIPSCO     | ✱ Saddlebrook      | ✱ Johnson Utilities |
| ● Sun City West | + Sun City | — Pima Utility Co. | ◆ Sundance          |

**Anthem**

Month/Year	Number of Services	Total Monthly Sewage Flow	Average Flow (gal/day/du)
Jan-02	2996	16520000	178
Feb-02	3062	14236000	166
Mar-02	3168	16736000	170
Apr-02	3205	16218000	169
May-02	3221	16745000	168
Jun-02	3234	17652000	182
Jul-02	3294	17468000	171
Aug-02	3329	19581000	190
Sep-02	3442	19470000	189
Oct-02	3708	21167000	184
Nov-02	3869	24443000	211
Dec-02	4107	20334000	160
Total			2136
<b>Average</b>			<b>178</b>

**Johnson Utilities**

Month/Year	Number of Services	Total Monthly Sewage Flow	Average Flow (gal/day/du)
January-02	910	4355000	154
February-02	945	4426000	167
March-02	1031	5111000	160
April-02	1088	5744000	176
May-02	1137	6395000	181
June-02	1161	5853000	168
July-02	1248	5918000	153
August-02	1411	7348000	168
September-02	1505	6683000	148
October-02	1670	7099000	137
November-02	1748	6964000	133
December-02	1947	7798000	129
Total			1875
Average			156

**Litchfield Park Service**

Month/Year	Number of Services	Total Monthly Sewage Flow	Average Flow (gal/day/du)
January-02	6122	43529000	229
February-02	6255	40066000	229
March-02	6358	40587000	206
April-02	6581	46236000	234
May-02	6795	39218000	186
June-02	7063	38218000	180
July-02	7566	38975000	166
August-02	7735	34360000	143
September-02	8115	49162000	202
October-02	8342	48990000	189
November-02	8469	51156000	201
December-02	8822	52784000	193
Total			2360
<b>Average</b>			<b>197</b>

**Pima Utility Co.**

Month/Year	Number of Services	Total Monthly Sewage Flow	Average Flow (gal/day/du)
January-02	8454	30320000	116
February-02	8473	30502000	129
March-02	8493	34170000	130
April-02	8515	30712000	120
May-02	8533	26523000	100
June-02	8552	23612000	92
July-02	8572	23083000	87
August-02	8598	22956000	86
September-02	8623	23856000	92
October-02	8645	27225000	102
November-02	8673	30639000	118
December-02	8698	29514000	109
Total			1281
<b>Average</b>			<b>107</b>

**Saddlebrooke Utility Co.**

Month/Year	Number of Services	Total Monthly Sewage Flow	Average Flow (gal/day/du)
January-02	3142	11713000	120
February-02	3162	10922000	123
March-02	3180	12258000	124
April-02	3191	11139000	116
May-02	3205	9693000	98
June-02	3223	8648000	89
July-02	3245	8939000	89
August-02	3267	8919000	88
September-02	3288	8872000	90
October-02	3307	10190000	99
November-02	3340	11251000	112
December-02	3359	11738000	113
Total			1263
<b>Average</b>			<b>105</b>

**Sun City**

Month/Year	Number of Services	Total Monthly Sewage Flow	Average Flow (gal/day/du)
January-02	21144	143349000	219
February-02	21144	128837000	218
March-02	21144	145174000	221
April-02	21144	117033000	185
May-02	21144	98875000	151
June-02	21144	104436000	165
July-02	21149	118147000	180
August-02	21150	108715000	166
September-02	21150	126404000	199
October-02	21150	115018000	175
November-02	21150	93886000	148
December-02	21150	112378000	171
Total			2198
<b>Average</b>			<b>183</b>

**Sun City West**

Month/Year	Number of Services	Total Monthly Sewage Flow	Average Flow (gal/day/du)
January-02	14925	86364000	187
February-02	14925	79340000	190
March-02	14926	87739000	190
April-02	14926	80218000	179
May-02	14926	72362000	156
June-02	14926	63966000	143
July-02	14927	60661000	131
August-02	14927	59719000	129
September-02	14927	60908000	136
October-02	14927	69189000	150
November-02	14927	72955000	163
December-02	14928	75945000	164
Total			1917
<b>Average</b>			<b>160</b>

## Sundance Wastewater Treatment Plant

### Average Daily Flow per Month (Dec 02 - Sep 03)

(based on the weighted number of units closed and average monthly flows at the plant)

	<b>Average Daily Flow (gpd)</b>
Dec	225.15
Jan	136.8
Feb	167.9
Mar	153.91
Apr	151.05
May	148.42
Jun	163.52
Jul	134.15
Aug	144.14
Sep	120.15
<b>Total</b>	<b>1,545</b>
<b>Average</b>	<b>155</b>



## Appendix C Model Results

<b>East Buckeye Wastewater Master Plan</b>			
<b>Mahole Results</b>			
<b>ID</b>	<b>Elevation (ft)</b>	<b>Load (mgd)</b>	<b>Grade (ft)</b>
MH-1	1,004.55	0.004	981.052
MH-10	1,029.72	0.407	1,016.16
MH-102	900.00	0.326	887.56
MH-103	910.00	0.375	897.289
MH-107	927.00	0.358	914.691
MH-11	1,011.99	0.424	994.046
MH-113	900.00	0.278	882.571
MH-114	930.00	0.137	914.479
MH-115	920.00	0	901.54
MH-116	900.00	0.322	891.805
MH-117	955.00	0.156	940.247
MH-118	973.00	0.149	960.658
MH-119	970.00	0.047	954.636
MH-12	1,083.62	0.109	1,068.80
MH-120	950.00	0.141	937.617
MH-122	931.00	0.157	918.34
MH-123	988.00	0.021	975.468
MH-125	990.00	0.108	977.62
MH-126	972.00	0.27	959.51
MH-127	955.00	0.083	942.418
MH-128	940.00	0.095	927.426
MH-129	980.00	0.346	967.63
MH-13	1,033.03	0.138	1,018.21
MH-130	961.00	0.309	948.507
MH-131	944.00	0.345	931.315
MH-14	1,086.31	0.615	1,071.93
MH-15	1,053.54	0.314	1,040.25
MH-16	999.36	0.194	975.911
MH-17	1,057.01	0.531	1,043.64
MH-18	1,047.78	0.24	1,033.61
MH-19	1,008.10	0.038	987.71
MH-2	1,016.44	0.393	1,002.93
MH-20	1,003.87	0.122	986.094
MH-201	864.93	0.424	847.35
MH-203	879.30	0.052	858.965
MH-204	874.60	0.305	856.633
MH-205	906.86	0.371	891.015
MH-206	874.55	0	860.248
MH-207	858.98	0.091	854.5
MH-208	849.23	0.417	835.198
MH-21	1,008.90	0.197	992.687
MH-210	874.65	0.082	859.946
MH-211	884.63	0.226	870.144
MH-212	881.86	0.345	861.675
MH-213	862.16	0.366	844.1
MH-214	945.59	0.413	923.929
MH-215	899.99	0.19	880.726
MH-216	869.15	0.08	838.768
MH-217	862.90	0.071	835.344

<b>East Buckeye Wastewater Master Plan</b>			
<b>Mahole Results</b>			
<b>ID</b>	<b>Elevation (ft)</b>	<b>Load (mgd)</b>	<b>Grade (ft)</b>
MH-218	861.90	0.275	842.397
MH-219	876.71	0.465	862.402
MH-22	1,028.79	0.197	1,013.59
MH-221	884.10	0	863.089
MH-222	961.03	0.308	946.489
MH-223	870.93	0.149	853.144
MH-224	993.86	0.104	977.477
MH-225	874.82	0.59	860.615
MH-230	902.27	0.167	889.104
MH-231	909.31	0	883.543
MH-232	938.38	0.413	924.062
MH-233	933.23	0	918.778
MH-234	909.18	0.479	895.042
MH-24	1,002.38	0	984.132
MH-26	1,055.33	0.398	1,039.63
MH-262	857.08	0.452	840.609
MH-265	854.58	0.103	837.001
MH-266	860.33	0.078	845.618
MH-267	867.34	0.083	824.532
MH-268	872.51	0.009	849.521
MH-269	880.80	0.403	864.57
MH-270	882.58	0.445	868.255
MH-271	864.66	0.685	847.803
MH-272	936.19	0.199	920.42
MH-273	968.64	0.363	953.438
MH-274	921.17	0.408	899.742
MH-275	898.53	0.106	885.251
MH-276	904.21	0.228	885.98
MH-28	1,031.82	0.184	1,019.44
MH-3	1,044.72	0	1,031.87
MH-30	1,072.56	0.207	1,058.26
MH-31	1,104.19	0.263	1,089.76
MH-32	1,008.08	0	994.778
MH-33	1,129.56	0.395	1,114.97
MH-36	1,003.45	0.016	979.382
MH-4	1,015.62	0.23	1,003.62
MH-5	1,010.73	0	996
MH-53	919.75	0.152	907.214
MH-6	1,006.96	0.202	989.825
MH-64	902.13	0.464	880.266
MH-7	1,001.85	0	974.115
MH-78	1,005.02	0	977.143
MH-80	1,005.08	0.203	982.324
MH-82	1,007.90	0.15	991.67
MH-9	1,000.76	0.017	974.876
SUN-BYP	1,003.26	3.3	988.362

**East Buckeye Wastewater Master Plan Pipe Results**

ID	From ID	To ID	Diam (in)	Length (ft)	Slope	Peak Flow (mgd)	Avg Flow (mgd)	Velocity (ft/s)	d/D	q/Q	Full Flow (mgd)
1	MH-7	SUN-WTP	36	761.833	0.000709	9.904	6.188	2.834	0.715	0.861	11.508
10	MH-21	MH-1	12	675.691	0.011011	2.128	1.165	5.387	0.727	0.879	2.423
11	MH-22	MH-21	12	2,614.81	0.007997	1.797	0.968	4.581	0.722	0.87	2.065
12	MH-18	MH-22	12	2,645.21	0.007602	1.462	0.771	4.324	0.632	0.726	2.013
13	MH-17	MH-18	12	2,508.19	0.003999	1.045	0.531	3.124	0.626	0.715	1.46
14	MH-80	MH-1	30	1,586.62	0.0008	6.587	3.992	2.671	0.726	0.876	7.52
15	MH-24	MH-80	27	1,343.45	0.001303	6.29	3.789	3.172	0.721	0.868	7.244
16	MH-20	MH-24	27	1,510.74	0.001297	6.29	3.789	3.167	0.722	0.87	7.229
17	MH-19	MH-20	27	1,341.02	0.001201	6.087	3.667	3.052	0.725	0.875	6.954
18	MH-11	MH-19	18	1,033.02	0.005605	3.047	1.727	4.66	0.557	0.598	5.096
19	MH-13	MH-11	15	2,587.37	0.009299	2.358	1.303	5.288	0.549	0.584	4.037
2	MH-9	MH-7	36	1,073.35	0.000699	9.904	6.188	2.818	0.719	0.867	11.426
20	MH-26	MH-13	15	2,647.37	0.008099	2.128	1.165	4.893	0.538	0.565	3.767
21	MH-12	MH-26	12	2,638.84	0.011001	1.455	0.767	4.988	0.559	0.601	2.422
22	MH-6	MH-19	24	2,748.93	0.000771	3.329	1.902	2.236	0.688	0.818	4.071
23	MH-82	MH-6	21	1,540.59	0.001097	3.009	1.7	2.469	0.731	0.885	3.401
24	MH-5	MH-82	18	1,466.44	0.003	2.759	1.55	3.573	0.64	0.74	3.729
25	MH-4	MH-5	15	1,371.17	0.005404	2.759	1.55	4.389	0.739	0.897	3.077
26	MH-28	MH-4	15	2,657.68	0.005998	2.384	1.32	4.465	0.638	0.735	3.242
27	MH-3	MH-28	15	1,569.31	0.008004	2.079	1.136	4.845	0.532	0.555	3.745
28	MH-15	MH-3	15	1,048.15	0.007995	2.079	1.136	4.845	0.532	0.555	3.743
29	MH-30	MH-15	12	2,647.64	0.0067	1.55	0.822	4.152	0.689	0.82	1.89
3	MH-32	MH-9	12	700.752	0.003996	0.824	0.407	2.961	0.538	0.565	1.459
30	MH-14	MH-30	12	2,626.82	0.005231	1.191	0.615	3.576	0.624	0.713	1.67
31	MH-31	MH-12	12	2,651.64	0.007901	1.268	0.658	4.256	0.568	0.618	2.052
32	MH-33	MH-31	12	2,643.03	0.009599	0.803	0.395	4.076	0.412	0.355	2.262
4	MH-10	MH-32	12	2,587.39	0.008302	0.824	0.407	3.895	0.435	0.392	2.104
5	MH-16	MH-9	36	1,628.31	0.0007	9.27	5.764	2.786	0.684	0.811	11.437
6	MH-78	MH-16	33	1,159.25	0.000897	8.98	5.57	3.014	0.725	0.875	10.266
7	MH-2	MH-78	12	2,263.97	0.005	0.799	0.393	3.201	0.494	0.49	1.633
8	MH-36	MH-78	30	1,664.97	0.001303	8.389	5.177	3.407	0.725	0.874	9.596
9	MH-1	MH-36	30	1,290.37	0.001294	8.365	5.161	3.398	0.725	0.875	9.563
P-101	MH-107	MH-103	15	2,662.66	0.006441	2.444	1.358	4.62	0.633	0.728	3.36
P-102	MH-103	MH-102	18	1,724.36	0.005567	3.056	1.733	4.648	0.56	0.602	5.079
P-105	MH-102	MH-113	24	5,358.74	0.000836	3.583	2.059	2.341	0.705	0.845	4.239
P-107	MH-53	MH-113	12	2,598.22	0.009191	1.351	0.708	4.574	0.564	0.61	2.213
P-108	MH-114	MH-115	18	1,388.20	0.001563	1.526	0.808	2.43	0.539	0.567	2.691
P-109	MH-115	MH-116	18	1,892.97	0.004997	1.526	0.808	3.739	0.387	0.317	4.812
P-110	MH-116	SWR-WTF	24	280.735	0.000784	2.068	1.13	2.024	0.502	0.504	4.104
P-113	MH-119	MH-120	8	2,592.51	0.006584	0.171	0.068	2.389	0.354	0.269	0.635
P-116	MH-123	MH-119	8	2,645.76	0.007873	0.065	0.021	1.933	0.207	0.094	0.695
P-117	MH-118	MH-117	8	2,592.51	0.007803	0.337	0.149	3.048	0.492	0.487	0.692
P-118	MH-117	MH-122	10	2,707.70	0.007962	0.636	0.305	3.6	0.501	0.502	1.267
P-119	MH-125	MH-126	8	2,617.29	0.006877	0.254	0.108	2.703	0.435	0.391	0.649
P-120	MH-126	MH-127	12	2,642.21	0.006457	0.772	0.378	3.487	0.45	0.416	1.855
P-121	MH-127	MH-128	12	2,638.26	0.005648	0.92	0.461	3.469	0.518	0.53	1.735
P-123	MH-129	MH-130	10	2,617.03	0.00726	0.713	0.346	3.572	0.552	0.59	1.21
P-124	MH-130	MH-131	12	2,641.26	0.006398	1.263	0.655	3.917	0.607	0.684	1.847
P-125	MH-131	MH-107	15	2,630.05	0.006331	1.85	1	4.311	0.532	0.555	3.331
P-126	MH-122	MH-114	15	2,519.96	0.001401	0.922	0.462	2.054	0.552	0.588	1.567
P-127	MH-120	MH-114	8	2,711.49	0.008305	0.455	0.209	3.355	0.58	0.638	0.714
P-128	MH-128	MH-53	12	2,683.34	0.007509	1.088	0.556	4.023	0.526	0.544	2.001
P-139	MH-64	SWR-WTF	33	2,549.02	0.000745	5.857	3.509	2.573	0.573	0.626	9.357
P-140	MH-113	MH-64	30	2,340.66	0.000825	5.132	3.045	2.579	0.601	0.672	7.633
P-214	MH-203	MH-204	24	2,492.87	0.000923	3.388	1.936	2.415	0.652	0.761	4.453
P-215	MH-211	MH-212	10	2,476.17	0.002399	0.488	0.226	2.136	0.617	0.702	0.695
P-216	MH-212	MH-203	21	2,787.63	0.000918	2.549	1.419	2.233	0.688	0.819	3.112
P-217	MH-204	MH-223	24	2,717.41	0.001299	3.877	2.241	2.842	0.637	0.734	5.284
P-220	MH-201	MH-213	42	2,820.21	0.001	17.161	11.138	3.707	0.697	0.832	20.618
P-221	MH-213	MH-218	48	2,488.89	0.000699	17.686	11.504	3.297	0.627	0.719	24.613

**East Buckeye Wastewater Master Plan Pipe Results**

ID	From ID	To ID	Diam (in)	Length (ft)	Slope	Peak Flow (mgd)	Avg Flow (mgd)	Velocity (ft/s)	d/D	q/Q	Full Flow (mgd)
P-223	MH-221	MH-212	18	1,305.89	0.001103	1.595	0.848	2.145	0.62	0.705	2.26
P-227	MH-219	MH-203	15	2,823.98	0.001399	0.927	0.465	2.057	0.554	0.592	1.566
P-229	MH-232	MH-233	12	2,513.24	0.002001	0.835	0.413	2.265	0.682	0.808	1.033
P-231	MH-208	EB-WWTP	48	2,879.07	0.000698	20.173	13.245	3.378	0.689	0.82	24.596
P-232	MH-231	MH-215	30	1,369.29	0.001599	9.436	5.875	3.784	0.733	0.888	10.63
P-233	MH-266	MH-217	8	2,597.66	0.004	0.192	0.078	2.058	0.433	0.389	0.495
P-234	MH-218	MH-262	48	2,638.41	0.000701	18.081	11.779	3.313	0.637	0.733	24.65
P-235	MH-225	MH-223	15	2,779.77	0.001399	1.147	0.59	2.156	0.636	0.732	1.566
P-236	MH-206	MH-201	30	2,709.76	0.003698	11.182	7.049	5.502	0.611	0.692	16.164
P-237	MH-215	MH-206	30	2,598.85	0.008004	11.182	7.049	7.379	0.482	0.47	23.78
P-238	MH-233	MH-234	12	2,636.77	0.009	0.835	0.413	4.022	0.428	0.381	2.19
P-239	MH-234	MH-230	15	1,218.84	0.004997	1.669	0.892	3.842	0.538	0.564	2.959
P-242	MH-216	MH-267	8	2,616.75	0.004001	0.381	0.171	2.421	0.657	0.768	0.495
P-243	MH-217	MH-267	8	2,688.34	0.003999	0.337	0.149	2.359	0.605	0.681	0.495
P-244	MH-210	MH-268	8	2,610.79	0.003999	0.201	0.082	2.081	0.443	0.406	0.495
P-245	MH-268	MH-216	8	2,719.38	0.004001	0.22	0.091	2.129	0.467	0.444	0.495
P-247	MH-269	MH-221	18	1,346.08	0.001099	1.595	0.848	2.143	0.62	0.706	2.257
P-249	MH-270	MH-269	15	2,635.86	0.0014	0.891	0.445	2.039	0.54	0.569	1.566
P-250	MH-265	MH-208	48	2,663.00	0.000702	19.579	12.828	3.369	0.673	0.794	24.668
P-251	MH-207	MH-265	48	2,621.30	0.000698	19.432	12.725	3.354	0.671	0.79	24.596
P-252	MH-223	MH-271	24	2,563.47	0.002001	5.036	2.98	3.559	0.657	0.768	6.558
P-253	MH-271	MH-201	33	2,614.10	0.000497	6.084	3.665	2.211	0.674	0.796	7.643
P-254	MH-222	MH-272	8	2,594.65	0.010001	0.642	0.308	3.874	0.688	0.819	0.783
P-255	MH-272	MH-205	10	2,669.47	0.011002	1.002	0.507	4.533	0.601	0.673	1.489
P-256	MH-224	MH-273	18	2,641.52	0.009101	5.685	3.404	6.413	0.725	0.875	6.494
P-257	MH-273	MH-214	18	2,659.56	0.010998	6.253	3.767	7.045	0.726	0.876	7.139
P-258	MH-214	MH-274	21	2,636.18	0.009199	6.897	4.18	6.855	0.617	0.7	9.848
P-259	MH-274	MH-231	21	1,291.63	0.009205	7.484	4.588	6.967	0.652	0.76	9.852
P-260	MH-275	MH-215	18	2,641.98	0.001101	1.823	0.984	2.202	0.681	0.807	2.259
P-261	MH-205	MH-275	15	2,572.17	0.0022	1.646	0.878	2.774	0.7	0.838	1.964
P-262	MH-230	MH-276	18	2,659.49	0.001102	1.947	1.059	2.225	0.716	0.862	2.259
P-263	MH-276	MH-231	21	2,605.13	0.000917	2.329	1.287	2.195	0.646	0.749	3.11
P-265	MH-262	MH-207	48	2,660.02	0.000699	18.727	12.231	3.337	0.652	0.761	24.616
P-270	MH-267	WW-1	12	275.904	0.001921	0.817	0.403	2.217	0.682	0.808	1.012
P-BYP1	SUN-BYP	MH-224	18	1,309.30	0.008302	5.511	3.3	6.13	0.734	0.889	6.202



## Appendix D Pipeline Costs

East Buckeye Wastewater Master Plan Pipe Costs					
ID	Diam (in)	Length (ft)	Pipe Cost	Manhole Cost	Total Cost
1	36	762	179,914	5,790	\$185,704
2	36	1,073	253,483	8,157	\$261,641
3	12	701	36,201	5,326	\$41,527
4	12	2,587	133,665	19,664	\$153,329
5	36	1,628	384,542	12,375	\$396,917
6	33	1,159	239,547	8,810	\$248,358
7	12	2,264	116,957	17,206	\$134,163
8	30	1,665	294,899	12,654	\$307,553
9	30	1,290	228,550	9,807	\$238,357
10	12	676	34,906	5,135	\$40,041
11	12	2,615	135,081	19,873	\$154,954
12	12	2,645	136,652	20,104	\$156,755
13	12	2,508	129,573	19,062	\$148,635
14	30	1,587	281,023	12,058	\$293,081
15	27	1,343	218,122	10,210	\$228,333
16	27	1,511	245,283	11,482	\$256,765
17	27	1,341	217,728	10,192	\$227,920
18	18	1,033	76,237	7,851	\$84,088
19	15	2,587	148,939	19,664	\$168,603
20	15	2,647	152,393	20,120	\$172,513
21	12	2,639	136,322	20,055	\$156,378
22	24	2,749	377,340	20,892	\$398,232
23	21	1,541	170,543	11,708	\$182,251
24	18	1,466	108,223	11,145	\$119,368
25	15	1,371	78,930	10,421	\$89,351
26	15	2,658	152,987	20,198	\$173,185
27	15	1,569	90,336	11,927	\$102,262
28	15	1,048	60,335	7,966	\$68,301
29	12	2,648	136,777	20,122	\$156,899
30	12	2,627	135,702	19,964	\$155,665
31	12	2,652	136,984	20,152	\$157,136
32	12	2,643	136,539	20,087	\$156,626
P-101	15	2,663	153,273	20,236	\$173,509
P-102	18	1,724	127,258	13,105	\$140,363
P-105	24	5,359	735,583	40,726	\$776,309
P-107	12	2,598	134,224	19,746	\$153,971
P-108	18	1,388	102,449	10,550	\$113,000
P-109	18	1,893	139,701	14,387	\$154,088
P-110	24	281	38,536	2,134	\$40,670
P-113	8	2,593	114,796	19,703	\$134,499
P-116	8	2,646	117,154	20,108	\$137,262
P-117	8	2,593	114,796	19,703	\$134,499
P-118	10	2,708	131,887	20,579	\$152,465
P-119	8	2,617	115,893	19,891	\$135,785
P-120	12	2,642	136,497	20,081	\$156,577
P-121	12	2,638	136,293	20,051	\$156,343
P-123	10	2,617	127,470	19,889	\$147,360
P-124	12	2,641	136,447	20,074	\$156,521
P-125	15	2,630	151,396	19,988	\$171,384

East Buckeye Wastewater Master Plan Pipe Costs					
ID	Diam (in)	Length (ft)	Pipe Cost	Manhole Cost	Total Cost
P-126	15	2,520	145,059	19,152	\$164,211
P-127	8	2,711	120,065	20,607	\$140,672
P-128	12	2,683	138,622	20,393	\$159,015
P-139	33	2,549	526,728	19,373	\$546,101
P-140	30	2,341	414,578	17,789	\$432,367
P-214	24	2,493	342,191	18,946	\$361,136
P-215	10	2,476	120,609	18,819	\$139,428
P-216	21	2,788	308,591	21,186	\$329,777
P-217	24	2,717	373,013	20,652	\$393,666
P-220	42	2,820	749,273	21,434	\$770,706
P-221	48	2,489	734,720	18,916	\$753,635
P-223	18	1,306	96,375	9,925	\$106,299
P-227	15	2,824	162,560	21,462	\$184,022
P-229	12	2,513	129,834	19,101	\$148,934
P-231	48	2,879	849,902	21,881	\$871,783
P-232	30	1,369	242,529	10,407	\$252,936
P-233	8	2,598	115,024	19,742	\$134,766
P-234	48	2,638	778,858	20,052	\$798,910
P-235	15	2,780	160,015	21,126	\$181,141
P-236	30	2,710	479,953	20,594	\$500,547
P-237	30	2,599	460,308	19,751	\$655,059
P-238	12	2,637	136,216	20,039	\$156,255
P-239	15	1,219	70,161	9,263	\$79,424
P-242	8	2,617	115,870	19,887	\$135,757
P-243	8	2,688	119,040	20,431	\$139,471
P-244	8	2,611	115,606	19,842	\$135,448
P-245	8	2,719	120,414	20,667	\$141,081
P-247	18	1,346	99,341	10,230	\$109,571
P-249	15	2,636	151,731	20,033	\$171,763
P-250	48	2,663	786,117	20,239	\$806,356
P-251	48	2,621	773,809	19,922	\$793,731
P-252	24	2,563	351,882	19,482	\$371,365
P-253	33	2,614	540,177	19,867	\$560,044
P-254	8	2,595	114,891	19,719	\$134,610
P-255	10	2,669	130,025	20,288	\$150,313
P-256	18	2,642	194,944	20,076	\$215,020
P-257	18	2,660	196,276	20,213	\$216,488
P-258	21	2,636	291,825	20,035	\$311,860
P-259	21	1,292	142,984	9,816	\$152,800
P-260	18	2,642	194,978	20,079	\$215,057
P-261	15	2,572	148,064	19,548	\$167,613
P-262	18	2,659	196,270	20,212	\$216,483
P-263	21	2,605	288,387	19,799	\$308,186
P-265	48	2,660	785,238	20,216	\$805,454
P-270	12	276	14,253	2,097	\$16,350
P-BYP1	18	1,309	96,627	9,951	\$181,577



## Appendix E East Buckeye- North Study Area Costs



## Appendix E-1 North Area Pipe Costs

**East Buckeye-North Sewer Infrastructure Cost Breakdown**

General Information				Pipe Information		Manhole Information			Sewer Easement Information			Cost Breakdown					
Pipe ID Section #	Pipe Diameter	Pipe Length (FT)	Pipe/MH Depth (AVE)	Pipe Cost/LF	Total Pipe Cost	Manholes/Section	Manhole Cost (EA) (1)	Total Manhole Cost	Easement/WTP Area (sq. ft.)	Easement Cost	Mob. + Conting. @ 20%	Sub-Total Cost	Engineering @ 12%	Const. Mgmt. @ 5%	Legal @ 4%	Permits/Fees @ 2%	Total Cost
1	36"	762.00	30.86	\$ 160.00	\$ 121,920.00	2	\$ 3,800.00	\$ 7,600.00	67,023.02	\$ 92,290.70	\$ 44,362.14	\$ 266,172.84	\$ 31,940.74	\$ 13,308.64	\$ 10,646.91	\$ 5,323.48	\$ 327,392.59
2	36"	1,073.00	28.96	\$ 160.00	\$ 171,680.00	3	\$ 3,800.00	\$ 11,400.00	82,148.16	\$ 113,118.02	\$ 59,239.60	\$ 355,437.62	\$ 42,652.51	\$ 17,771.88	\$ 14,217.50	\$ 7,108.75	\$ 437,188.27
3	12"	701.00	20.94	\$ 35.00	\$ 24,535.00	2	\$ 3,800.00	\$ 7,600.00			\$ 6,427.00	\$ 38,562.00	\$ 4,627.44	\$ 1,928.10	\$ 1,542.48	\$ 771.24	\$ 47,431.26
4	12"	2,587.00	13.92	\$ 35.00	\$ 90,545.00	7	\$ 3,800.00	\$ 26,600.00			\$ 23,429.00	\$ 140,574.00	\$ 16,868.88	\$ 7,028.70	\$ 5,622.96	\$ 2,811.48	\$ 172,906.02
5	36"	1,828.00	26.67	\$ 160.00	\$ 260,480.00	5	\$ 3,800.00	\$ 19,000.00	86,837.52	\$ 119,575.27	\$ 79,811.05	\$ 478,866.32	\$ 57,463.96	\$ 23,943.32	\$ 19,154.85	\$ 9,577.33	\$ 589,005.57
6	33"	1,159.00	27.69	\$ 140.00	\$ 162,260.00	3	\$ 3,800.00	\$ 11,400.00	64,185.42	\$ 88,383.32	\$ 52,408.66	\$ 314,451.99	\$ 37,734.24	\$ 15,722.60	\$ 12,578.09	\$ 6,289.04	\$ 386,775.95
7	12"	2,264.00	21.94	\$ 35.00	\$ 79,240.00	6	\$ 3,800.00	\$ 22,800.00			\$ 20,406.00	\$ 122,448.00	\$ 14,693.76	\$ 6,122.40	\$ 4,897.92	\$ 2,448.96	\$ 160,611.04
8	30"	1,665.00	27.88	\$ 120.00	\$ 199,800.00	5	\$ 3,800.00	\$ 19,000.00	92,840.40	\$ 127,841.23	\$ 69,328.25	\$ 415,969.48	\$ 49,916.34	\$ 20,798.47	\$ 16,638.78	\$ 8,319.39	\$ 511,642.46
9	30"	1,290.00	25.6	\$ 120.00	\$ 154,800.00	4	\$ 3,800.00	\$ 15,200.00	66,048.00	\$ 90,948.10	\$ 52,189.82	\$ 313,137.72	\$ 37,576.53	\$ 15,656.89	\$ 12,525.51	\$ 6,262.75	\$ 385,159.39
10	12"	676.00	21.13	\$ 35.00	\$ 23,660.00	2	\$ 3,800.00	\$ 7,600.00			\$ 6,252.00	\$ 37,512.00	\$ 4,501.44	\$ 1,875.60	\$ 1,500.48	\$ 750.24	\$ 46,139.76
11	12"	2,615.00	16.43	\$ 35.00	\$ 91,525.00	7	\$ 3,800.00	\$ 26,600.00			\$ 23,625.00	\$ 141,750.00	\$ 17,010.00	\$ 7,087.50	\$ 5,670.00	\$ 2,835.00	\$ 174,352.50
12	12"	2,645.00	15.38	\$ 35.00	\$ 92,575.00	7	\$ 3,800.00	\$ 26,600.00			\$ 23,835.00	\$ 143,010.00	\$ 17,161.20	\$ 7,150.50	\$ 5,720.40	\$ 2,860.20	\$ 175,902.30
13	12"	2,508.00	14.4	\$ 35.00	\$ 87,780.00	7	\$ 3,800.00	\$ 26,600.00			\$ 22,878.00	\$ 137,256.00	\$ 16,470.72	\$ 6,862.80	\$ 5,490.24	\$ 2,745.12	\$ 188,824.88
14	30"	1,587.00	24.94	\$ 120.00	\$ 190,440.00	4	\$ 3,800.00	\$ 15,200.00	79,159.56	\$ 109,002.71	\$ 62,928.54	\$ 377,571.26	\$ 45,308.55	\$ 18,876.56	\$ 15,102.85	\$ 7,551.43	\$ 464,412.65
15	27"	1,343.00	22.22	\$ 110.00	\$ 147,730.00	4	\$ 3,800.00	\$ 15,200.00	59,682.92	\$ 82,183.38	\$ 49,022.68	\$ 294,136.06	\$ 35,296.33	\$ 14,706.80	\$ 11,765.44	\$ 5,882.72	\$ 361,787.35
16	27"	1,511.00	19.64	\$ 110.00	\$ 166,210.00	4	\$ 3,800.00	\$ 15,200.00	59,352.08	\$ 81,727.81	\$ 52,627.56	\$ 315,765.38	\$ 37,891.85	\$ 15,788.27	\$ 12,830.62	\$ 6,315.31	\$ 388,391.41
17	27"	1,341.00	20.71	\$ 110.00	\$ 147,510.00	4	\$ 3,800.00	\$ 15,200.00	55,544.22	\$ 76,484.39	\$ 47,838.88	\$ 287,033.27	\$ 34,443.99	\$ 14,351.66	\$ 11,481.33	\$ 5,740.67	\$ 353,059.92
18	18"	1,033.00	20.4	\$ 50.00	\$ 51,650.00	3	\$ 3,800.00	\$ 11,400.00			\$ 12,610.00	\$ 75,660.00	\$ 9,079.20	\$ 3,783.00	\$ 3,026.40	\$ 1,513.20	\$ 93,061.80
19	15"	2,587.00	17.15	\$ 39.00	\$ 100,893.00	7	\$ 3,800.00	\$ 26,600.00			\$ 25,498.60	\$ 152,991.60	\$ 18,358.98	\$ 7,649.58	\$ 6,119.66	\$ 3,059.83	\$ 188,179.67
20	15"	2,647.00	15.94	\$ 39.00	\$ 103,233.00	7	\$ 3,800.00	\$ 26,600.00			\$ 25,966.60	\$ 155,799.60	\$ 18,695.95	\$ 7,789.98	\$ 6,231.98	\$ 3,115.99	\$ 191,633.81
21	12"	2,639.00	15.88	\$ 35.00	\$ 92,365.00	7	\$ 3,800.00	\$ 26,600.00			\$ 23,793.00	\$ 142,758.00	\$ 17,130.96	\$ 7,137.90	\$ 5,710.32	\$ 2,855.16	\$ 175,592.34
22	24"	2,749.00	20.27	\$ 83.00	\$ 255,657.00	7	\$ 3,800.00	\$ 26,600.00	111,444.46	\$ 153,459.02	\$ 87,143.20	\$ 522,859.23	\$ 62,743.11	\$ 26,142.96	\$ 20,914.37	\$ 10,457.18	\$ 643,116.85
23	21"	1,541.00	18.01	\$ 75.00	\$ 115,575.00	4	\$ 3,800.00	\$ 15,200.00	55,506.82	\$ 76,432.89	\$ 41,441.58	\$ 248,649.47	\$ 29,837.94	\$ 12,432.47	\$ 9,945.98	\$ 4,972.99	\$ 305,838.85
24	18"	1,466.00	16.6	\$ 50.00	\$ 73,300.00	4	\$ 3,800.00	\$ 15,200.00	48,671.20	\$ 67,020.24	\$ 31,104.05	\$ 186,624.29	\$ 22,394.91	\$ 9,331.21	\$ 7,464.97	\$ 3,732.49	\$ 229,547.88
25	15"	1,371.00	14.31	\$ 39.00	\$ 53,469.00	4	\$ 3,800.00	\$ 15,200.00			\$ 13,733.80	\$ 82,402.80	\$ 9,888.34	\$ 4,120.14	\$ 3,296.11	\$ 1,648.06	\$ 101,355.44
26	15"	2,658.00	13.05	\$ 39.00	\$ 103,662.00	7	\$ 3,800.00	\$ 26,600.00			\$ 26,052.40	\$ 156,314.40	\$ 18,757.73	\$ 7,815.72	\$ 6,252.58	\$ 3,126.29	\$ 192,266.71
27	15"	1,569.00	13.35	\$ 39.00	\$ 61,191.00	4	\$ 3,800.00	\$ 15,200.00			\$ 15,278.20	\$ 91,669.20	\$ 11,000.30	\$ 4,583.46	\$ 3,666.77	\$ 1,833.38	\$ 112,753.12
28	15"	1,048.00	13.74	\$ 39.00	\$ 40,872.00	3	\$ 3,800.00	\$ 11,400.00			\$ 10,454.40	\$ 62,726.40	\$ 7,527.17	\$ 3,136.32	\$ 2,509.06	\$ 1,254.53	\$ 77,153.47
29	12"	2,648.00	14.48	\$ 35.00	\$ 92,680.00	7	\$ 3,800.00	\$ 26,600.00			\$ 23,856.00	\$ 143,136.00	\$ 17,176.32	\$ 7,156.80	\$ 5,725.44	\$ 2,862.72	\$ 176,057.28
30	12"	2,627.00	15	\$ 35.00	\$ 91,945.00	7	\$ 3,800.00	\$ 26,600.00			\$ 23,709.00	\$ 142,254.00	\$ 17,070.48	\$ 7,112.70	\$ 5,690.16	\$ 2,845.08	\$ 174,972.42
31	12"	2,652.00	15.19	\$ 35.00	\$ 92,820.00	7	\$ 3,800.00	\$ 26,600.00			\$ 23,884.00	\$ 143,304.00	\$ 17,196.48	\$ 7,165.20	\$ 5,732.16	\$ 2,866.08	\$ 176,263.92
32	12"	2,643.00	15	\$ 35.00	\$ 92,505.00	7	\$ 3,800.00	\$ 26,600.00			\$ 23,821.00	\$ 142,926.00	\$ 17,151.12	\$ 7,146.30	\$ 5,717.04	\$ 2,858.52	\$ 175,798.98
<b>Sub-Totals</b>		<b>59,233.00</b>			<b>\$ 3,634,507.00</b>			<b>\$ 611,800.00</b>	<b>928,443.78</b>	<b>\$ 1,278,467.09</b>	<b>\$ 1,104,954.82</b>	<b>\$ 6,629,728.90</b>	<b>\$ 795,567.47</b>	<b>\$ 331,486.45</b>	<b>\$ 265,189.16</b>	<b>\$ 132,594.58</b>	<b>\$ 8,154,566.55</b>

**Other Improvements**

(1) Add \$3,400.00 per manhole if Saverisen coating is required.



## Appendix E-2 North Area Cost Breakdown

East Buckeye-North Sewer Infrastructure Cost Breakdown - Exception Area Split, No Lift Station												
Service Area	Total DU's	Comm. Acentage	Gallons/Day	% of Total	Pipe/MH # 1 %	Pipe/MH # 1 Cost	Pipe/MH # 2 %	Pipe/MH # 2 Cost	Pipe/MH # 3 %	Pipe/MH # 3 Cost	Pipe/MH # 4 %	Pipe/MH # 4 Cost
1	52	0.000	16,704	0.0027	0.0027	\$ 883.90	0.0027	\$ 1,180.33				
2	608	0.000	194,419	0.0314	0.0314	\$ 10,287.76	0.0314	\$ 13,737.90				
3	0	0.000	15,614	0.0025	0.0025	\$ 826.24	0.0025	\$ 1,103.33				
4	25	0.000	5,340	0.0009	0.0009	\$ 282.54	0.0009	\$ 377.30				
5A	636	0.000	203,520	0.0329	0.0329	\$ 10,769.33	0.0329	\$ 14,380.97	0.5000	\$ 23,715.63	0.5000	\$ 86,453.01
5B	636	0.000	203,520	0.0329	0.0329	\$ 10,769.33	0.0329	\$ 14,380.97	0.5000	\$ 23,715.63	0.5000	\$ 86,453.01
6A	614	0.000	196,531	0.0318	0.0318	\$ 10,399.51	0.0318	\$ 13,887.13				
6B	614	0.000	196,531	0.0318	0.0318	\$ 10,399.51	0.0318	\$ 13,887.13				
7	614	0.000	196,531	0.0318	0.0318	\$ 10,399.51	0.0318	\$ 13,887.13				
8	614	0.000	196,531	0.0318	0.0318	\$ 10,399.51	0.0318	\$ 13,887.13				
9A	297	0.000	112,591	0.0182	0.0182	\$ 5,957.81	0.0182	\$ 7,955.84				
9B	0	84.711	127,067	0.0205	0.0205	\$ 6,723.77	0.0205	\$ 8,978.67				
10A	150	0.000	86,514	0.0140	0.0140	\$ 4,577.91	0.0140	\$ 6,113.18				
10B	0	45.097	67,646	0.0109	0.0109	\$ 3,579.48	0.0109	\$ 4,779.91				
10C	602	0.000	192,694	0.0311	0.0311	\$ 10,196.45	0.0311	\$ 13,615.98				
10D	575	0.000	183,964	0.0297	0.0297	\$ 9,734.52	0.0297	\$ 12,999.13				
11	602	7.000	203,140	0.0328	0.0328	\$ 10,749.22	0.0328	\$ 14,354.12				
12	364	4.000	122,480	0.0198	0.0198	\$ 6,481.07	0.0198	\$ 8,654.59				
13A	629	7.000	211,780	0.0342	0.0342	\$ 11,206.41	0.0342	\$ 14,964.63				
13B	630	7.000	212,100	0.0343	0.0343	\$ 11,223.34	0.0343	\$ 14,987.24				
14A	95	18.934	58,801	0.0095	0.0095	\$ 3,111.47	0.0095	\$ 4,154.95				
14B	248	0.000	79,360	0.0128	0.0128	\$ 4,199.36	0.0128	\$ 5,607.67				
15A	0	129.190	193,785	0.0313	0.0313	\$ 10,254.20	0.0313	\$ 13,693.08				
15B	0	135.910	203,865	0.0329	0.0329	\$ 10,787.58	0.0329	\$ 14,405.35				
16A	63	68.327	104,507	0.0169	0.0169	\$ 5,530.00	0.0169	\$ 7,384.56				
16B	381	0.000	110,260	0.0178	0.0178	\$ 5,834.47	0.0178	\$ 7,791.14				
16C	126	0.000	4,032	0.0007	0.0007	\$ 213.35	0.0007	\$ 284.91				
16D	497	0.000	152,993	0.0247	0.0247	\$ 8,095.69	0.0247	\$ 10,810.69				
17	0	25.070	37,605	0.0061	0.0061	\$ 1,989.88	0.0061	\$ 2,657.22				
18	630	0.000	201,600	0.0326	0.0326	\$ 10,667.73	0.0326	\$ 14,245.30				
19	470	0.000	150,400	0.0243	0.0243	\$ 7,958.47	0.0243	\$ 10,627.45				
20A	633	0.000	202,560	0.0327	0.0327	\$ 10,718.53	0.0327	\$ 14,313.14				
20B	101	16.220	27,562	0.0045	0.0045	\$ 1,458.45	0.0045	\$ 1,947.56				
21A	70	71.053	108,820	0.0176	0.0176	\$ 5,758.22	0.0176	\$ 7,689.32				
21B	66	48.929	75,506	0.0122	0.0122	\$ 3,995.40	0.0122	\$ 5,335.31				
22A	650	16.000	232,000	0.0375	0.0375	\$ 12,276.36	0.0375	\$ 16,393.40				
22B	80	52.794	81,751	0.0132	0.0132	\$ 4,325.88	0.0132	\$ 5,776.63				
23A	590	8.998	202,443	0.0327	0.0327	\$ 10,712.33	0.0327	\$ 14,304.86				
23B	128	0.000	4,096	0.0007	0.0007	\$ 216.74	0.0007	\$ 289.43				
EX # 1			614,987	0.0994	0.0994	\$ 32,542.24	0.0994	\$ 43,455.73				
EX # 2			394,954	0.0638	0.0638	\$ 20,899.12	0.0638	\$ 27,907.93				
<b>TOTALS</b>	<b>13090</b>	<b>746.233</b>	<b>6,187,103.28</b>	<b>100%</b>	<b>100%</b>	<b>\$ 327,392.59</b>	<b>100%</b>	<b>\$ 437,188.27</b>	<b>100%</b>	<b>\$ 47,431.26</b>	<b>100%</b>	<b>\$ 172,906.02</b>

6,187,103

6,187,103

407,040

407,040

Pipe/MH # 5 %	Pipe/MH # 5 Cost	Pipe/MH # 6 %	Pipe/MH # 6 Cost	Pipe/MH # 7 %	Pipe/MH # 7 Cost	Pipe/MH # 8 %	Pipe/MH # 8 Cost	Pipe/MH # 9 %	Pipe/MH # 9 Cost	Pipe/MH # 10 %	Pipe/MH # 10 Cost
0.033734	\$ 19,869.31										
0.002709	\$ 1,595.77	0.002804	\$ 1,084.46			0.0030	\$ 1,543.50				
0.000926	\$ 545.69	0.000959	\$ 370.84			0.0010	\$ 527.82	0.0010	\$ 398.54		
0.034100	\$ 20,085.16	0.035291	\$ 13,649.55	0.5000	\$ 75,305.52						
0.034100	\$ 20,085.16	0.035291	\$ 13,649.55	0.5000	\$ 75,305.52						
0.034100	\$ 20,085.16	0.035291	\$ 13,649.55			0.0380	\$ 19,427.37	0.0381	\$ 14,668.99	0.1689	\$ 7,793.39
0.034100	\$ 20,085.16	0.035291	\$ 13,649.55			0.0380	\$ 19,427.37	0.0381	\$ 14,668.99	0.1689	\$ 7,793.39
0.019536	\$ 11,506.65	0.020218	\$ 7,819.73			0.0218	\$ 11,129.81	0.0218	\$ 8,403.76	0.0968	\$ 4,464.78
0.022047	\$ 12,985.98	0.022817	\$ 8,825.07			0.0245	\$ 12,560.69	0.0246	\$ 9,484.18	0.1092	\$ 5,038.79
0.015011	\$ 8,841.58	0.015535	\$ 6,008.59			0.0167	\$ 8,552.02	0.0168	\$ 6,457.35	0.0744	\$ 3,430.69
0.011737	\$ 6,913.26	0.012147	\$ 4,698.14			0.0131	\$ 6,686.85	0.0131	\$ 5,049.03	0.0581	\$ 2,682.46
0.033434	\$ 19,692.98	0.034602	\$ 13,383.03			0.0372	\$ 19,048.04	0.0373	\$ 14,382.56	0.1656	\$ 7,641.22
0.031920	\$ 18,800.83	0.033034	\$ 12,776.74			0.0355	\$ 18,185.10	0.0357	\$ 13,730.99	0.1581	\$ 7,295.05
0.035247	\$ 20,760.56	0.036477	\$ 14,108.55			0.0392	\$ 20,080.66	0.0394	\$ 15,162.26		
0.021251	\$ 12,517.25	0.021993	\$ 8,506.52			0.0237	\$ 12,107.31	0.0237	\$ 9,141.84		
0.036746	\$ 21,643.56	0.038029	\$ 14,708.62			0.0409	\$ 20,934.74	0.0410	\$ 15,807.15		
0.036801	\$ 21,676.26	0.038086	\$ 14,730.84			0.0410	\$ 20,966.37	0.0411	\$ 15,831.03		
0.010203	\$ 6,009.36	0.010559	\$ 4,083.87			0.0114	\$ 5,812.56	0.0114	\$ 4,388.88		
0.013770	\$ 8,110.46	0.014250	\$ 5,511.74			0.0153	\$ 7,844.84	0.0154	\$ 5,923.39		
0.033624	\$ 19,804.50	0.034797	\$ 13,458.82			0.0374	\$ 19,155.91	0.0376	\$ 14,464.01		
0.035373	\$ 20,834.66	0.036608	\$ 14,158.90			0.0394	\$ 20,152.33	0.0395	\$ 15,216.38		
0.018133	\$ 10,680.39	0.018766	\$ 7,258.22			0.0202	\$ 10,330.61	0.0203	\$ 7,800.31		
0.019131	\$ 11,268.43	0.019799	\$ 7,657.85			0.0213	\$ 10,899.40	0.0214	\$ 8,229.79		
0.000700	\$ 412.06	0.000724	\$ 280.03			0.0008	\$ 398.57	0.0008	\$ 300.95		
0.026546	\$ 15,635.65	0.027473	\$ 10,625.74			0.0296	\$ 15,123.59	0.0296	\$ 11,419.34		
0.006525	\$ 3,843.17	0.006753	\$ 2,611.76			0.0073	\$ 3,717.30	0.0073	\$ 2,806.82		
0.034980	\$ 20,603.18	0.036201	\$ 14,001.59			0.0389	\$ 19,928.43	0.0391	\$ 15,047.32		
0.026096	\$ 15,370.63	0.027007	\$ 10,445.63			0.0291	\$ 14,867.24	0.0291	\$ 11,225.78		
0.035146	\$ 20,701.29	0.036373	\$ 14,068.27			0.0391	\$ 20,023.33	0.0393	\$ 15,118.97		
0.004782	\$ 2,816.79	0.004949	\$ 1,914.25			0.0053	\$ 2,724.54	0.0053	\$ 2,057.21		
0.018881	\$ 11,121.17	0.019540	\$ 7,557.77			0.0210	\$ 10,756.95	0.0211	\$ 8,122.23		
0.013101	\$ 7,716.53	0.013558	\$ 5,244.03			0.0146	\$ 7,463.82	0.0146	\$ 5,635.69		
0.040254	\$ 23,710.01	0.041660	\$ 16,112.94			0.0448	\$ 22,933.51	0.0450	\$ 17,316.36		
0.014185	\$ 8,354.81	0.014680	\$ 5,677.80			0.0158	\$ 8,081.20	0.0158	\$ 6,101.85		
0.035126	\$ 20,689.32	0.036352	\$ 14,060.14			0.0391	\$ 20,011.75	0.0392	\$ 15,110.24		
0.000711	\$ 418.60	0.000736	\$ 284.48			0.0008	\$ 404.90	0.0008	\$ 305.72		
0.106706	\$ 62,850.63	0.110432	\$ 42,712.29			0.1188	\$ 60,792.29	0.1192	\$ 45,902.31		
0.068528	\$ 40,363.63	0.070921	\$ 27,430.48			0.0763	\$ 39,041.73	0.0765	\$ 29,479.16		
<b>100%</b>	<b>\$ 589,005.57</b>	<b>100%</b>	<b>\$ 386,775.95</b>	<b>100%</b>	<b>\$ 150,611.04</b>	<b>100%</b>	<b>\$ 511,642.46</b>	<b>100%</b>	<b>\$ 385,159.39</b>	<b>100%</b>	<b>\$ 46,139.76</b>

5,763,359

5,568,940

393,062

5,175,878

5,160,263

1,163,538









Pipe/MH/Esmt/Eng/CM/Legal. Total Cost / Service Area	Total WWTP Cost	Easement Refund	Total Pipe/MH/WWTP Cost
\$ 2,064.22	\$ 133,632.00	\$ 119,575.27	\$ 16,120.96
\$ 43,894.97	\$ 1,555,353.60	\$ 88,383.32	\$ 1,510,865.24
\$ 6,153.30	\$ 124,915.20	\$ 218,789.33	\$ (87,720.83)
\$ 2,502.72	\$ 42,716.00	\$ 109,002.71	\$ (63,783.99)
\$ 135,318.94	\$ 1,628,160.00		\$ 1,763,478.94
\$ 135,318.94	\$ 1,628,160.00		\$ 1,763,478.94
\$ 133,326.88	\$ 1,572,249.60		\$ 1,705,576.48
\$ 133,326.88	\$ 1,572,249.60		\$ 1,705,576.48
\$ 99,911.11	\$ 1,572,249.60		\$ 1,672,160.71
\$ 135,345.94	\$ 1,572,249.60		\$ 1,707,595.54
\$ 103,243.76	\$ 900,730.88		\$ 1,003,974.64
\$ 116,517.15	\$ 1,016,532.00		\$ 1,133,049.15
\$ 106,846.83	\$ 692,111.36		\$ 798,958.19
\$ 83,543.86	\$ 541,164.00		\$ 624,707.86
\$ 237,981.56	\$ 1,541,550.08		\$ 1,779,531.64
\$ 227,200.29	\$ 1,471,713.28		\$ 1,698,913.57
\$ 118,851.48	\$ 1,625,120.00	\$ 82,183.38	\$ 1,661,788.09
\$ 95,914.06	\$ 979,840.00	\$ 158,212.21	\$ 917,541.85
\$ 197,657.23	\$ 1,694,240.00		\$ 1,891,897.23
\$ 197,955.89	\$ 1,696,800.00		\$ 1,894,755.89
\$ 63,374.74	\$ 470,408.00		\$ 533,782.74
\$ 85,532.89	\$ 634,880.00		\$ 720,412.89
\$ 240,750.91	\$ 1,550,280.00		\$ 1,791,030.91
\$ 253,273.91	\$ 1,630,920.00		\$ 1,884,193.91
\$ 153,767.80	\$ 836,052.00		\$ 989,819.80
\$ 191,761.10	\$ 882,083.84		\$ 1,073,844.94
\$ 5,932.57	\$ 32,256.00		\$ 38,188.57
\$ 266,080.46	\$ 1,223,946.24		\$ 1,490,026.70
\$ 33,070.21	\$ 300,840.00	\$ 130,440.17	\$ 203,470.05
\$ 245,465.28	\$ 1,612,800.00	\$ 23,018.85	\$ 1,835,246.43
\$ 210,180.66	\$ 1,203,200.00	\$ 143,453.13	\$ 1,269,927.53
\$ 326,324.54	\$ 1,620,480.00		\$ 1,946,804.54
\$ 44,402.43	\$ 220,496.00		\$ 264,898.43
\$ 191,163.48	\$ 870,556.00		\$ 1,061,719.48
\$ 132,640.69	\$ 604,044.00		\$ 736,684.69
\$ 446,363.40	\$ 1,856,000.00		\$ 2,302,363.40
\$ 157,287.30	\$ 654,008.00		\$ 811,295.30
\$ 432,880.73	\$ 1,619,543.36		\$ 2,052,424.09
\$ 8,758.42	\$ 32,768.00		\$ 41,526.42
\$ 1,489,990.12	\$ 4,919,896.00		\$ 6,409,886.12
\$ 862,688.91	\$ 3,159,632.00		\$ 4,022,320.91
\$ 8,154,566.55	\$ 49,496,826.24	\$ 1,073,058.37	\$ 56,578,334.42

Project	Acres	DU	Comm	DU / AC	Flow / Day	Total Cost*	Cost / Gal
Blue Horizons	558.19	2225	25.00	3.9861	749,500.00	\$ 6,365,983.07	\$ 8.49
Vista De Montana	276.33	1100	0.00	3.9807	352,000.00	\$ 3,105,173.96	\$ 8.82
Jackrabbit Trails	78.66	343	0.00	4.3605	138,161.00	\$ 1,254,195.63	\$ 9.08
Parkman Ranch	153.43	633	0.00	4.1257	202,560.00	\$ 1,946,804.54	\$ 9.61
Paloma Vista	159.78	650	16.00	4.0681	232,000.00	\$ 2,302,363.40	\$ 9.92
Arroyo Seco	290	950	0.00	3.2759	394,954.00	\$ 4,022,320.91	\$ 10.18
<b>Totals</b>	<b>1516.4</b>	<b>5901</b>	<b>41.00</b>	<b>3.8915</b>	<b>1,674,221.00</b>	<b>\$ 14,974,520.59</b>	

Total Cost\* includes all costs for all development within that 1/4 section or that Service Area. Actual costs may vary.



## Appendix E-3 North Area Easement Costs

**East Buckeye-North Roosevelt Irrigation District (Sewer Alignment) Property Owners Information**

**Sewer Easement**

Property #	APN	Curent Owner	Current Owner's Address	Project ?	Size Sq. Ft.	Size Ac.	Linear ' of Sewer	Ave. Sewer Depth (Ft)	Easement Area Needed (Sq. Ft.)	Cost/Acre	Total Cost
1	504-21-008-K	Buckeye Land LLC	8501 E. Princess Dr., Suite 200, Scottsdale, AZ 95260	Sundance	673,612.00	15.4640	229	30.86	14,109	\$60,000	\$ 19,434.15
2	504-21-008-L	Buckeye Land LLC	8501 E. Princess Dr., Suite 200, Scottsdale, AZ 95260	Sundance	672,044.00	15.4280	533	30.86	32,921	\$60,000	\$ 45,346.35
3	504-21-008-M	Buckeye Land LLC	8501 E. Princess Dr., Suite 200, Scottsdale, AZ 95260	Sundance	453,765.00	10.4170	354	28.96	20,509	\$60,000	\$ 28,249.16
4	504-21-008-N	Buckeye Land LLC	8501 E. Princess Dr., Suite 200, Scottsdale, AZ 95260	Sundance	621,557.57	14.2690	719	28.96	41,639	\$60,000	\$ 57,354.36
5	504-21-005	Van Leeuwen Properties Limited Partnership	Route 1, 1802 S. Airport Road, Buckeye, AZ 85236		405,108.00	9.3000	814	26.67	43,419	\$60,000	\$ 59,805.45
6	504-21-006	Van Leeuwen Properties Limited Partnership	Route 1, 1802 S. Airport Road, Buckeye, AZ 85236		163,350.00	3.7500	814	26.67	43,419	\$60,000	\$ 59,805.45
7	504-21-003-J	Van Leeuwen Properties Limited Partnership	Route 1, 1802 S. Airport Road, Buckeye, AZ 85236		3,195,910.00	73.3680	1,159	27.69	64,185	\$60,000	\$ 88,409.67
8	502-46-009-B	S & J Investments LLC	7436 E. Stetson Dr., Suite 190, Scottsdale, AZ 85251		2,125,516.00	48.7951	1,665	27.88	92,840	\$60,000	\$ 127,879.34
9	502-46-008-Y	Layne P. Davis	20625 W. Yuma Rd., Buckeye, AZ 85326		56,142.18	1.2888	194	25.60	9,907	\$60,000	\$ 13,646.28
10	502-46-008-N	Prestige Developments Inc.	8600 W. Clearwater, Kennewick, WA 99336		39,390.29	0.9043	194	25.60	9,907	\$60,000	\$ 13,646.28
11	502-46-109	Sigfredo & Agueda Rodriguez	18912A W. Indian School Rd., Litchfield Park, AZ 85340		73,301.00	1.6828	194	25.60	9,907	\$60,000	\$ 13,646.28
12	502-46-008-T	George E. Busse & Edwin Smith	1428 S. 205th Avenue, Buckeye, AZ 85326		63,123.96	1.4491	194	25.60	9,907	\$60,000	\$ 13,646.28
13	502-46-008-Z	Jesse E. Johnson & Kimberly S. Hinton	1417 S. 205th Avenue, Buckeye, AZ 85326		63,402.00	1.4555	258	25.60	13,210	\$60,000	\$ 18,195.04
14	502-46-008-H	Rigoberto Navarro	416 N. Citrus Rd., Unit 51, Buckeye, AZ 85326		53,662.47	1.2319	258	25.60	13,210	\$60,000	\$ 18,195.04
15	502-46-003	George A. & Patricia Rovey	19300 W. Yuma Rd., Buckeye, AZ 85326		564,973.00	12.9700	1,587	24.94	79,160	\$60,000	\$ 109,035.21
16	502-35-007	AMI LLC	4041 E. Thomas Rd., Suite 200, Phoenix, AZ 85018	Blue Horizons	6,577,560.00	151.0000	1,343	22.22	59,683	\$60,000	\$ 82,207.88
17	502-35-010	AMI LLC	4041 E. Thomas Rd., Suite 200, Phoenix, AZ 85018	Blue Horizons	3,982,691.00	91.4300	2,852	20.18	115,107	\$60,000	\$ 158,549.20
18	502-36-019	Dietrich Family Limited Partnership	1401 N. 24th Street, Suite 4, Phoenix, AZ 85008		1,092,049.00	25.0700	2,749	20.27	111,444	\$60,000	\$ 153,504.77
19	502-36-017-J	First American Title Insurance Company	4801 E. Washington St., Suite 110, Phoenix, AZ 85034	Vista De Montana	850,291.00	19.5200	509	18.01	18,317	\$60,000	\$ 25,230.37
20	502-36-018-K	First American Title Insurance Company	4801 E. Washington St., Suite 110, Phoenix, AZ 85034	Vista De Montana	828,076.00	19.0100	1,032	18.01	37,190	\$60,000	\$ 51,225.30
21	502-36-018-L	First American Title Insurance Company	4801 E. Washington St., Suite 110, Phoenix, AZ 85034	Vista De Montana	918,245.00	21.0800	1,466	16.60	48,671	\$60,000	\$ 67,040.22
<b>Sub Total</b>							<b>19,115</b>		<b>888,662</b>		<b>\$ 1,224,052.09</b>

**SWWTP Expansion**

Property #	APN	Curent Owner	Current Owner's Address	Project ?	Size Sq. Ft.	Size Ac.			Expansion Area Needed (Sq. Ft.)	Cost/Acre	Total Cost
1	504-21-008-K	Buckeye Land LLC	8501 E. Princess Dr., Suite 200, Scottsdale, AZ 95260	Sundance	673,612.00	15.4640			20,000	\$60,000	\$ 27,548.21
2	504-21-008-L	Buckeye Land LLC	8501 E. Princess Dr., Suite 200, Scottsdale, AZ 95260	Sundance	672,044.00	15.4280			20,000	\$60,000	\$ 27,548.21
<b>Sub Total</b>									<b>40,000</b>		<b>\$ 55,096.42</b>
<b>GRAND TOTAL</b>									<b>928,662</b>		<b>\$ 1,279,148.51</b>

# EAST BUCKEYE SEWER MASTER PLAN



**EAST BUCKEYE SEWER MASTER PLAN SEWER EXHIBIT**

PLANNING ■ DESIGN ■ CONSTRUCTION

**RBF CONSULTING**

1800 NORTH 28th AVENUE, SUITE 100  
PHOENIX, ARIZONA 85008-7890  
602.467.2200 • FAX 602.467.2201 • www.RBF.com

LAYOUT	DRAWN	CHECKED
MAY	AK	MAY

DRIVING SCALE(S) **NTS**

ORIGINAL PLAN DATE **APR/2004** SHEET NO. **1**

LATEST REVISION **1**

PROJECT NUMBER **45101817** OF 1 SHEETS



## Appendix F Sundance Effluent Line

## Sundance Effluent Line Worksheet for Pressure Pipe

Project Description	
Worksheet	Sundance Effluent Line
Flow Element	Pressure Pipe
Method	Hazen-Williams Formula
Solve For	Discharge

Input Data	
Pressure at 1	0.00 psi
Pressure at 2	0.00 psi
Elevation at 1	1,007.33 ft
Elevation at 2	892.00 ft
Length	13,926.00 ft
C Coefficient	130.0
Diameter	20 in

Results	
Discharge	10.46 mgd
Headloss	115.33 ft
Energy Grade at 1	1,008.18 ft
Energy Grade at 2	892.85 ft
Hydraulic Grade at 1	1,007.33 ft
Hydraulic Grade at 2	892.00 ft
Flow Area	2.2 ft <sup>2</sup>
Wetted Perimeter	5.24 ft
Velocity	7.41 ft/s
Velocity Head	0.85 ft
Friction Slope	0.008282 ft/ft

## Sundance Effluent Line Buildout Worksheet for Pressure Pipe

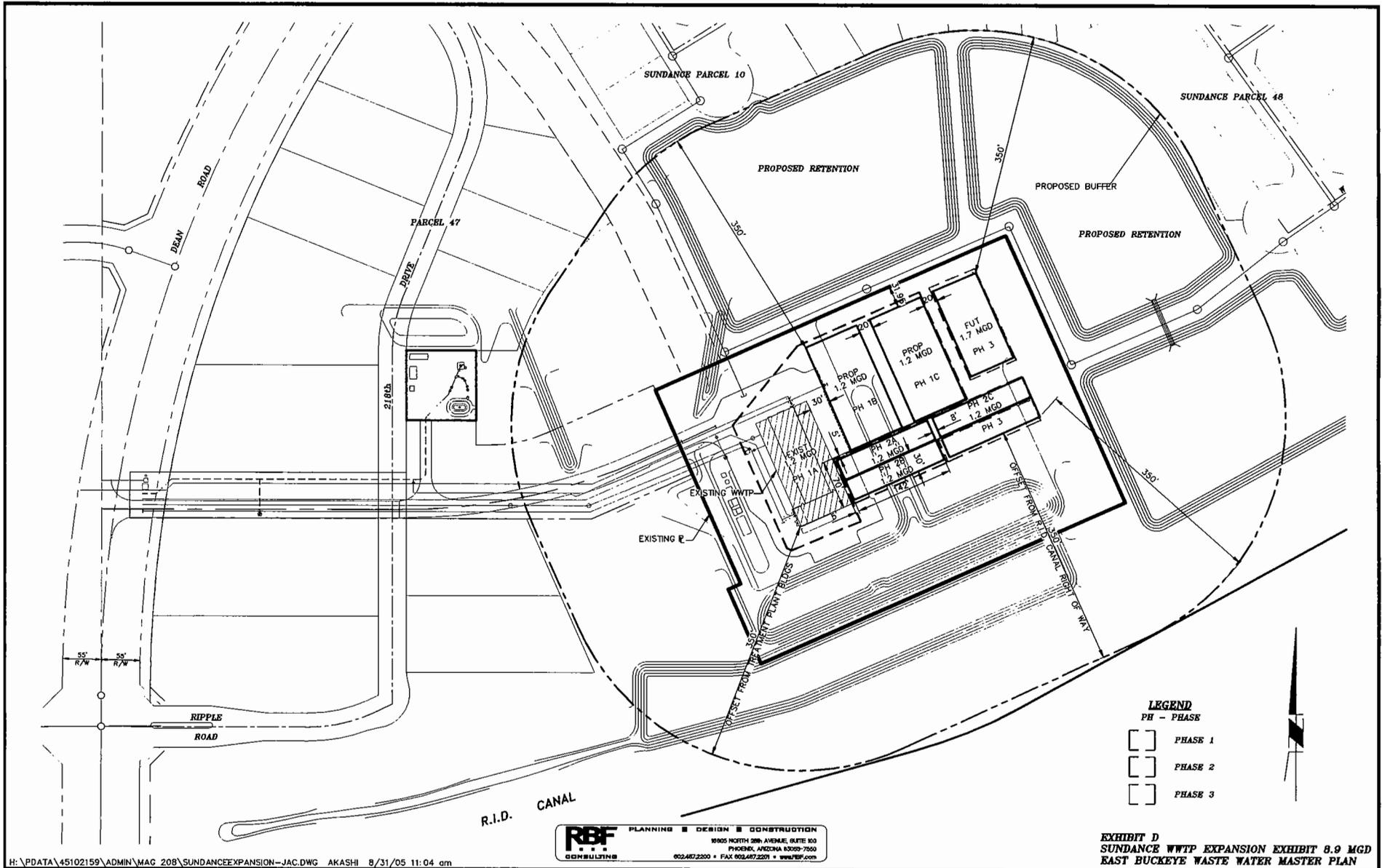
Project Description	
Worksheet	Sundance Effluent Line at Buildout
Flow Element	Pressure Pipe
Method	Hazen-Williams Formula
Solve For	Discharge

Input Data	
Pressure at 1	7.00 psi
Pressure at 2	0.00 psi
Elevation at 1	1,007.33 ft
Elevation at 2	892.00 ft
Length	13,926.00 ft
C Coefficient	130.0
Diameter	20 in

Results	
Discharge	11.22 mgd
Headloss	131.48 ft
Energy Grade at 1	1,024.46 ft
Energy Grade at 2	892.98 ft
Hydraulic Grade at 1	1,023.48 ft
Hydraulic Grade at 2	892.00 ft
Flow Area	2.2 ft <sup>2</sup>
Wetted Perimeter	5.24 ft
Velocity	7.96 ft/s
Velocity Head	0.98 ft
Friction Slope	0.009441 ft/ft

## **Appendix D**

### **Proposed Construction Phases Exhibit**



**PUBLIC HEARING ON THE DRAFT MAG 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT FOR THE EXPANSION OF THE TOWN OF BUCKEYE SUNDANCE WASTEWATER TREATMENT PLANT**

Tuesday, December 13, 2005 at 3:00 p.m.  
MAG Office, Suite 200 - Cholla Room 302 North 1st Avenue Phoenix, Arizona 85003

The Maricopa Association of Governments (MAG) will conduct a public hearing on the Draft MAG 208 Plan Amendment for the Expansion of the Town of Buckeye Sundance Wastewater Treatment Plant. The purpose of the hearing is to receive public comments on the draft amendment.

The Sundance Wastewater Treatment Plant is identified in the current MAG 208 Plan for a capacity of 3.6 million gallons per day (mgd). The expansion would increase ultimate capacity to 8.9 mgd. Reclaimed water from the expanded facility would be disposed of through, reuse, recharge and an Arizona Pollutant Discharge Elimination System Permit discharge to the Buckeye Irrigation District Canal.

Following consideration of comments received, it is anticipated that the MAG Water Quality Advisory Committee will make a recommendation to the MAG Management Committee. On January 11, 2006, the MAG Management Committee is anticipated to make a recommendation to the MAG Regional Council. It is anticipated that the MAG Regional Council will take action on the draft plan amendment on January 25, 2006.

The draft document will be available for public review at the MAG Office from 8:00 a.m. to 5:00 p.m. Monday through Friday beginning Thursday, October 27, 2005. Copies will also be available for review at the Glendale Public Library, 5959 West Brown Street; City of Mesa Library, 64 East First Street; and Phoenix Central Public Library, 1221 North Central Avenue. Public comments are welcome at the hearing, or may be submitted in writing by 3:00 p.m. on December 13, 2005 to MAG staff at the address below.

Contact Person: Julie Hoffman  
302 North 1st Avenue, Suite 300 Phoenix, Arizona 85003  
Fax: (602) 254-6490  
05788-October 29, 2005

# THE ARIZONA REPUBLIC

STATE OF ARIZONA }  
COUNTY OF MARICOPA } SS.

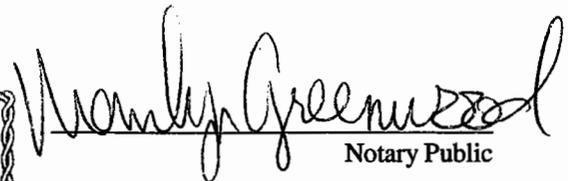
Diana Chavez, being first duly sworn, upon oath deposes and says: That she is a legal advertising representative of the Arizona Business Gazette, a newspaper of general circulation in the county of Maricopa, State of Arizona, published at Phoenix, Arizona, by Phoenix Newspapers Inc., which also publishes The Arizona Republic, and that the copy hereto attached is a true copy of the advertisement published in the said paper on the dates as indicated.

The Arizona Republic

October 29, 2005



Sworn to before me this  
31<sup>ST</sup> day of  
October A.D. 2005

  
Notary Public

November 1, 2005

TO: Interested Parties for Water Quality

FROM: Julie Hoffman, Environmental Planner

SUBJECT: PUBLIC HEARING ON THE DRAFT MAG 208 WATER QUALITY MANAGEMENT PLAN AMENDMENT FOR THE EXPANSION OF THE TOWN OF BUCKEYE SUNDANCE WASTEWATER TREATMENT PLANT

Public Hearing  
December 13, 2005 at 3:00 p.m.  
MAG Office, Cholla Room  
302 North 1<sup>st</sup> Avenue, Second Floor  
Phoenix, Arizona 85003

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For your information and convenience, a copy of the public hearing notice is enclosed. The draft document is available for public review at the MAG Office, third floor from 8:00 a.m. to 5:00 p.m. Monday through Friday. Copies are also available for review at the Glendale Public Library, 5959 West Brown Street; City of Mesa Library, 64 East First Street; and Phoenix Central Public Library, 1221 North Central Avenue. For further information or to submit written comments on the draft amendment prior to the hearing, please contact me at (602) 254-6300.

**PUBLIC HEARING ON THE DRAFT MAG 208 WATER QUALITY MANAGEMENT PLAN  
AMENDMENT FOR THE EXPANSION OF THE TOWN OF BUCKEYE SUNDANCE  
WASTEWATER TREATMENT PLANT**

Tuesday, December 13, 2005 at 3:00 p.m.  
MAG Office, Suite 200 - Cholla Room  
302 North 1<sup>st</sup> Avenue  
Phoenix, Arizona 85003

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Contact Person: Julie Hoffman  
302 North 1<sup>st</sup> Avenue, Suite 300  
Phoenix, Arizona 85003  
Fax: (602) 254-6490

Maricopa Association of Governments  
Received

**JAN 13 2006**

MARICOPA ASSOCIATION OF GOVERNMENTS WATER  
QUALITY ADVISORY COMMITTEE MEETING AND  
PUBLIC HEARING ON THE DRAFT MAG 208 WATER  
QUALITY MANAGEMENT PLAN AMENDMENT FOR THE  
EXPANSION OF THE TOWN OF BUCKEYE SUNDANCE  
WASTEWATER TREATMENT PLANT.

Phoenix, Arizona  
December 13, 2005  
3:00 p.m.

**Glennie**  
Reporting Services

5333 North 7th Street  
Suite B110  
Phoenix, Arizona 85014-2840

(602) 266-6535 Phone  
(602) 266-9661 Fax

Prepared by:  
Janet Hauck, RPR  
Arizona Certified  
Reporter Number 50522

Prepared for:  
Maricopa Association  
of Governments

(Original)

1           The Public Hearing was taken on December 13,  
2 2005, commencing at 3:00 p.m., at the offices of the  
3 Maricopa Association of Governments, 302 North 1st  
4 Avenue, Suite 200, Phoenix, Arizona, before  
5 JANET HAUCK, RPR, a Certified Reporter, Certificate  
6 No. 50522, for the State of Arizona.

7 **Committee Members Present:**

8 Roger Klingler, City of Scottsdale, Chair  
9 Greg Stack, City of Avondale  
10 Lucky Roberts, Town of Buckeye  
11 Chris Ochs, City of Glendale  
12 Rich Williams, Sr., City of Surprise  
13 David McNeil, City of Tempe  
14 Dale Bodiya, Maricopa County  
15 John Boyer, Arizona Public Service Company  
16 Eugene Jensen, Citizen Representative  
17 David Iwanski, City of Goodyear

18 **Committee Members Attending**  
19 **by Telephone Conference Call:**

20 Jacqueline Strong, City of Chandler  
21 Bill Haney, City of Mesa

22 **Others Present:**

23 Ron Frey, Kennedy/Jenks Consultants  
24 Peter Chan, CSA Engineering  
25 John Dannan, Pulte Homes  
26 Matt Cox, Lennar Homes  
27 Paul Gilbert, Beus Gilbert  
28 Felipe Zubia, Beus Gilbert  
29 Jim Condit, JF Properties  
30 Michael Worlton, RBF Consulting  
31 Dianne Barker, Citizen  
32 Julie Hoffman, Maricopa Association of Governments  
33 Ann Wimmer, Maricopa Association of Governments

1 \* \* \*

2 MR. KLINGLER: Thank you. Now, our next item  
3 is Item 5, our public hearing. I would like to open  
4 the Public Hearing on the Draft MAG 208 Plan Amendment  
5 for the Expansion of the Town of Buckeye Sundance  
6 Wastewater Treatment Plant.

7 We will begin with a briefing on the draft  
8 amendment, and following the briefing, hearing  
9 participants are invited to make comments for the  
10 public record. A court reporter is present to provide  
11 an official record of the hearing. Written comments  
12 are also welcome. For those wishing to speak on the  
13 draft amendment, please fill out a yellow card and hand  
14 it to MAG staff.

15 Michael Worlton of RBF Consulting will  
16 provide a briefing on the Draft Buckeye 208 Amendment.

17 Michael?

18 MR. WORLTON: Thank you. This is a map of  
19 the existing service area for the Sundance Wastewater  
20 Treatment Plant. You can see that I-10 is the road to  
21 the north. The plant is down in the southern area. We  
22 have a blowup, actually, of a larger scale map here  
23 showing the expanded service area. In the pink we show  
24 the Verrado service area proposed. We also show in the  
25 yellow the existing Sundance, and the plant is the

1 purple dot at the bottom. The expanded Sundance area  
2 that we're proposing is indicated by the boundary line  
3 that's orange. If you look, actually, to the south,  
4 the south boundary, there is the RID canal. It's kind  
5 of the south boundary of that area.

6 Here's the proposed site plan. Currently,  
7 the existing plant is 1.2 million gallons per day.  
8 It's a sequencing batch reactor. The existing 208  
9 allows for two additional 1.2 mgd expansions to that  
10 which brings us to 3.6 mgd sequencing batch reactors.  
11 An additional clarifier for each of those is  
12 anticipated to be constructed and bringing the total to  
13 7.2, and also, a conversion to an MLE, Modified  
14 Ludzack-Ettinger process. And then a final phase will  
15 bring the total from 7.2 to 8.9 mgd.

16 This is a schematic of the existing plant and  
17 the sequencing batch reactor. We don't have plans to  
18 go beyond it. As I mentioned, we have 1.2 mgd  
19 existing. The existing 208 Amendment is for 3.6. We  
20 don't anticipate needing to expand anything under this  
21 amendment for several years.

22 So, this is kind of what we have in place and  
23 what we will see in the next two phases -- or not next  
24 two phases, but next two expansions of the existing  
25 phase, and then the next phase will go to a MLE

1 process. So, that's a schematic of what's currently  
2 being done.

3 In summary, the treatment process, the  
4 concept is to convert SBR to MLE because we're finding  
5 the MLE technology to be more efficient. We will  
6 maintain all the minimum setbacks as required for odor  
7 and noise. Also, I didn't discuss this, but the plan  
8 is to discharge effluent to the Buckeye Irrigation  
9 District Canal and also to golf courses on-site which I  
10 think I have slides.

11 The plant will be served by gravity flows.  
12 There will be one lift station that's going to service  
13 that plant, but in general, it will be served by  
14 gravity flow. And I mentioned that there will be a  
15 golf course that we are reusing the water on currently.  
16 It was just recently that we started bringing water to  
17 the Buckeye Irrigation District Canal.

18 It's just kind of a summary of the permits  
19 which you will find in the MAG 208 Amendment we  
20 submitted that we are operating under and also will be  
21 obtaining for future construction. That's the end. If  
22 you have any questions, I'll be happy to answer them at  
23 this time.

24 MR. KLINGLER: Michael, at this time, we  
25 would invite public comments.



STATE OF ARIZONA        )  
                                  )  
COUNTY OF MARICOPA    )

I, JANET HAUCK, a Certified Reporter,  
Certificate No. 50522, in the State of Arizona, do  
hereby certify that the foregoing pages constitute a  
full, true, and accurate transcript of all proceedings  
had in the foregoing matter, all done to the best of my  
skill and ability.

I FURTHER CERTIFY that I am not related to  
nor employed by any of the parties hereto, and have no  
interest in the outcome hereof.

WITNESS my hand this 12th day of January,  
2006.

  
\_\_\_\_\_  
Janet Hauck, RPR  
Arizona Certified  
Reporter No. 50522