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December 21, 2001
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VIA HAND DELIVERY

Robert M. C. Rose Of Counsel

Blanca S. Mayo, Director<br>Division of the Commission Clerk and Administrative Services<br>Florida Public Service Commission<br>2540 Shumard Oak Boulevard<br>Tallahassee, Florida 32399-0850<br>Re: Aloha Utilities, Inc.; PSC Docket No. 010503-WU<br>Application for Water Rate Increase<br>Our File No. 26038.35

Dear Ms. Bayo:

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15998-01 \text { thru } 16001-01
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Attached in accordance with the requirements of the Commission's most recent amendment to its Procedure Order are the original and 15 copies of the Rebuttal Testimonies of Stephen G. Watford, Robert C. Nixon, CPA, David W. Porter, P.E., and F. Marshall Deterding, Esquire along with the attached exhibits, to be filed in the above-referenced case.

Should you have any questions in this regard, please do not hesitate to contact me.
Sincerely,

FMD/tms
Enclosures

cc: Ralph Jaeger, Esquire (Without Attachments Via Hand Delivery)

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION ALOHA UTILITIES, INC.

DOCKET NO. 010503-WU
APPIICATION FOR WATER RATE INCREASE OF
ALOHA UTILITIES, INC. IN PASCO COUNTY
REBUTTAL TESTIMONY OF STEPHEN G. WATFORD
Q. Please state your name and employment address.
A. Stephen G. Watford, Aloha Utilities, Inc., 6915 Perrine Ranch Road, New Port Richey, Florida 34655.
Q. In what capacity are you employed by Aloha Utilities, Inc.
A. I am the Utility's President.
Q. How long have you been so employed?
A. I have been an officer of the Utility since 1986 and the President of the Utility for approximately seven years. I have been employed with Aloha since 1975.
Q. What is the purpose of your rebuttal testimony?
A. The purpose of my testimony is to address several basic issues. First is the issue on in-house costs related to this rate proceeding. I have attached hereto, as Exhibit SGW-1, a schedule showing the approximate total cost for this rate case to date, including notices and filing fees and incidentals as well as estimates for these and travel to complete the case and Mr. Stallcup's comments no this issue. In order to estimate the cost of notices, we
utilized our experience from the last couple of notices we have had to issue as a basis for estimating the costs of the two expected additional notices in this case. The great majority of the in-house costs are related to the noticing and the filing fee with some incidentals for copying and travel related items. Along with all other rate case expenses, we will update our total estimate of rate case costs as a late-filed exhibit in accordance with standard Public Service Commission ("PSC" or "Commission") practice, in order to allow the Commission to have the most up to date information concerning rate case costs at the time it makes its final decision.
Q. What is the second issue you feel you need to address?
A. The second issue is the conservation programs that the Utility has proposed for recovery in this case. In our original filing, we included a proposal that the Utility would recover its basic revenue requirement from the first tier of rates. In addition, we proposed that the second tier be utilized for the purposes of funding the conservation programs that the Utility and the Southwest Florida Water Management District (SWFWMD)had agreed upon. Any revenues from the second tier of rates above those needed to fund these conservation programs could be utilized for purchases of County water above those estimates ultimately included in rate setting. Any
remaining funds could be used for funding of projects such as the reuse facilities and/or funding of the substantial feasibility study that we have been discussing with the SWFWMD to review an R/O facility as a possible alternative supply. We believe these are all worthwhile and appropriate items for recovery through rates. The reason we chose, in August, to request them in the manner in which we did, rather than as a basic component of the revenue requirement, was two fold. First, it was not clear at that time what the specific conservation measures would be, much less what the cost might be related to them or to the other items. Secondly, we recognized that the effects of repression from the new rate structure and increased costs are unique and unpredictable. We therefore felt that the way we chose for recovery of these items was the best one available at that time. It is certainly within the Commission's discretion to agree that these funds would be utilized for any or all of these proposed components, or handled in some other way. However, it is clear that the conservation programs at least recommended and agreed to by SWFWMD, if not required by the date of the Commission's final decision in this case, should be recognized in rate setting, or we will have to pursue a separate and costly proceeding to recover those costs as
soon as they are approved in the next few weeks. I have attached hereto a listing of those conservation programs and their estimated costs of $\$ 155,000$ as Exhibit SGW-2 which were developed in conjunction with and the approval of the SWFWMD staff in recent months. These have been provided to the Commission staff and the other parties through a response to Staff's First set of Interrogatories. The SWFWMD has already approved these programs and costs as being appropriate for implementation though they are not yet required by Order, which we anticipate will be forthcoming shortly. This information was provided to the parties on October 22, 2001. To the extent the Commission or its staff needs any further clarification of these costs, we will be more than happy to provide that. However, I believe this gives a fairly detailed assessment of those costs and the SWFWMD witnesses have discussed, in some detail, the specifics underlying the benefits to be gained from implementation of these conservation programs, which they have had a major hand in developing for Aloha.

The SWFWMD does not develop these programs based upon whether or not they will "pay for themselves" by reduced consumption or otherwise reduce cost. That is not the goal of the $S W F W M D$ in requiring these conservation measures. Instead, the idea is to reduce consumption of
the water resource, or at least increase awareness of water usage and the precious nature of the resource. It is not to reduce cost to a utility and in fact, the SWFWMD's own staff has specifically indicated that this is not a key factor to them in either designing or approving the conservation plans for utilities, including the one which we have negotiated with them. To the extent that implementation of these programs would result in increased water costs to the customer, the SWFWMD would agree that furthers their goal as well. Increased cost to the end customer is in fact the single biggest factor that would result in savings of water. It is in fact true that these conservation measures may result in reduced consumption. However, for the most part, no one is sure whether they will or will not result in reduced consumption. Even if they do, it is unlikely from my review of these conservation measures, and the information supplied by the SWFWMD concerning their effectiveness, that any of them will "pay for themselves" in reduced consumption. It is therefore unreasonable to set rates assuming such cost savings. The Commission has the oversight and review authority after the fact, to determine whether or not implementation of the conservation measures causes reduced consumption and reduce costs and to adjust rates appropriately if need
be. For the time being, however, these costs must be recognized in order for the Utility to comply with its Water Use Permit.

To the extent the Commission believes that these should more appropriately be included in the basic revenue requirement under the first tier of rates, we certainly have no objection to that change in treatment of these costs, we simply did it the way we did because of the unknown nature of those costs at the time of filing the original Application. The filing of rebuttal testimony is our first opportunity to provide detail concerning those costs within the record of this case.

If the Commission fails to recognize these costs altogether, it will simply force the Utility to delay implementation of those programs, as desired by the SWFWMD and the Utility will also have to file a separate limited proceeding in order to seek recovery of those costs immediately after, if not before, the conclusion of this case. Doing so will entail substantial additional cost.
Q. What is the next issue you believe needs to be addressed?
A. The next issue I believe needs to be addressed is the one on the quality of water service provided by Aloha. This issue has three separate aspects. One is the area of customer satisfaction and/or complaints, the second is
the question of the quality of water provided, and the third is the status of the pilot project. Mr. Larkin provided direct testimony suggesting that the quality of service provided by Aloha was unsatisfactory, though he was rather vague in his statements about what constituted unsatisfactory service as provided by the Utility. Mr. Durbin, for the Commission staff, provided testimony concerning the number of complaints lodged with the PSC and some analysis of those complaints in comparison to other companies. While Mr. Durbin draws no conclusions from that testimony, I believe that there are several misleading, if not inaccurate, statements contained within his testimony and schedules.

Finally, there is some discussion within the testimony of Mr. Larkin and Mr. Biddy about the status of the pilot project undertaken by Aloha for the purposes of determining the best available method for removal of hydrogen sulfide from the Utility's source water. I will try and address each of these three components of quality of service separately.
Q. Please address the issue of customer complaints.
A. The most comprehensive discussion is the testimony of Mr. Durbin of the PSC staff. Mr. Durbin has compiled statistics concerning complaints lodged against Aloha Utilities in the last $23 / 4$ years. Mr. Durbin's
statistics show that in less than $1 \%$ of the cases of customer complaints (two complaints), Aloha has been found to be in violation of either rule or tariff. That's an average of less than one complaint per year where the Utility is found to have done anything wrong. I personally believe that is a very good record. While there are explanations in the case of both allegedly valid complaints, suffice it to say that the Utility corrected the error and satisfied the Commission that they had taken care of the issue. In both cases, we gave the customer benefits as a compensation for the error that were not otherwise required anywhere by Commission rules, statutes or the Utility's tariff, but simply were provided to the customer for the purpose of demonstrating to the customer that we sincerely regretted the error. Mr. Durbin also notes that the Utility was late in responding to eleven customer complaints (approximately 4\%) over this $23 / 4$ year period. There were extenuating circumstances in many of these alleged late filings, that we do not believe should be counted against Aloha. I have attached hereto a schedule as Exhibit SGW-3, which outlines the circumstances surrounding Aloha's response to each of these alleged late responses to complaints. In five of the eleven cases, we contend that we were not late in providing a response. In the case of Mr. Dennis

Winchester, while the staff only states that we were one day late in providing the response (outside the 15 days normally allowed), we have a facsimile confirmation showing that we did in fact file a response on the due date which was October 17, 2001. We then sent a confirmation to the Commission the next day showing that the facsimile had also been sent to the customer (which confirmation was excluded from the original reply). Apparently, this second copy was incorrectly logged as our response. Our response to the customer complaint was timely.

In the case of customers McKay, Gover, Arseanau, and Myers' complaints, the staff apparently sent those complaints to the Utility's old office fax number after the Utility had moved from those offices in December, and had officially notified the Commission of the move. Apparently, the word did not get through to the Division of Consumer Affairs and into their official records for approximately two months, although it was correctly posted on the PSC's company information page on the PSC website. Therefore, some of the customer complaints ended up being sent to the wrong number. In any case, when we found out about the existence of the complaint, we called the PSC and asked that they resend it to our new number. In each case, we filed a response in less
than the normal 15 days required from the date we received it at our then official contact number. In the McKay case, we were notified that the customer had chosen to close the complaint and therefore, we did not respond, assuming that no response was necessary to a voluntarily withdrawn complaint.

In at least three of the remaining six allegedly late responses, the PSC facsimile failed to accept our faxed response, and so we sent it by mail on the due date. Therefore, it arrived a day or two late and was marked by the Commission staff as late. While this is a somewhat unusual occurrence, it does occur, and we do not believe that Aloha should be held responsible when we are unable to fax our reply (as is permitted and the norm). As noted in my exhibit, there are explanations to each and every allegedly late response. However, suffice it to say that we do not permit our staff to respond to the PSC Consumer Affairs Department in an untimely manner and as you can see, there are explanations concerning each of these.

Based upon these explanations, we believe there were zero late responses that were not justified. However, even if there were three late complaint responses, or six or even the eleven alleged by Mr. Durbin, that is very reasonable in over a $23 / 4$ year period. Even in the worst case
scenario, less than $4 \%$ of our responses are late. Based upon our review, it is at most $2 \%$ and even those have some reasonable explanation and are rarely more than a day or two late.

Thirdly, Mr. Durbin provides an analysis of the timing of all customer complaints. It is interesting to note that there are basically five peak months during this 2 3/4 year period in the filing of these complaints. Three of these relate primarily to what are referred to as "service complaints" (May 2000, January 2001, July 2001) and two relate primarily to what are referred to as "billing complaints" (December 2000, March 2001). There are explanations for each of these peaks that shows why they are not occurring in cases such as those compared by Mr. Durbin that do not involve ongoing rate or other formal proceedings. While I will give some insight into each and every one of these peaks, I first want to note three major faults related to this complaint history and Mr. Durbin's comparative analysis:

1) As Mr. Durbin noted in his deposition, he did not review the other utilities cited as comparable to determine whether any were involved in rate proceedings or other contested proceedings before the PSC during the period of time utilized for this comparison. I know from experience that complaints
are always higher during the processing of such formal cases. In fact, in rate proceedings, a Utility is required by the PSC to give at least two formal notices to each customer, wherein the customers are actually encouraged to call or write the PSC and provide their comments or concerns. In our case, a sewer rate case was ongoing from April of 2000 through April of 2001. This water case began with the request for a limited proceeding and that was followed by the filing of this rate case. All of which began in early 2001 and obviously continues through the present. This is by far the highest period, on average, shown in Mr. Durbin's JRD-2 exhibit for both service and billing complaints. Failure to compare Aloha to only those with ongoing rate proceedings (especially two separate ones) makes such a comparison unreasonable.
2) No attempt has been made to segregate water complaints from sewer complaints or the Aloha Gardens system from the Seven Springs system of Aloha. It is therefore impossible to tell from Mr. Durbin's schedule, which of these complaints relate to Seven Springs, much less its water system alone.
3) The period chosen for analysis is certainly
questionable. For the five years prior to 2000, the Utility averaged less than 25 complaints per year. In 2000 and 2001, this average has approximately tripled. The reason is obvious. The Utility's rate cases and other proceedings before the Commission have increased the customer contacts with the PSC substantially. The quality of the water provided to the customers has actually increased over the last two years, because of the utility reaching full optimization of its corrosion control program in accordance with the agreed upon parameters per the DEP approved program. The customer service procedures and complaint handling have also been refined and improved over that period. Even the Management Audit undertaken by the PSC staff notes these improvements.

For each and every one of these reasons, I believe Mr . Durbin's analysis is not a fair representation of Aloha's customer complaint level, nor is it fair to compare the Utility to the others listed in his Exhibit JRD-3. Attached to my testimony as Exhibit SGW-4 is a graph showing PSC complaints per year per 1,000 customers. As you can see, the effect of the ongoing proceedings of the last several years is clearly apparent. When you look at time prior to the last several years, you can see that
our complaint ratio is much lower, averaging less than 3 complaints per 1,000 customers per year. This is a very favorable ratio compared to the companies Mr. Durbin used in his analysis and in fact, would place Aloha in the bottom half of the range of companies that Mr. Durbin used in his analysis.
Q. What about the issue of the five peaks you spoke about?
A. Yes. I would like to provide some details concerning each of these five peaks:

1) May and June 2000 - The Utility filed its Seven Springs sewer rate increase request in April of 2000. In accordance with PSC rules, we sent out an initial Customer Notice explaining the underlying causes of the sewer rates increase immediately after filing. As noted earlier, these notices specifically encourage customers to voice any concerns. Therefore, I believe this accounts not only for the spike in complaints during the month of May, but also into June. Most of the complaints in May were water quality related, and $3 / 4$ of the complainants did not contact Aloha before contacting the PSC on these specific water quality complaints, and three had never complained to Aloha about water quality concerns. This certainly makes it clear that the complaints were in response to
the notification, if not some other organized effort to encourage customers to contact the PSC. While this does not diminish the validity of the customers' complaints, it certainly indicates the reason for those complaints and therefore makes these complaint levels not comparable to a utility not involved in such a proceeding.
2) December 2000, January 2001 - December and January have a total of approximately 33 complaints. Of those, 19 are complaints from the Ashley Place Apartments. A situation arose there relating to deposit and customer billing that was in no way the Utility's fault, as well as being beyond the Utility's control. A new owner of the apartment complex contacted the Utility a few months before this, in late Summer or early Eall of 2000. They asked that all apartment customers' individual billings be discontinued and that in the future all bills be sent to the apartment complex management. They completed service applications for each apartment changing the accounts back to the apartment complex owner's name. The Utility had no choice but to comply with this request. As we did so, each of the individual customers received credit for their deposit, which rendered their
bills much lower than normal, and then they ceased receiving bills. However, as soon as the apartment complex management realized that they would be responsible, not only for paying these bills, but for collecting any costs from the customers to cover those bills, they changed their minds and asked that we reinstate individual service to the apartments. The individual apartment customers were rightfully upset. However, this is not a matter to be upset at Aloha over, but instead, should be taken up with the apartment management, since it was fully within their discretion and the Utility was obligated to follow the instructions from the apartment owner. If these complaints are removed from January and February, the total number of complaints for the two month period is a relatively modest six to seven per month. In early January, the Utility implemented a substantial increase in sewer rates per its request, after expiration of the eight month file and suspend period. As part of that implementation in early December, the Utility notified the customers of the new rates being implemented and the reason therefore. The customers received that notice in early December, and their first bill for service
under the new rates in early to mid January. Therefore, it is not surprising that the increased number of complaints occurred in those two months, or in the two months that followed in February and March.
3) March 2001 - In addition to just beginning service at the new rates in March of 2001, the customers received the final notice of the sewer rate increase at the beginning of this month, as the sewer case came to a close. You will note that here and in December 2000 and January 2001 the billing complaints reach their highest level. This makes it obvious that these complaints were in response to the rate increases occurring in those months.
4) July 2001 - 17 of the 23 complaints received in July of 2001 related to the copper corrosion issue. The customers were well aware through press accounts that the Utility was planning to file for a rate increase in its water system at the end of July. It is again interesting to note that of the 23 total complaints received in this month, 17 were related to the copper corrosion issue. Over $2 / 3$ of these had never before contacted the Utility with a copper corrosion, water quality, or any other type
of complaint, and 12 of the total 17 contacted us on the same day they contacted the PSC. In other words, they did not give the Utility an opportunity to try and satisfy their concern before filing a complaint with the PSC.

It must also be pointed out that the PSC recently conducted a management audit of Aloha. The findings of the management audit clearly indicated that Aloha is effectively meeting and handling its customer service obligations. The PSC audit staff wrote the following in their executive summary:
"However, based upon employee interviews, documents, survey results, and Aloha's new customer service database, the degree of satisfaction with Aloha's overall customer service function seems to be high.

Additionally, customer problems reflected in inquiries to the Commission have stabilized in recent years. BRR Staff's review did not identify any significant service inadequacies."

The management audit also found that:
"The overall survey results indicated that Aloha's customers are generally satisfied with Aloha's customer service, the timeliness of response, and the overall handling of various customer requests."
Q. The second area of customer satisfaction which you discussed, was water quality. What comments would you like to make in that regard?
A. Mr. Larkin has at least made some comments about the quality of water provided by Aloha. While he has provided absolutely no specifics, it is important to note what has gone on with regard to the water quality of this company, in previous cases, and the findings regarding the water itself. This Utility has gone through an unprecedented investigation of the quality of the water that it provides. There have been enumerable tests on the source water and inspections of the final water and review of all regulatory agency records concerning the Utility's compliance with their standards. The end result has always been that the Utility is providing clean and clear water to the point-of-delivery of the customers' homes, in compliance with all regulatory standards. This has been the case throughout the last six years where this issue has been reviewed and investigated to unprecedented levels. The DEP, the PSC, and several consulting engineers and labs, have all found this to be the case and at no time has the quality of the water provided by the Utility ever been suggested to be below regulatory standards, by any person knowledgeable in the area. If anything, the quality of water provided
by Aloha has actually increased since those last cases, because of optimization of our corrosion control program approximately one and a half years ago.

As to the black water issue, the Commission not only has investigated this in detail with regard to Aloha, but has, at the direction of Commissioner Jaber, put together an interagency task force, which performed a detailed review of the issue statewide and among other findings, noted that the problem existed throughout the state, especially in a corridor from the Tampa Bay area up through Jacksonville. That task force published a detailed report on the subject.

In conclusion, the quality of water provided by Aloha is still, and has been throughout the last six years of constant investigation of the issue, in compliance with all regulatory standards. The DEP witness is offering testimony in this case to that effect, and several DEP witnesses in the past have done likewise. While there is certainly a concern with copper corrosion in some customer's homes, we have offered about every alternative we can to assist the customers, including continuing to provide them educational pamphlets when they experience this problem. Hopefully, if we in fact do go to a revised treatment process, including R/O and/or MIEX, the changes inherent there will also substantially assist in
reducing the occurrence of copper corrosion in those homes. We continue to review these issues and to seek a situation where ultimately no customers will experience that copper corrosion problem. However, this is far different than suggesting that Aloha is providing poor quality of water, because in fact, it is not and there is no scientific basis for suggesting that it is.
Q. Please discuss the issue of the pilot project status.
A. Both Mr. Biddy and Mr. Larkin have suggested that the pilot project has been "put on hold." This is not true. We have spent substantial amounts of money on this pilot testing of the MIEX treatment process, in order to remove hydrogen sulfide. Given the changes that we now have learned are going to occur in the coming years, both from the chemical makeup of water being provided by Pasco County and by the increased reliance on some other source long-term, it would be wholly imprudent for the Utility to ignore those known changes and proceed with the next major phase of the pilot project, even if we were at that stage (which we are not). The resulting conclusions and indicated treatment processes would then be unworkable with those known changes in the water expected to be received in the coming years. However, we have not reached a point where we have stopped moving forward with the pilot project, we are simply accumulating the massive
data which we have collected in the first phase, and are preparing for installation of the scaled down model treatment process that we expect to begin testing at the beginning of 2002. This is where the Utility will expend the large sums of money originally estimated, which will no doubt total more than that estimated in the original pilot project estimate recognized by the Commission in the previous proceeding. In addition, we will probably be simultaneously undertaking review and feasibility studies at approximately three times the cost of the pilot project toward obtaining alternative water supplies. By the time this case goes to hearing, pursuit of that feasibility study will very likely be a requirement of the SWFWMD. That too will have to be coordinated with the pilot project to ensure compatibility. We believe that the MIEX process will factor into the future of the water supply for Aloha. However, it would be irresponsible to look at that single component in a vacuum. The progress to date has been very encouraging with the MIEX process. Therefore, the suggestion by either Mr. Biddy or Mr. Larkin that the pilot project is on hold, much less that it will cost less than the figure estimated and required to be recognized as working capital in the last proceeding is absurd. We actually expect to have substantially more
invested in the pilot project than the original estimate, because of the additional consideration of the new source of water from the County, and its effect on that proposed process, than was fully proposed for recognition in that last Order. In addition, we are undertaking an $R / O$ feasibility study with the approval, if not requirement, of the SWFWMD that will also cost substantially more than the pilot project, and will likely affect the pilot project and its cost. It should be noted that we have accounted for the pilot project, and included it in working capital, exactly as we were ordered to do in the Commission's Order from last summer that addressed the accounting treatment for the pilot project. As to the comments from Mr. Larkin and Mr. Biddy about the progress of the pilot project, there were no specific deadlines, and we have certainly pursued the pilot project with due diligence. We have kept the Commission staff informed of our progress and have never received any comments from the staff that they felt things were moving too slow, or that we were headed in any wrong direction.
Q. Mr. Fletcher provided some testimony concerning the issue of an appropriate royalty for water acquired under rights owned by related parties. Please respond.
A. Yes. Actually, I find it amazing the amount of attention being focused on one of the lowest cost sources of water that we have available to us. Instead of trying to take actions that could possibly cause us to lose the low cost water source, I would have thought the staff would have embraced it. However, Mr. Fletcher has testified exclusively on this issue. The real issue here has been lost in the discussion. The primary issue has to be securing a source of water and the cost of that water. That is the only rational basis for trying to compare the relative worth of the various water sources. However, his concern is that he believes the Utility somehow has the responsibility to prove "the original cost" of the property utilized for extracting this water "when first devoted to public service." There are several errors in his logic:

1) First of all, this property has never been devoted to public service. Instead, it has been leased under a royalty type arrangement, just as the property of the Mitchell's has been leased under a royalty type arrangement. Therefore, even if the Commission were to consider some basic property value, they would have to also consider the fact that we would have to condemn that property and go through that very costly process and we would have to do so today, not 25 years ago. While the Commission did not specifically endorse the
arrangements with the related party, they did endorse the appropriateness of the royalty arrangement with a third party, upon which the Utility reasonably relied in making similar arrangements with a related party. It cannot reasonably be said now that the Utility should not have entered into the royalty arrangements, after the Commission specifically recognized such an arrangement for an unrelated third party.
2) It is only reasonable that the Utility relied on the Commission's decision regarding payment of $a$ royalty for all water, as it did in 1978 for the third party transaction and which arrangement has not been challenged for over 20 years. Until recently, there was absolutely no question of the appropriateness of this arrangement and in fact, the Commission had not only previously approved it, but it had been reflected in the Annual Reports filed by the Utility for all of the intervening 22 years with no question from the PSC. Therefore, it is unreasonable to suggest that the Commission has not previously approved this arrangement, much less to now go back and try to assess what the Utility "could have done" 25 years ago instead. The Commission must review the arrangement based on the
current conditions. The Utility is able to obtain bulk raw water from an unrelated third party at $\$ .10 /$ thousand gallons. The Utility is able to obtain treated water from the County at \$2.35/thousand gallons. The related party has agreed to sell treated water to Aloha at the same price charged by the County, which is obviously the market value. Since there are no other alternatives available, the Utility is much better off paying the royalty it has been paying to the related party than it is paying either the County price for treated water, or seeking some other alternative source (none of which are known to be available at this time). The review of this cost must be based upon the current alternatives available to the Utility and in that light, it is the best alternative that the Utility has to provide quality water service to its customers at the cheapest possible price. Therefore, Mr. Fletcher's suggestions are unreasonable ones.
3) The Utility would have to pay for not only property rights, but also all of the equipment located on the related party's property, because that equipment belongs to the landowner. In our opinion, that would render the arrangement with the
related party even more favorable, based upon a royalty, rather than acquiring land, especially in light of the Utility's ability to move its well locations should the wells cease to function. The landowner has also always paid the property taxes as due on these properties.
4) Finally, the staff of the Commission seems to believe that if they abrogate the contract between Aloha and Tahitian development or Interphase by changing the price agreed upon between the parties, that the Utility will be able to purchase that water at whatever price the Commission says. This is not the alternative available to the Utility. Instead, I've defined the alternatives available for purchasing water, and the only currently available alternative is to buy treated water from the County at $\$ 2.35 /$ thousand gallons. In light of this, not only is the price paid by Aloha to the related party well below market, it is also the only available alternative to Aloha purchasing this treated water from the County presently. If the Commission is to deny recognition of the contracted for cost between the parties, then they should grant to Aloha rates to cover purchasing all water from Pasco County, or to purchase treated water
from the related party at a cost similar to that charged by the County.
5) There seems to be a suggestion within Mr . Fletcher's testimony that the Utility could have the permits moved to new well locations on property that it purchased. I have also seen responses from the SWFWMD that might possibly be read by some to suggest that we could actually move those permits. However, we discussed on numerous occasions, with the staff of the SWFWMD, a proposal to move some existing wells, including ones we were thinking about purchasing, in order to increase our capacity in the last few years and were informed that under the current SWFWMD policy, that those would be subjected to all the same filing, modeling, technical requirements, as a new permit submittal, and we have learned very well that new permits are denied in virtually every case and that the likelihood of our getting such a new permit was very small. In other words, we have tried to move other wells and have learned that the likelihood of receiving approval of such a change is very, very small.

For all the above reasons, it is not only unreasonable, after all these years, to second guess the agreement
between the Utility and the related parties, it is also contrary to previous findings of the Commission. We have to focus on the pertinent question and that is, what is the cost of the water available to the Utility from this source compared to the cost from other sources. Ultimately, it leaves the Utility in the precarious position of having to purchase all of its water from the County and incur substantial additional costs, which would then have to be borne by the ratepayers.
Q. There has been an issue raised about the new employees, either because of vacant positions, or because of new employees that the Utility has added in order to provide better quality of service. Let me ask you first, the reason why these new employees have been added?
A. Those employees were added for several reasons. First of all, in our old location our offices were too small to accommodate anymore employees, even though we were in desperate need of additional employees. The Commission's own management audit also made it clear that they saw the need for these additional employees. In order to improve customer service and keep up with the growing customer base, it is only natural that now and then you will have to add additional employees.
Q. Ms. DeRonne has proposed to eliminate all of those positions that are new and even suggests the
appropriateness of excluding some of the employees where there were currently vacant positions. Do you have any comments in this regard?
A. Yes. The Utility will never be able to keep and/or hire the needed employees to continue to provide high quality of service and hopefully to improve customer service, if the Commission accepts Ms. DeRonne's proposal. In fact, all of the new employee positions and all of the vacant positions, have now been filled as of the date of my filing this testimony in mid December and we expect to keep them filled for the long run. The only position remaining unfilled is that of the Utility Director, which we hope to have filled in the next month or so, and it will certainly be filled before the time these rates go into effect. We have previously interviewed suitable applicants and in fact offered the position to a gentleman. However, after several months of negotiation, and his initially agreeing to take the position, he chose to take another position to avoid having to relocate his family. We have re-advertised the position and have several good candidates that we are presently considering. We anticipate this position will be filled by the date of the hearing or shortly thereafter. This position is as much needed as the others, in order to allow the Utility to perform more budgeting and
management functions that even the management audit performed by the PSC indicates are necessary, but which the Utility management staff is unable to perform because of other demands and the growth within the system that has occurred over the last several years with no commensurate change in management.

For all of these reasons, and because Ms. DeRonne herself agreed that if the positions were filled by the date of the hearing they should be considered, we believe all of the costs of these new employees and the vacant positions, must be considered in final rate setting in order to allow the Utility to cure a longstanding under staffing problem, and continue to provide a high quality and hopefully even improved quality of water and customer service.
Q. Mr. Larkin has suggested that the Utility could have filed this case with the wastewater rate case and as such, the rate case costs related to this case should not be allowed for recovery. Do you have any comment in this regard?
A. Yes. Mr. Larkin's concern is misplaced. He has provided no evidence whatsoever that the Utility could have filed for this water case at the time the wastewater case was filed. The wastewater case was originally filed in April of 2000. As Mr. Nixon has noted, there have been two
full rate investigations and analyses by the Public Service Commission, the last one ending just this last Summer in August of 2001, both of which declined to give the Utility any increased water rates, and in fact suggested that the Utility was slightly overearning. The only way that the Utility could have possibly been able to justify a rate increase was if it had proposed to begin purchasing water from Pasco County several years ago and the Commission declined. In that case, the cost to the customers would have been higher in the long run, because that additional purchased water cost would have far outweighed any savings by combining two rate cases. Aloha prudently investigated the other less costly alternatives to purchasing water from the County, before ultimately reaching the conclusion that it must do so. This has only benefitted Aloha's customers. In effect, the customers would have lost much more if the Utility had gone that route.

To my knowledge, Mr. Larkin's proposal is not only contrary to reason, it is contrary to law. I have never heard of a case in Florida or any other jurisdiction where such a proposal has been made, much less accepted. As Mr. Nixon notes, the Utility went so far as to ask for consideration of increased purchased water requirements approximately one year ago, and the Commission declined
to even consider those additional costs in that rate investigation.
Q. Do you have any comments or suggestions concerning the testimony of Mr . Stewart and Mr. Stallcup concerning the projections of gallons sold for the projected test year 2001?
A. Yes. There are substantial problems with both of their proposals. However, first I would like to offer a little background into what Aloha proposed in its filing with regard to the number of gallons sold to be utilized in setting rates for the projected test year 2001. Aloha's Seven Springs service territory began by serving small retirement homes in a very large development known as Veterans Village and other similar developments surrounding it. Those properties consisted almost exclusively of relatively small homes with small yards with a retiree customer base. As such, water usage has historically been very low for that group of Aloha's customers. As Veterans Village and similar developments reached build out, the new areas where development was occurring and continues to occur in the eastern portions of Aloha's territory began to take on a different character and demographic, with the general change in this southern Pasco County demographic. Instead of retirees and small homes, Pasco County has become a
bedroom community for the Tampa area. As such, we have seen a gradual shift in the type of homes serviced from the small homes in the Veterans Village area with a mainly retiree population, to medium sized homes with a mix of families and retirees in some of the newer subdivisions, and now to the construction of larger homes with larger yards and a majority of family type residents, with more than two persons per household on average. Attached as Exhibit SGW-8 are copies of several advertisements for new homes in the service territory which are typical of all new customers, as well as those expected to be added for the foreseeable future. These are much different than the average of those constructed in the service area 10 or more years ago. This change in the demographic in Aloha's territory is readily apparent from not only a tour of the areas served, but also from a review of the usage patterns of the areas where Aloha has remaining connections for the future within its system. We have done the analysis and provided it to the parties in this proceeding, which clearly demonstrates that the areas where development is expected in the coming years are all in areas where average usage per household is at least 500 GPD/ERC, if not higher. Based upon this very apparent and substantial change in demographic, we were urged by members of the Commission
staff, at the time of seeking test year approval in this case, to project the 2001 test year usage with recognition of this demographic shift in consumption. In response to that suggestion, we have taken the calendar year 2000 actual consumption levels and projected them forward in 2001, based upon a 500 GPD average usage by all new customers in the projected year. This is in keeping with what we were urged to do by members of the Commission staff.
Q. What has been proposed as an alternative to Aloha's projection method by Mr. Stewart and Mr. Stallcup, and what problems do you have with it?
A. Both Mr. Stewart and Mr. Stallcup have taken different approaches to projecting 2001 gallons sold. It should be kept in mind that the purpose of the projections for gallons sold for the test year is to reflect what can be expected in the future, as far as consumption by the Utility's customers, not just to place a figure for gallons sold matched up with other test year statistics. Mr. Stewart, after all his analysis, has simply stated that he believes that the year 2000 does not include a reasonable base year consumption figure, because of the ongoing drought in the area. This contention underlies, to a great extent, the proposal by Mr. Stallcup as well. Mr. Stewart has discussed the reason why he believes that

2000 is not a representative year upon which to base future projections, and then has simply taken the average consumption per ERC for the last five years, as the projected future consumption per ERC for all customers in the projected test year 2001. This effectively brings Aloha's consumption back to approximately 1997 levels, for a Utility who has seen growth in consumption each and every year. The Utility has a long history of ever increasing usage per ERC. It is wholly inappropriate to assume this will cease to exist and even reverse itself (as both Mr. Stewart and Mr. Stallcup have effectively done). Since rates are set for a proposed four year period, during which they will be presumed to be effective, such a proposal is not only inappropriate for test year 2001 projections, but it is also inappropriate and unreasonable for the years into the future during which these new rates will be in effect. The underlying presumption that the drought has affected consumption in 2000, and only 2000, is not a reasonable one because the SWFWMD has implemented increasingly stiff watering restrictions to deal with exactly that problem. If anything, due to the watering restrictions (which may be rescinded at any time), water usage has been repressed during the drought, not artificially increased. As I noted, the utility has seen a gradual increase in
consumption each and every year during its history and to the extent a drought exists, it has existed for many years, not just the historic test year 2000. Watering restrictions from the SWFWMD have been in effect for several years, which would diminish any affect which would normally be expected in a drought. In addition, there is absolutely no proof that the general drought conditions have ended, and no one in a position to know is projecting that those conditions are ending. Since we are utilizing only a four year horizon for the period of time rates will be in effect, the Commission should not base its rate setting on a presumption that a longstanding condition will end when there is no real evidence to support that contention.
Q. What about the testimony of Mr. Stallcup? How has he proposed to set consumption levels in the projected test year?
A. Mr. Stallcup has used a complicated model to project galions sold, based upon use of a Moisture Deficit Variable (MDV). By doing this, he has attempted to tie various weather conditions, including temperature and rainfall, to consumption levels and then to predict 2001 consumption based upon this factor. It is unclear at this time whether or not the conditions which his model projects, will in fact exist during the period of time
rates are expected to be in effect. More importantly, his model totally ignores the very clear existence of a demographic shift resulting in greater consumption per ERC for all new connections. Mr. Stallcup has totally ignored the ever increasing consumption per ERC for new customers. This very obvious change has historically trended up over the last 10 years beginning with the development of the Trinity Community. Because that shift is dramatic, it affects the average consumption per ERC and should be used to calculate the proposed test year consumption levels. We have done substantial analysis to review this demographic shift and prepared several schedules which reflect it.

Attached as Exhibit SGW-5 is a chart showing a linear regression analysis showing increasing usage per ERC over the last six years with a projection for 2001 . There is nothing to indicate that this trend will not continue. In fact, if watering restrictions are rescinded, they will probably increase drastically. All of the other proposals for projected usage puts 2001 consumption at pre-1996 levels and that is not only counter intuitive, but if you are at all familiar with our service area, impossible. Also attached to my testimony as Exhibit SGW-6 is a listing of water usage by subdivision, showing usage over the last six years, as well as the 12 month
period used to project water usage in the MFRs. These are real numbers from experience, not projections of unknown reliability. These represent the gallonage being used in all of our subdivisions. You can clearly see that the usage in Thousand Oaks and Fox Hollow are well above 500 GPD/ERC and these are the areas where all of our new homes will be constructed. Mr. Porter used this data in his testimony, but it is clear that if anything, we have underestimated the future water demands of our customers. We have in fact taken the proposed rates that Mr. Stallcup provided in Late-Filed Exhibit No. 7 to his deposition that he contends come out of his analysis, and inserted them into the SWFWMD model and have found that they produce a substantial revenue shortfall. A summary of these results is attached hereto as Exhibit SGW-7. Mr. Stallcup's testimony proposes the use of a multiple regression model that allegedly takes into account many other factors (because of the use of the MDV) to forecast the projected test year consumption levels. He notes that this is superior to a time trend regression analysis as used by Aloha, because it takes into account other changes and conditions which exist. However, a review of the historic information clearly indicates that the model used by Mr. Stallcup and the staff, deviates substantially from the trends within the utility's
consumption per ERC levels that have existed in the past and can be expected to exist into the future. It cannot possibly be a superior methodology if the end results ignore the changes that the Utility has seen throughout its history. The staff position has focused on one variable that the staff believes has a high correlation with customer consumption and attempted to apply it to the coming year, without regard to any other variables that may be even more pertinent to the projection of future consumption. That is our problem with the proposal by the staff. In addition, the staff's proposal substantially reduces the number of gallons that the Utility can expect to sell in the future years below levels that the Utility has experienced in recent times. This places an extremely large risk on the Utility that if consumption is above the substantial reductions predicted by staff's model, that the Utility will be buying water at a marginal cost above the marginal revenue to be received from these customers. As such, the Utility will not only not be able to meet its authorized rate-of-return, it will begin losing money very quickly if that circumstance occurs.
Q. Do you have any comments with regard to Ms. DeRonne's testimony and proposal?
A. Yes. Ms. DeRonne has expressed a concern that the

Utility will continue to exceed its Water Use Permit and as such, will be able to achieve additional operating income because of the use of maximum permit levels in this case. There is very little basis for concern that the Utility will be pumping above those permit limits. In fact, because of the potential substantial penalties that the SWFWMD has made clear will result from any significant exceedence of permit levels, it is very unlikely that there will be such exceedences of any material nature. In fact, because the maximum allowed levels have been used in rate setting, the likelihood of the Utility not being able to pump at the maximum level on any given day, month, or year and because of the restrictions placed on the Utility for pumpage limits that use each of those separate time frames, it is much more Iikely that the Utility will not be able to pump water at a level exactly equal to its maximum permit levels and will fall under that amount. As a result, the cost of purchased water will increase above the levels recognized in rate setting in this proceeding under the current proposals. In addition, as I hope I have made clear above, the potential for shortfall, even with an equal amount of either under or over pumpage from the Utility's wells, weighs much more heavily on the Utility's earnings being harmed than it does toward the
customers being harmed by any exceedence, simply because of the high marginal cost of each additional thousand gallons of water, which the Utility must purchase, in comparison to its cost of pumping and treating that water.

Ms. DeRonne has proposed that this case be held open for some sort of monitoring, in case the Utility does exceed its permit levels for pumped water. As noted, we do not believe there is much likelihood of that and any potential deviation from the SWFWMD permit is likely to be substantially to the detriment of the Utility. Even though this is predicted to be the case, we do not believe that a separate monitoring is appropriate, anymore in this case than in cases where a Utility has within its control, the ability to modify other recognized expenses in order to gain additional operating income. There is really no difference from the issue Ms. DeRonne is discussing then a myriad of other issues, or potential expenses, that could be adjusted to achieve greater earnings. However, because of the factors that I have discussed above, being outside the Utility's control and their substantial potential affect on the Utility, we believe that to the extent that the Commission proposes to do monitoring of earnings and purchased versus pumped water, that monitoring must
include recognition of the possibility that the Utility will not achieve its permit levels, and to the extent there is any either "true up" of any past under or overages or potential to reestablish rates on a going forward basis, those must work both ways for all potential problems resulting from deviations of water purchased versus water pumped.

As we have noted, there must also be recognition that the consumption levels predicted by the staff and by Mr. Stewart or by the Utility, to the extent any of those are adopted in setting final rates, that the Utility will not be able to pay for purchased water if consumption actually exceeds the levels predicted by those witnesses or by the rates as finally established in this case. We understand the concern that generally when the commission sets rates with projections, the case is not held open and we are generally in favor of that finality. However, to the extent the case is held open, it must recognize the fact that this case differs from the ordinary case, both in the amount of the predicted reduction in consumption and the reasons for that predicted reduction and the fact that any significant deviation from those projected consumption levels can have substantial effects on the Utility. Therefore, any jurisdiction that the Commission retains for monitoring must incorporate those
potentialities as well, and the need for increased rates or possibly surcharges for past under sales. In addition to the extent any monitoring is ultimately required in the Commission's Final Order, additional administrative costs must be recognized in rate setting in this proceeding. While we do not know the particulars of what will be expected from the Utility in that monitoring, we would suggest that at a minimum, if quarterly reports are filed on purchased and pumped water, that an additional $\$ 10,000$ per year of annual expense be recognized by the Commission, in order to allow the Utility to prepare, file, and answer any questions concerning those reports. Depending upon the level of scrutiny, the monitoring requirements, and additional proceedings that may follow short of formal hearing, that should be sufficient for basic monitoring and reporting. Therefore, we believe the Commission must include such costs, to the extent that monitoring is required.
Q. As I understand it, Mr. Stallcup's proposal for rate setting also includes shifting substantial fixed costs from the base portion of the Utility's rates, to the variable or gallonage charge. Is that correct?
A. Yes. While the Utility shifted some of the fixed costs to the gallonage rate, the staff proposal has gone much
farther. Generally speaking, from a historical and general regulatory philosophy perspective, fixed costs should be recovered through the base charge and variable costs recovered from the gallonage charge. This has always been the maxim under which the Public Service Commission has operated, as I understand it, in setting Utility rates. This is so that the Utility will be able to recover its fixed costs regardless of consumption levels, and its variable costs will flow with variable revenues, thus helping to solidify the likelihood of recovering all costs and minimizing the likelihood of over or under earnings situation occurring. In this case, in order to set base rates that were not outrageously high, we had to work with the model supplied by Dr. Whitcomb and the SWFWMD to shift some of the fixed costs into the gallonage rates. We were willing to consider that additional risk, at least for the purposes of this case, without any additional recognition of that risk in rate-of-return or otherwise. However, the staff's proposal, as we understand it, would shift even more of the fixed costs into the gallonage charge, thereby further increasing the risk on the Utility. Upon review of Mr. Stallcup's worksheets, it appears that a substantial quantity (almost equal to water sales in lower sales months of the last year) of water will have
to be sold just to meet the fixed costs of the Utility, much less enabling the Utility to meet its variable costs. Mr. Stallcup furnished, in a late-filed exhibit to his deposition workpapers, spreadsheets, along with other items for review. One of the items provided by Mr. Stallcup was a schedule illustrative of the rates using his proposed methodology for setting final rates in this case. In which he appears to contradict his own testimony which states: "However, due to revenue stability concerns, the BFC allocation percentage should not be decreased to the point that the new $B F C$ is less than the current BFC." In his late-filed exhibit, he proposes a base charge of $\$ 6.18$, which is lower than our current base facility charge. To my knowledge, no additional recognition of that increased risk has been in any way recognized by the Commission staff, or proposed for recognition by the Commission staff in this case, or in any other previous case. While we don't know if the Commission has done such a shift of fixed costs into gallonage charges in other cases, as has been done here or to the extent it has been done here, we believe it substantially increases the risk upon the Utility to do so and believe to the extent it is proposed, that it must be recognized in rate setting in the form of a higher rate-of-return, or some other recognition of the
substantiai increased risk that this places on the Utility.
Q. There is a proposal to make an adjustment to the salary cf a Mr. Painter, because his salary was allocated fully to the wastewater case in the Utility's recent wastewater rate case. Do you have any comments with regard to this proposed adjustment?
A. Yes. Originally, the staff had proposed an allocation of Mr. Painter's salary for the portion of that salary related to Seven Springs water versus Seven Springs wastewater. They are now proposing to eliminate his salary altogether, because it was recognized in the last rate case as being related to wastewater, a couple of years ago. The fact of the matter is, his salary should not be removed in total, because his job description has changed since the time of the wastewater rate case. Mr. Paintex is now a supervisor over water and wastewater operations, whereas at that time, he related solely to wastewater. His old position has now been occupied by the addition of new employees, who have taken over a portion of his old wastewater related duties. As he has moved up into a higher supervisory level, he now deals with both water and wastewater issues in that new position. As such, the circumstances that existed in the wastewater case are no longer applicable in this case. It is simply a change of his duties since the wastewater case, and a replacement of the duties that he formerly performed for the wastewater system two years ago, by a new employee. As such, no adjustment is appropriate, other than that originally proposed to properly allocate Mr. Painter's salary between the two systems.
Q. Do you have any further testimony to provide at this time?
A. No. I do not.

# ALOHA UTILITIES, INC. <br> Docket No. 010503-WU <br> In-House Expenses 

## Actual

Filing Fee ..... \$ 4,500
Cost of Notice ..... 7,300
Travel ..... 1,000
Total ..... $\$ 12.800$
Estimated
Cost of Notices (2) ..... \$ 7,300
Travel ..... 1,400
Copying, Federal Express, Telephone \& Other ..... 500
Total ..... $\$ 9,200$
Grand Total Actual and Estimated:$\$ 22,000$
SGw-1

## ALOHA UTILITIES, INC.

## DEMAND SIDE WATER CONSERVATION MEASURES

The Compliance Plan which Aloha must submit to the SWFWMD is currently in the early stages of development. In the final plan, the Utility must include both supply side and demand side measures to be undertaken. However, because the supply side issues are in the early stages of development, we have outlined below the demand side proposals that the Utility has made through the SWFWMD and which are expected to be placed into effect immediately upon approval and recognition and rate setting by the PSC.

## A. Customer Direct Mail Billing Inserts

As a result of the change to envelope billing, Aloha Utilities, Inc. now has the capability to provide billing inserts to its customers with each monthly customer bill. The Company has utilized the billing inserts to notify customers of various issues concerning utility service. Principal among these issues is the Company's efforts to educate customers about water supply and use including the current drought conditions, methods and devices for conserving water, and the importance of compliance with watering restrictions. The Company began this practice at the very end of 2000 , and has continued through the current date. The approximate additional annual cost for developing, copying, and including these bill inserts is approximately $\$ 5,000$ per year.

## B. Customer Conservation Programs

Conserving water provides a low-costalternative to development of alternative water sources. The Company proposes to implement the following customer conservation programs to educate consumers, curtail additional increases in consumption, and achieve long term reductions in usage on an individual basis:

1. Retrofit Kit: The Company will initiate a program to make retrofit kits available to interested customers at no charge. The kit will include such items as low flow showerheads, low flow faucet aerators, leak detection tablets, replacement flapper valves, and educational materials regarding conservation. Customers will be informed of the program through billing inserts and other means. Annual Budgeted Cost: $\$ 25,000$.
2. Water Conservation Pilot Program: The Company will develop and implement a program to make available high efficiency water heaters and low flow toilets to utility customers. The program will provide for, or offer credits or other financial incentive toward, a selection of such devices to customers, monitor the water use of participants, and report to the District regarding the effectiveness of the program. An initial report concerning implementation of such program will be made within 60 days of implementation, a preliminary report within six months and a final report within one year of implementation. Annual Budgeted Cost: $\$ 30,000$.

3. Mixed Media Conservation Messages: Through radio, television and billing inserts, the Company will budget monthly for media advertising to promote conservation. Such advertising budget will be allocated $50 \%$ for billing inserts, $25 \%$ for radio and $25 \%$ for television mediums. Annual Budgeted Cost: \$15,000.
4. Water Auditor: A full time staff position will be created to interact directly with customers, perform water audits, irrigation audit and recommend and promote water conversation measures. Audits will initially target large volume users in which improvements in overall water use efficiencies will have the greatest impact on Utility water withdrawals. Annual Budgeted Cost: $\$ 38,000$.
5. Additional Staffing: Initially, the Company will budget for one new staff member to implement and promote consumer conversation programs. Budgeted Annual Cost: $\$ 30,000$.
6. Web Site: The Company is in the process of developing a web site to provide information to the general public about the Utility. The web site will include a section on conservation providing general information on the topic, specific information on Utility programs, and links to other useful sites. Budgeted Annual Cost: \$12,000.

The Company will, within 30 days of the date of the Consent Order, meet to refine the details of this consumer conversation program in conjunction with the District's water shortage coordinator. The total cost of the program is estimated to be $\$ 150,000$ annually. It is anticipated that these conservation measures will result in an approximately $5 \%$ reduction in water demand in the service area.

The conservation program is to be paid for from revenues generated by the conservation rates implemented pursuant to Waterate 2001 discussed below. The Company will develop these programs in the fourth quarter of 2001 and should be in a position to implement them by March 31, 2002. These programs will proceed unless the Public Service Commission denies recognition of the funding for these programs as proposed by the Company in its pending rate case. The Company will nevertheless be required to comply with water conservation requirements of the WUP. Aloha will use its best efforts to secure PSC approval of water conservation programs in this §2. In the event funding for these programs is recognized, but Conservation Revenues in a given year based on Waterate 2001 are less than projected, adjustments to the program budgets will be made accordingly.

## C. Implementation of Conservation Rates

The Utility's rates and charges are established by the Florida Public Service Commission. Rates and charges cannot be modified without the prior consent of the Commission. Historically, the Commission has done very little to promote the use of conversation rates, having approved such rates for less than ten utilities statewide. As a
result of several issues arising from District WUP enforcement, including the purchase of water from Pasco County and the implementation of a conservation rate structure, the Public Service Commission is conditioning rate relief for the Company on the filing of a full rate case.

On April 2, 2001, representatives of Aloha attended the Waterate 2001 Workshop hosted by the District. At that time, the District provided information and training on software designed to assist in establishing a conservation or inverted block rate structure, the goal of which is to reduce water usage by at least $5 \%$ in the Company's service area. The Company utilized this software in preparing a conservation rate structure for its Application for Increase in Water Rates which was filed with the PSC on August 10, 2001.

The time frame required for completing of a rate case through completion is 13-19 months, as discussed in more detail below. At such time as the PSC authorizes a change in Aloha's rates, the Company will implement the conservation rate structure. According to the Waterate 2001 model, the Company can expect a substantial reduction in potable water use, estimated at $28 \%$, over the use which would otherwise be expected for the same period. Unlike traditional rate setting in the water industry in Florida, use of a conservation rate structure will cause greater variability in system revenues. The Company estimates that, based on the District's model, revenues may exceed the approved revenue requirement by up to $\$ 288,900$ annually ("Conservation Revenues"). The Company has proposed to the PSC that, to the extent they occur, the Company should use such Conservation Revenues to further the conservation programs, with the balance going toward costs associated with the development of the reverse osmosis water treatment facility, or such other alternative water source project or objective as the Company may determine, subject to District approval, which approval shall not be unreasonably withheld.

## D. Wastewater Reuse System

Aloha has been a front runner in implementation of a reuse system, has aggressively sought customers for that system, and has expended millions of dollars to that end. In addition, the Utility has a longstanding policy to requiring developers to install reuse facilities where feasible.

Aloha believes that investment in its reclaimed water facility and reuse transmission system was the single most effective means available to offset groundwater withdrawals for customer irrigation needs and mitigate environmental and water resource impacts caused by groundwater withdrawals for direct customer consumption. Acknowledgment by the District of the benefits of this program can be seen in the continued cooperative funding provided since the original Agreement. Aloha has sought, and continues to seek recognition by the District of the benefits of this program and the mitigation of groundwater withdrawals in the Company's service area in the North Tampa Bay WUCA.

Stephen G. Watford
Docket No. 010503-WU
Exhibit to Rebuttal Testimony SGW-1

Selsky, Anita - Listed on spreadsheet sent to you previously, there was no response from the PSC fax, so the response was mailed on 2/1/99.

Taylor Tire - Listed on spreadsheet sent to you previously, fax machine was not working properly, faxed on $8 / 23 / 00$ when repaired. Mr. Watford had been on the phone several times discussing this issue with the PSC staff.

Winchester, Dennis - I have a fax confirmation sheet verifying that this response was sent on the due date of $10 / 17 / 00$. I have a revision showing that we copied the customer and it was faxed on 10/18/00.

Baumrucker, Jeffrey - Listed on spreadsheet sent to you previously, replied in letter that response was sent late on $1 / 4 / 01$ due to relocation of office.

McKay, Chester - VFW Post states on response from Durbin that our office contacted them on 2/9/01 stating that we had not received this complaint. They apparently tried to fax the complaint to the old office fax number, even though we notified the PSC in writing of the move and the new numbers. We were notified that the customer had chosen to close the complaint on $1 / 30 / 01$. Obviously, since the customer closed the complaint himself, no response was required from Aloha.

Gover, Jeanne - Same as above. We contacted them on 1/30/01 and responded within 12 working days (we are given 15 working days on each request).

Arseanau, Darrell - Same as above. We contacted them on 2/9/01 and responded in five working days.

Myers, Samantha - Same as above. We contacted them on 2/9/01 and responded in 14 working days.

Sheckells, John - Listed on spreadsheet sent to you previously, no response from PSC fax, mailed on 4/4/01.

Kwiatowski, Joseph - Listed on spreadsheet sent to you previously, no response from PSC fax, mailed on 4/4/01.

Prishvalko, Betty - Listed on spreadsheet sent to you previously, waited on results in supplemental report. This was not conducted and we responded on 5/23/01.


## YEARLY PEC COMPLAINTS

 DOCKET 010503

$2$

## Gallons per ERC per Day



## Consumption per Connection

12/06/01
SUBDIVISION_CONSUMPTION.PRG

Order by Subdivision


SGW-6
oof 2

## Consumption per Connection

12/06/01
SUBDIVISION_CONSUMPTION.PRG

Order by Subdivision

| SUBDIVISION | GAILONS | BILLS | GALS/MTH | GALS/DAY |
| :---: | :---: | :---: | :---: | :---: |
| ASHLEY PLACE APARTME | 30511489 | 12676 | 2407 | 80 |
| CHELSEA PLACE | 190953793 | 11029 | 17314 | 577 |
| COUNTRY PLAACE VILIAG | 135738884 | 30392 | 4466 | 149 |
| CYPRESS LAKES | 150589082 | 11022 | 13663 | 455 |
| FOX HOLLOW | 331070996 | 15530 | 21318 | 711 |
| FOXHOLLOW TOWNHOMES | 3919205 | 449 | 8729 | 291 |
| FOXWOOD | 147634517 | 8231 | 17936 | 598 |
| HERITAGE LAKES | 450054485 | 73477 | 6125 | 204 |
| HERITAGE SPRINGS | 6060112 | 1859 | 3260 | 109 |
| HILLS OF SAN JOSE | 47196662 | 3754 | 12572 | 419 |
| MILLPOND | 370628101 | 55735 | 6650 | 222 |
| NATURA | 30217773 | 2560 | 11804 | 393 |
| NATURES HIDEAWAY | 272994803 | 27266 | 10012 | 334 |
| OAKCREEK APARTMENTS | 52502215 | 13940 | 3766 | 226 |
| PARK LAKE ESTATES | 517862328 | 62412 | 8297 | 277 |
| PLANTATION | 45972730 | 3066 | 14994 | 500 |
| RANCHSIDE APARTMENTS | 17931330 | 5929 | 3024 | 101 |
| RIVER OAKS CONDOS | 8595901 | 3120 | 2755 | 92 |
| RIVERSIDE VILLAGE | 199069506 | 19078 | 10435 | 348 |
| RIVERSIDE VILIAS | 58280681 | 16010 | 3640 | 121 |
| RIVIERA | 56867890 | 1848 | 30773 | 1026 |
| SPRING HAVEN CONDOS | 8996180 | 3116 | 2887 | 96 |
| THOUSAND OAKS | 1337378 | 79 | 16929 | 564 |
| TRINITY OAKS | 542420406 | 31003 | 17496 | 583 |
| VETERANS VILIAGE | 1040541581 | 183409 | 5673 | 189 |
| VICEROY CONDOS | 2898630 | 811 | 3574 | 119 |
| WOODBEND | 33909743 | 4079 | 8313 | 277 |
| WOODGATE | 67259726 | 6986 | 9628 | 321 |
| WOODTRAIL VILLAGE | 167389511 | 22382 | 7479 | 249 |
| WYNDTREE | 385320390 | 35696 | 10794 | 360 |
| TOTALS | 75978144077 | 9221665 | 8059 | 269 |


| Customer Class Names | Billing Cycle ¢ | Monthly |
| :---: | :---: | :---: |
| 2．General Service $3 / 4^{\prime \prime}$ <br> 3．General Service $1^{\prime \prime}$ |  | Thousand Gallons（TG） |
| 4．General Service $11 / 2^{\prime \prime}$ <br> 5．General Service $\mathbf{2 "}^{\prime \prime}$ | Year Type 囯䢒 | Calendar Year |
| 6．General Service $3^{\prime \prime}$ <br> 7．General Service 4＂ | Base Year 盎置 | 2000 |
| 8．General Service $6^{\prime \prime}$ | Planning Horizon（Years） | 5 困 |
| 10. | Annual Inflation Rate | $2.5 \%$ |


| Customer Class | Long－Run Elasticity |  | Short－Run Adjustment |  |  |  | Single FamilyProperty Value \％Weights |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential | Florida | ［18180 | 50\％ | 75\％ | 100\％ | 100\％ | 50\％ | 0\％ | 50\％ |
| General Service 3／4＂ | －0．20 | 䢕 | 50\％ | 75\％ | 100\％ | 100\％ | 33\％ | 0\％ | 67\％ |
| General Service 1＂ | －0．20 | ［10］ | 50\％ | 75\％ | 100\％ | 100\％ | 33\％ | 0\％ | 67\％ |
| General Service $11 / 2^{\prime \prime}$ | －0．20 | 3 $\sqrt{1}$ | 50\％ | 75\％ | 100\％ | 100\％ | 33\％ | 33\％ | 34\％ |
| General Service 2＂ | －0．20 | 迷 | 50\％ | 75\％ | 100\％ | 100\％ | 33\％ | 0\％ | 67\％ |
| General Service 3＂ | －0．20 | ［104 | 50\％ | 75\％ | 100\％ | 100\％ | 33\％ | 33\％ | 34\％ |
| General Service 4＂ | －0．20 |  | 50\％ | 75\％ | 100\％ | 100\％ | 33\％ | 0\％ | 67\％ |
| General Service 6＂ | －0．20 | 國 | 50\％ | 75\％ | 100\％ | 100\％ | 33\％ | 0\％ | 67\％ |
|  |  |  |  |  |  |  |  |  |  |


|  | Base Year | Five Year Planning Horizon |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| Base Case <br> Revenue Requirements | \$1,849,005 | \$3,012,527 | \$3,012,527 | \$3,012,527 | \$3,012,527 | \$3,012,527 |
| Short-Run Variable Revenue Requirements | \$389,484 | \$1,073,000 | \$1,073,000 | \$1,073,000 | \$1,073,000 | \$1,073,000 |
| Short-Run Variable as \% of Total Base Case | 21.1\% | 35.6\% | 35.6\% | 35.6\% | 35.6\% | 35.6\% |

TABLE 4. WATER ACCOUNTS

| Meter Size | EMU <br> Factor | Number of Accounts by Meter Size |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \hline \text { Base Year } \\ 2000 \end{array}$ | Five Year Planning Horizon |  |  |  |  |
|  |  |  | 2001 | 2002 | 2003 | 2004 | 2005 |
| All Customer Classes |  |  |  |  |  |  |  |
| 5/8" |  | 9,125 | 9,552 | 9,552 | 9,552 | 9,552 | 9,552 |
| 3/4" |  | 0 | 0 | 0 | 0 | 0 | 0 |
| $1{ }^{\prime \prime}$ |  | 46 | 48 | 48 | 48 | 48 | 48 |
| 1.5" |  | 15 | 16 | 16 | 16 | 16 | 16 |
| $2{ }^{\prime \prime}$ |  | 25 | 26 | 26 | 26 | 26 | 26 |
| $3{ }^{\prime \prime}$ |  | 1 | 1 | 1 | 1 | 1 | 1 |
| 4" |  | 2 | 2 | 2 | 2 | 2 | 2 |
| $6 "$ |  | 5 | 6 | 6 | 6 | 6 | 6 |
| $8{ }^{\prime \prime}$ |  | 0 | 0 | 0 | 0 | 0 | 0 |
| 10" |  | 0 | 0 | 0 | 0 | 0 | 0 |
| $12^{\prime \prime}$ |  | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Accounts |  | 9,219 | 9,651 | 9,651 | 9,651 | 9,651 | 9,651 |
| Total EMUs |  | 9,831 | 10,326 | 10,326 | 10,326 | 10,326 | 10,326 |
| Residential |  |  |  |  |  |  |  |
| 5/8" | 1 | 8,989 | 9,410 | 9,410 | 9,410 | 9,410 | 9,410 |
| 3/4" | 1.5 |  |  |  |  |  |  |
| $1{ }^{1 \prime}$ | 2.5 |  |  |  |  |  |  |
| 1.5 " | 5 |  |  |  |  |  |  |
| $2{ }^{\prime \prime}$ | 8 |  |  |  |  |  |  |
| 3" | 16 |  |  |  |  |  |  |
| $4 "$ | 25 |  |  |  |  |  |  |
| $6{ }^{\prime \prime}$ | 50 |  |  |  |  |  |  |
| $8{ }^{\prime \prime}$ | 80 |  |  |  |  |  |  |
| 10" | 115 |  |  |  |  |  |  |
| 12" | 215 |  |  |  |  |  |  |
| Total Accounts |  | 8,989 | 9,410 | 9,410 | 9,410 | 9,410 | 9,410 |
| Total EMUs |  | 8,989 | 9,410 | 9,410 | 9,410 | 9,410 | 9,410 |

TABLE 4. WATER ACCOUNTS


TABLE 4. WATER ACCOUNTS


## TABLE 4. WATER ACCOUNTS

| Meter Size | EMU <br> Factor | Number of Accounts by Meter Size |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \hline \text { Base Year } \\ 2000 \end{array}$ | Five Year Planning Horizon |  |  |  |  |
|  |  |  | 2001 | 2002 | 2003 | 2004 | 2005 |
| General Service 3" |  |  |  |  |  |  |  |
| 5/8" | 1 |  |  |  |  |  |  |
| 3/4" | 1.5 |  |  |  |  |  |  |
| 1 " | 2.5 |  |  |  |  |  |  |
| $1.5{ }^{\prime \prime}$ | 5 |  |  |  |  |  |  |
| 2" | 8 |  |  |  |  |  |  |
| $3^{\prime \prime}$ | 16 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4" | 25 |  |  |  |  |  |  |
| $6{ }^{\prime \prime}$ | 50 |  |  |  |  |  |  |
| 8" | 80 |  |  |  |  |  |  |
| 10" | 115 |  |  |  |  |  |  |
| 12" | 215 |  |  |  |  |  |  |
| Total Accounts |  | 1 | 1 | 1 | 1 | 1 | 1 |
| Total EMUs |  | 16 | 16 | 16 | 16 | 16 | 16 |


| General Service 4" |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5/8" | 1 |  |  |  |  |  |  |
| 3/4" | 1.5 |  |  |  |  |  |  |
| $1^{14}$ | 2.5 |  |  |  |  |  |  |
| 1.5" | 5 |  |  |  |  |  |  |
| $2{ }^{\prime \prime}$ | 8 |  |  |  |  |  |  |
| 3 " | 16 |  |  |  |  |  |  |
| $4{ }^{\prime \prime}$ | 25 | 2 | 2 | 2 | 2 | 2 | 2 |
| $6^{\prime \prime}$ | 50 |  |  |  |  |  |  |
| $8{ }^{\prime \prime}$ | 80 |  |  |  |  |  |  |
| $10^{\prime \prime}$ | 115 |  |  |  |  |  |  |
| $12^{\prime \prime}$ | 215 |  |  |  |  |  |  |
| Total Accounts |  | 2 | 2 | 2 | 2 | 2 | 2 |
| Total EMUs |  | 50 | 50 | 50 | 50 | 50 | 50 |

## TABLE 4. WATER ACCOUNTS




| Customer Class | Water Consumption in Thousand Gallons (TG) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { Base Year } \\ 2000 \\ \hline \end{gathered}$ | Five Year Planning Horizon |  |  |  |  |
|  |  | 2001 | 2002 | 2003 | 2004 | 2005 |
| Residential | 925,916 | 1,003,845 | 1,003,845 | 1,003,845 | 1,003,845 | 1,003,845 |
| General Service $314^{\prime \prime}$ | 22,713 | 24,625 | 24,625 | 24,625 | 24,625 | 24,625 |
| General Service 1" | 10,314 | 11,182 | 11,182 | 11,182 | 11,182 | 11,182 |
| General Service $11 / 2^{\prime \prime}$ | 8,805 | 9,546 | 9,546 | 9,546 | 9,546 | 9,546 |
| General Service 2" | 36,425 | 39,491 | 39,491 | 39,491 | 39,491 | 39,491 |
| General Service 3" | 1,501 | 1,627 | 1,627 | 1,627 | 1,627 | 1,627 |
| General Service 4" | 2,197 | 2,382 | 2,382 | 2,382 | 2,382 | 2,382 |
| General Service 6" | 17,785 | 19,282 | 19,282 | 19,282 | 19,282 | 19,282 |
| Total Water | 1,025,656 | 1,111,980 | 1,111,980 | 1,111,980 | 1,111,980 | 1,111,980 |


Top Bin Ave

 Gen Onneral Service 3/4" General Sorvice 1 General Service 1 1/2' General Service 2"




Gill
General Ser
service 4"
BIII
$0.0 \%$
General Service Bllt Count
1

1 $\begin{array}{rrrrrr}314 & 19.3 \% & \text { Bill Count } & \text { Bill } \% & \text { Bill Count } & \text { Bill } \\ 227 & 13.8 \% & & \end{array}$ | $1 / 2$ | $G$ |
| :--- | :--- |
| $i l l$ |  |
|  | $B$ | $\square$ $\begin{array}{rr}22 & \\ 10 & \\ 10 & \\ 7 & \end{array}$ .5\%

$3.4 \%$
$3.4 \%$


|  $0 c 00$ |
| :---: |
|  |  |


| 2\% |
| :--- |
| .14 |


| TABLE 7. FIXED CHARGES <br> I Check ifbed meter charges the same to all cusbmer classes. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential |  |  |  |  |  |  |
|  | Base Year |  | Five Ye | nning |  |  |
|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| \$/Account/Bill | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| \$/EMU/Bill | \$0.00 | \$0.00 |  |  |  |  |
| Meter Size | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill |
| $5 / 8^{\prime \prime}$ | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| $3 / 4^{\prime \prime}$ | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 1" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 1.5" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 2" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 3" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 4" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 6" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| $8{ }^{\prime \prime}$ | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 10" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 12" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |


| General Service 3/4" |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Base Year | Five Year Planning Horizon |  |  |  |  |
|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| \$/Account/Bill | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| \$/EMU/Bill |  | \$0.00 |  |  |  |  |
| Meter Size | \$/Bili | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill |
| 5/8" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| $3 / 4{ }^{\prime \prime}$ | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| $1{ }^{\prime \prime}$ | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| $1.5{ }^{\prime \prime}$ | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 2" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 3" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 4" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 6" | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| $8^{\prime \prime}$ | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |
| 10" | \$3.36 | \$6.18 | \$6.18 | > \$6.18 | \$6.18 | \$6.18 |
| $12^{\prime \prime}$ | \$3.36 | \$6.18 | \$6.18 | \$6.18 | \$6.18 | \$6.18 |


| TABLE 7. FIXED CHARGES <br> $\Gamma^{+}$Check irtmed meterchanges the same for all customerclasses. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Service 1" |  |  |  |  |  |  |
|  | Base Year |  | Five Ye | Planning 1 |  |  |
|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| \$/Account/Bili | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| \$/EMU/Bill |  | \$0.00 |  |  |  |  |
| Meter Size | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill |
| 5/8" | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| 3/4" | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| $1{ }^{\prime \prime}$ | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| 1.5" | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| $2^{\prime \prime}$ | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| 3" | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| 4" | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| 6" | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| $8{ }^{\prime \prime}$ | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| 10" | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| 12" | \$8.90 | \$15.23 | \$15.23 | \$15.23 | \$15.23 | \$15.23 |
| General Service 1 1/2" |  |  |  |  |  |  |
| \$/Account/Bill \$/EMU/Bill | Base Year2000 | Five Year Planning Horizon |  |  |  |  |
|  |  | 2001 | 2002 | 2003 | 2004 | 2005 |
|  | \$16.69 | $\begin{array}{rr} \$ 30.45 & \$ 30.45 \\ \$ 0.00 & \end{array}$ |  | \$30.45 | \$30.45 | \$30.45 |
|  |  |  |  |  |  |  |
| Meter Size | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/BiII |
| 5/8" | \$16.69 | \$30.45 | \$30.45 | \$30.45 | \$30.45 | \$30.45 |
| 3/4" | \$16.69 | \$30.45 | \$30.45 | \$30.45 | \$30.45 | \$30.45 |
| $1 "$ | \$16.69 | \$30.45 | \$30.45 | \$30.45 | \$30.45 | \$30.45 |
| $1.5{ }^{\prime \prime}$ | \$16.69 | \$30.45 | \$30.45 | \$30.45 | \$30.45 | \$30.45 |
| $2^{\prime \prime}$ | \$16.69 | \$30.45 | \$30.45 | \$30.45 | \$30.45 | \$30.45 |
| $3^{\prime \prime}$ | \$16.69 | \$30.45 | \$30.45 | \$30.45 | \$30.45 | \$30.45 |
| 4" | \$16.69 | \$30.45 | \$30.45 | \$30.45 | \$30.45 | \$30.45 |
| $6^{\prime \prime}$ | \$16.69 | \$30.45 | \$30.45 | \$30.45 | \$30.45 | \$30.45 |
| $8^{\prime \prime}$ | \$16.69 | \$30.45 | \$30.45 | \$30.45 | \$30.45 | \$30.45 |
| 10" | \$16.69 | \$30.45 | \$30.45 | - \$30.45 | \$30.45 | \$30.45 |
| $12^{\prime \prime}$ | \$16.69 | \$30.45 | \$30.45 | \$30.45 | \$30.45 | \$30.45 |


| TABLE 7. FIXED CHARGES <br> I Check whed meterchanges the safe for all customer classes. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Service 2" |  |  |  |  |  |  |
|  | Base Year |  | Five Yea | anning |  |  |
|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| \$/Account/Bill | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |
| \$/EMU/Bill |  | \$0.00 |  |  |  |  |
| Meter Size | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill |
| 5/8" | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |
| $3 / 4^{\prime \prime}$ | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |
| $1{ }^{1 \prime}$ | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |
| 1.5" | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |
| 2" | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |
| 3" | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |
| $4{ }^{\prime \prime}$ | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |
| 6" | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |
| $8{ }^{\prime \prime}$ | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |
| 10" | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |
| 12" | \$27.12 | \$48.72 | \$48.72 | \$48.72 | \$48.72 | \$48.72 |


| General Service 3" |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Base Year | Five Year Planning Horizon |  |  |  |  |
|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| \$/Account/Bill | \$53.47 | \$97.44 | \$97.44 | \$97.44 | \$97.44 | \$97.44 |
| \$/EMU/Bill |  | \$0.00 |  |  |  |  |
| Meter Size | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill |
| 5/8" | \$53.47 | \$97.44 | \$97.44 | \$97.44 | \$97.44 | \$97.44 |
| $3 / 4{ }^{\prime \prime}$ | \$53.47 | \$97.44 | \$97.44 | \$97.44 | \$97.44 | \$97.44 |
| $1 "$ | \$53.47 | \$97.44 | \$97.44 | \$97.44 | \$97.44 | \$97.44 |
| $1.5{ }^{\prime \prime}$ | \$53.47 | \$97.44 | \$97.44 | \$97.44 | \$97.44 | \$97.44 |
| 2" | \$53.47 | \$97.44 | \$97.44 | \$97.44 | \$97.44 | \$97.44 |
| $3{ }^{\prime \prime}$ | \$53.47 | \$97.44 | \$97.44 | \$97.44 | \$97.44 | \$97.44 |
| 4" | \$53.47 | \$97.44 | \$97.44 | \$97.44 | \$97.44 | \$97.44 |
| $6^{\prime \prime}$ | \$53.47 | \$97.44 | \$97.44 | \$97.44 | \$97.44 | \$97.44 |
| 8" | \$53.47 | \$97.44 | \$97.44 | \$97.44 | \$97.44 | \$97.44 |
| 10" | \$53.47 | \$97.44 | \$97.44 | $\bigcirc \$ 97.44$ | \$97.44 | \$97.44 |
| 12" | \$53.47 | \$97.44 | \$97.44 | \$97.44 | \$97.44 | \$97.44 |


| TABLE 7. FIXED CHARGES <br> 「 Check lfoned meterchanges the same for all customer classes. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Service 4" |  |  |  |  |  |  |
|  | Base Year |  | Five Yea | Planning | izon |  |
|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| \$/Account/Bill | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |
| \$/EMU/Bill | \$0.00 | \$0.00 |  |  |  |  |
| Meter Size | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill |
| 5/8' | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |
| 3/4" | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |
| 1" | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |
| 1.5" | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |
| 2" | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |
| 3" | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |
| $4 "$ | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |
| $6 "$ | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |
| $8{ }^{\prime \prime}$ | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |
| 10" | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |
| 12" | \$83.85 | \$152.25 | \$152.25 | \$152.25 | \$152.25 | \$152.25 |


| General Service 6" |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Base Year | Five Year Planning Horizon |  |  |  |  |
|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| \$/Account/Bill | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |
| \$/EMU/Bill | \$0.00 | \$0.00 |  |  |  |  |
| Meter Size | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill | \$/Bill |
| 5/8" | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |
| $3 / 4^{\text {n }}$ | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |
| 1" | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |
| 1.5" | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |
| 2" | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |
| 3" | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |
| 4" | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |
| $6^{\prime \prime}$ | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |
| $8{ }^{\prime \prime}$ | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |
| 10" | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |
| 12" | \$84.76 | \$305.00 | \$305.00 | \$305.00 | \$305.00 | \$305.00 |



| TABLE 9. REVENUE SUMMARY |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
|  | Base Year |  |  |  |  |  |  |


|  | Base Year |  | Five Y | Planning | rizon |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Customer Class | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| All Classes 200200200 |  |  |  |  |  |  |
| Base Water Use (TG) | 1,025,656 | 1,111,980 | 1,111,980 | 1,111,980 | 1,111,980 | 1,111,980 |
| Price Elastic Change | 0 | -180,965 | -242,342 | -294,477 | -283,506 | -272,432 |
| \% Change | 0.0\% | -16.3\% | -21.8\% | -26.5\% | -25.5\% | -24.5\% |
| New Water Use (TG) | 1,025,656 | 931,015 | 869,638 | 817,503 | 828,474 | 839,548 |
| Residential |  |  |  |  |  |  |
| Base Water Use (TG) | 925,916 | 1,003,845 | 1,003,845 | 1,003,845 | 1,003,845 | 1,003,845 |
| Price Elastic Change | 0 | -175,588 | -234,688 | -284,596 | -274,112 | -263,527 |
| \% Change | 0.0\% | -17.5\% | -23.4\% | -28.4\% | -27.3\% | -26.3\% |
| New Water Use (TG) | 925,916 | 828,257 | 769,157 | 719,249 | 729,733 | 740,318 |
| General Service 3/4" |  |  |  |  |  |  |
| Base Water Use (TG) | 22,713 | 24,625 | 24,625 | 24,625 | 24,625 | 24,625 |
| Price Elastic Change | 0 | -1,216 | -1,730 | -2,233 | -2,123 | -2,013 |
| \% Change | 0.0\% | -4.9\% | -7.0\% | -9.1\% | -8.6\% | -8.2\% |
| New Water Use (TG) | 22,713 | 23,409 | 22,895 | 22,392 | 22,502 | 22,612 |
| General Service 1" |  |  |  |  |  |  |
| Base Water Use (TG) | 10,314 | 11,182 | 11,182 | 11,182 | 11,182 | 11,182 |
| Price Elastic Change | 0 | -556 | -791 | -1,022 | -971 | -921 |
| \% Change | 0.0\% | -5.0\% | -7.1\% | -9.1\% | -8.7\% | -8.2\% |
| New Water Use (TG) | 10,314 | 10,626 | 10,391 | 10,160 | 10,211 | 10,261 |
| General Service 1 1/2" |  |  |  |  |  |  |
| Base Water Use (TG) | 8,805 | 9,546 | 9,546 | 9,546 | 9,546 | 9,546 |
| Price Elastic Change | 0 | -476 | -677 | -874 | -831 | -788 |
| \% Change | 0.0\% | -5.0\% | -7.1\% | -9.2\% | -8.7\% | -8.3\% |
| New Water Use (TG) | 8,805 | 9,070 | 8,869 | 8,672 | 8,715 | 8,758 |
| General Service 2" |  |  |  |  |  |  |
| Base Water Use (TG) | 36,425 | 39,491 | 39,491 | 39,491 | 39,491 | 39,491 |
| Price Elastic Change | 0 | -1,969 | -2,803 | -3,618 | -3,439 | -3,260 |
| \% Change | 0.0\% | -5.0\% | -7.1\% | -9.2\% | -8.7\% | -8.3\% |
| New Water Use (TG) | 36,425 | 37,522 | 36,688 | 35,873 | 36,052 | 36,231 |
| General Service 3" |  |  |  |  |  |  |
| Base Water Use (TG) | 1,501 | 1,627 | 1,627 | 1,627 | 1,627 | 1,627 |
| Price Elastic Change | 0 | -81 | -115 | -149 | -142 | -134 |
| \% Change | 0.0\% | -5.0\% | -7.1\% | -9.2\% | -8.7\% | -8.3\% |
| New Water Use (TG) | 1,501 | 1.546 | 1,512 | 1,478 | 1,485 | 1,493 |
| General Service 4" |  |  |  |  |  |  |
| Base Water Use (TG) | 2,197 | 2,382 | 2,382 | 2,382 | 2,382 | 2,382 |
| Price Elastic Change | 0 | -119 | -169 | -218 | -208 | -197 |
| \% Change | 0.0\% | -5.0\% | -7.1\% | -9.2\% | -8.7\% | -8.3\% |
| New Water Use (TG) | 2,197 | 2,263 | 2,213 | 2,164 | 2,174 | 2,185 |
| General Service 6" |  |  |  |  |  |  |
| Base Water Use (TG) | 17,785 | 19,282 | 19,282 | 19,282 | 19,282 | 19,282 |
| Price Elastic Change | 0 | -961 | -1,369 | -1,767 | -1,680 | -1,592 |
| \% Change | 0.0\% | -5.0\% | -7.1\% | -9.2\% | -8.7\% | -8.3\% |
| New Water Use (TG) | 17,785 | 18,321 | 17,913 | 17,515 | 17,602 | 17,690 |





| BinTG/Bin | General Service $2^{2}$ Bill Distribution: X of Anrual Bils |  |  |  |  |  | Genoral Service 3- Bill Pintricution; \% of Anrued Bills |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Base Year |  | Fine Yoer | Planning H | tron |  | Bene Yoer |  | Flw $\mathrm{Y}_{\text {e }}$ | Plameng H | tzon |  |
|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| 0 | 7.5\% | 7.5\% | 7.5\% | 7.5\% | 7.5\% | 7.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 1 | 3.4\% | 3.7\% | 3.8\% | 4.0\% | 4.0\% | 4.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 2 | 3.4\% | 3.4\% | 3.4\% | 3.4\% | 3.4\% | 3.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 3 | 2.4\% | 2.3\% | 2.2\% | 2.2\% | 2.2\% | 22\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 4 | 1.4\% | 1.3* | 1.3\% | 1.4\% | 1.4\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 5 | 0.7\% | 1.5\% | 1.8\% | 2.0\% | 1.9\% | 1.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 8 | 3.4\% | 3.1\% | 3.0\% | 2.8\% | 2.9\% | 2.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 7 | 2.0\% | 2.1\% | 2.1\% | 2.0\% | 2.0\% | 2.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 8 | 2.0\% | 9.5\% | 1.4\% | 1.2\% | 1.3\% | 1.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | $0.0 \times$ |
| ${ }^{9}$ | 0.7\% | 0.5\% | 0.6\% | 0.8\% | 0.6\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 10 | 0.3\% | 0.5\% | 0.8\% | 0.8\% | 0.6\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 11 | 0.7\% | 0.7\% | 07\% | 0.7\% | 0.7\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 12 | 0.7\% | 0.7\% | 0.7\% | 0.7\% | 0.7\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 13 | 0.7\% | 0.5\% | 0.6\% | 0.7\% | 0.7\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | $0.0 \times$ |
| 14 | 0.3\% | 0.9\% | 0.9\% | 0.8\% | 0.8\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | $0.0 \%$ | 0.0\% | 0.0\% |
| 15 | 1.0\% | 0.8\% | 0.6\% | 0.8\% | 0.6\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 18 | 0.7\% | 0.1\% | 0.5\% | 0.7\% | 0.7\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 17 | 0.0\% | 1.2\% | 0.8\% | 0.7\% | 0.7\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 18 | 1.4\% | 0.1\% | $0.4 \%$ | 0.4\% | 0.4\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 19 | 0.0\% | 0.7\% | 0.4\% | 0.3\% | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 20 | 0.7\% | 0.0\% | 02\% | 0.3\% | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 21 | 0.0\% | 0.4\% | 0.4\% | 0.5\% | 0.5\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 22 | 0.3\% | 0.4\% | 0.6\% | 0.8\% | 0.8\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 23 | 0.3\% | 0.8\% | 1.0\% | 1.0\% | 1.0\% | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 24 | 0.7\% | 4.1\% | 1.0\% | 0.9\% | 0.8\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 25 | 1.0\% | 1.0\% | 0.8\% | 0.8\% | 0.6\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 28 | 1.0\% | 0.6\% | 0.5\% | 0.5\% | 0.5\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 27 | 0.7\% | 0.4\% | 0.6\% | 0.7\% | 0.7\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 28 | 0.3\% | 0.7\% | 0.7\% | 0.6\% | 0.6\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 29 | 0.3\% | 0.74 | 0.5\% | 0.5\% | 0.5\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 30 | 1.0\% | 0.4\% | 0.5\% | 0.5\% | 0.5\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 31 | 0.3\% | 0.6\% | 0.5\% | 0.4\% | 0.5\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 32 | 0.3\% | 0.5\% | 0.4\% | 0.2\% | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 33 | 0.7\% | 0.4\% | 0.2\% | 0.4\% | 0.4\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 34 | 0.3\% | 0.1\% | 0.5\% | 0.8\% | 0.8\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 35 | 0.3\% | $0.6 \%$ | 0.9\% | 0.9\% | 0.9\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 36 | 0.0\% | 1.0\% | 0.8\% | 0.3\% | 0.4\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 37 | 0.7\% | 0.7\% | 0.2\% | 0.6\% | 0.5\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 38 | 1.0\% | 0.1\% | 0.8\% | 0.7\% | 0.7\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 39 | 0.7\% | 0.7\% | 0.7\% | 0.5\% | 0.5\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 40 | 0.0\% | 0.7\% | 0.5\% | 0.8\% | 0.7\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 41 | 0.7\% | 0.4\% | 0.8\% | 0.9\% | 0.9\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 42 | 0.7\% | 0.8\% | 0.9\% | 0.4\% | 0.5\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 43 | 0.3\% | 0.8\% | 0.4\% | 0.7\% | 0.8\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 44 | 0.7\% | 0.4\% | 0.7\% | 0.8\% | 0.9\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 45 | 1.0\% | 0.8\% | 0.8\% | 0.4\% | 0.5\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 46 | 0.3\% | 0.9\% | 0.4\% | 0.1\% | 0.1\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 47 | 0.3\% | 0.4\% | 0.0\% | 0.5\% | 0.4\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 48 | 1.0\% | 0.0\% | 0.5\% | 0.8\% | 0.8\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 49 | 0.7\% | 0.4\% | 0.8\% | 0.3\% | 0.4\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 50 | 0.0\% | 0.9\% | 0.3\% | 0.0\% | 0.1\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 51 | 0.0\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 52 | 0.7\% | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 53 | 1.0\% | 0.0\% | 0.1\% | 0.5\% | 0.4\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 54 | 0.0\% | 0.0\% | 0.4\% | 0.8\% | 0.7\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 55 | 0.0\% | 0.3\% | 0.8\% | 0.9\% | 0.8\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 58 | 0.0\% | 0.7\% | 0.9\% | 0.8\% | 0.8\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 57 | 0.0\% | 1.1\% | 0.6\% | 1.0\% | 1.0\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 58 | 0.3\% | 0.4\% | 1.1\% | 0.8\% | 0.8\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 59 | 0.7\% | 1.1\% | 0.9\% | 0.6\% | 0.8\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 60 | 4.0\% | 1.0\% | 0.5\% | 0.7\% | 0.7\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 61 | 0.3\% | 0.5\% | 0.7\% | 0.5\% | $0.6 \%$ | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 82 | 1.0\% | 0.4\% | 0.7\% | 0.2\% | 0.3\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 63 | 1.0\% | 1.1\% | 0.2\% | 0.3\% | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 84 | 0.7\% | 0.2\% | 0.2\% | 0.7\% | 0.6\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 65 | 0.0\% | 0.1\% | 0.5\% | 0.0\% | 0.9\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 66 | 1.4\% | 0.2\% | 1.0\% | 0.6\% | 0.7\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 67 | 0.3\% | 0.7\% | 0.8\% | 0.5\% | 0.5\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 68 | 0.0\% | 1.2\% | 0.3\% | 0.9\% | 0.8\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 89 | 0.3\% | 0.4\% | 0.8\% | 0.9\% | 0.9\% | 0.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 70 | 0.0\% | 0.2\% | 4.2\% | 0.4\% | 0.6\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 71 | 1.4\% | 0.0\% | $0.7 \%$ | 0.2\% | 0.2\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 72 | 1.0\% | 1.3\% | 0.1\% | 0.5\% | 0.4\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 73 | 0.0\% | 0.3\% | 0.2\% | 0.4\% | 0.4\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 74 | 0.3\% | 0.0\% | 0.8\% | 0.1\% | 0.2\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 75 | 1.0\% | 0.3\% | 0.2\% | 0.4\% | 0.3\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 76 | 1.4\% | 0.7\% | 0.1\% | 0.8\% | 0.5\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 77 | 0.0\% | 0.0\% | 0.5\% | 0.8\% | 0.7\% | 0.8\% | 0.0\% | 0.0\% | 0.0\% | $0.0 \%$ | 0.0\% | 0.0\% |
| 78 | 0.0\% | 0.1\% | 0.8\% | 0.8\% | 0.7\% | 0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 79 | 0.3\% | 0.6\% | 0.8\% | 0.6\% | 0.8\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 80 | 0.7\% | 0.5\% | 0.0\% | 0.3\% | 0.4\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 81 | 0.0\% | 0.8\% | 0.6\% | 0.1\% | 0.2\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 2.0\% | 1.2\% |
| 82 | 0.0\% | 0.5\% | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 4.7\% | 4.1\% | 3.3\% |
| 83 | 0.7\% | 0.8\% | 0.0\% | 0.2\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 3.9\% | 1.0\% | 2.5\% | 3.2\% |
| 84 | 0.3\% | 0.2\% | 0.0\% | 0.2\% | 0.2\% | 0.1\% | 0.0\% | 0.0\% | 4.7\% | 0.0\% | 0.4\% | 1.3\% |
| 85 | 1.0\% | 0.0\% | 0.2\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 4.4\% | 0.4\% | 0.0\% | 0.0\% | 0.2\% |
| ${ }^{86}$ | 0.3\% | 0.0\% | 0.1\% | 0.7\% | 0.4\% | 0.3\% | 0.0\% | 4.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 87 | 0.7\% | 0.2\% | 0.0\% | 0.3\% | 0.5\% | 0.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 88 | 0.3\% | 0.1\% | 0.8\% | 0.0\% | 0.1\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | $0.0 \%$ | 0.0\% | 0.0\% |
| 89 | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 80 | 0.0\% | 0.7\% | 0.0\% | 0.3\% | 0.2\% | 0.1\% | 9.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 81 | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 82 | 0.3\% | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 93 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 94 | 0.0\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 95 | 1.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| ${ }^{96}$ | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 97 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| 98 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| ${ }^{90}$ | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| Top Bin | 30.8\% | 30.8\% | 30.8\% | 30.8\% | 30.8\% | 30.8\% | 90.9\% | +0.9\% | 80.9\% | 90.8\% | 90.8\% | 90.9\% |
| Tolats | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Top $\operatorname{Sin}$ Ave | 328 | 312 | 305 | 298 | 288 | 301 | 131 | 124 | 122 | 119 | 120 | 120 |







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## It's Nohl Crest Homes' Year-End Close-Out Sale On Superb Inventories Available Now.

0 Hidden Creek ar Lake Jovica
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- Available Docember - $\$ 355,441 \cdot 12510$ Lake Jovita Blvd. • Ashbourne • 2,792 sq. $\mathrm{ft} \cdot 3 / 3$ • 3 -car garage
- Available December - $\$ 348,235 \cdot$ Lake Jovica Blvd. Lot 100 - Cartington $\cdot 2,804$ sq. ft. $4 / 3 \cdot$ 3-car garage
- Available December - $\$ 356,325 \cdot 12502$ Lake Jovita Blvd. • Brighton • $2,827 \mathrm{sq}$. ft - Great Room plan $\cdot 3 / 3 \cdot$ Study $\cdot 2$-cir garage with golf cart garage
- Model - $\$ 375,216 \cdot 12518$ Lake Jovita Blvd.
- Kent ${ }^{-2,664 ~ s q . ~ f t . ~} \cdot 3 / 3 \cdot$ Conservatory $\cdot 2$-car garage with golf car garage

QHawthome Estares at West Meadows

- Avalable Novembet ~ $\$ 325,995 \cdot 19244$ Autumn Woods Ave. - Sherwood $\cdot 3,201 \mathrm{sq}$. fc. $4 / 4^{-}$ Conservatory - Bonus Ronm-3-car garage - Pool
- Available Docember - $\$ 279,680 \cdot 8208$ Narure Cove Way $\cdot$ Hampshire $\cdot 2,628$ sq. ff. $\cdot 4 / 3 \%$ • Bonus Room - 3 -car garage $\bullet$ Pool
- Available February - $\$ 332,484$ • 19112 Native Fern Way $\cdot$ Carrington $-3,406$ sq. ft. $\cdot 4 / 4$ Conservatory ${ }^{\text {S Study }}$ - Bonus Room - 3 -car garage $\cdot$ Pool
OVillage Green in West Park Village at Westchase
- Available December $\sim \$ 361,594 \cdot 10310$ Green Links Dr -Stratford II $\cdot 3,100$ sq. fc. $\cdot 3 / 21 / 2 \cdot$ Sudy $\cdot 2 \%$-car garage with upscairs apartment


## OHericage ar Villa Rosa

- Available December - $\$ 384,867 \cdot 5407$ Garden Arbor Drive - Warwick - 3,570 sq. ft. - $4 / 4$-Scudy ${ }^{-}$ Bonus Room - Pool- 3 -car side-load garage
- Available March 2002 - $\$ 371,761 \cdot 5401$ Garden Arbor Drive ${ }^{-W a r w i c k} \cdot 3,145$ sq. ft. $\cdot 4 / 3$ -Conservatory- Fireplace - Pool/Spa $\cdot 3$-car garage - huge conservation lot
- Model Available - $\$ 476,994 \cdot 5407$ Sunflare Way ${ }^{\text {Warwick }}$ - $3,716 \mathrm{sq} .\mathrm{ft} \cdot 4 / 4 \cdot$ Bonus Room $\cdot$ Pool/Spa - 3 -car garage $\cdot$ Upgrades
ESt Gcorge at Trinity - Villa Homes Gated and community maincained
- Available November - $\$ 210,720 \cdot 10347$ Sorenstan Drive - Ballybunion ${ }^{-1,826}$ sq. ft. $\cdot$ 2/2-Study-2-car garage
- Available November - \$205,963 - 10339

Sorenstam Drive - Beauclerc - 1,872 sq. ft. $3 / 2$ * Study* 2-car garage


Tamagon at Trinity

- Available December - $\$ 217,472$ • 1633 Bayfield Court ' Oxford - 2,042 sq. $\mathrm{ft} \cdot 3 / 2$ - Great Romm ${ }^{-}$ Pool $\cdot 2$-car garage
- Available Novernber - $\$ 241,574 \cdot 1634$ Daylily Drive $\cdot$ Newcastle $\cdot 2.531 \mathrm{sq} . \mathrm{ft} \cdot \cdot 3 / 3 \cdot$ Study-3-car garage

The Crossings ar Trinity

- Available Decembet ~ $\$ 331,955 \cdot 2111$ Goid Dust Courr ${ }^{\circ}$ Carrington $\cdot 3,406$ sq. ft. $\cdot 4 / 3 \cdot$ Study•Bonus Room • Pool• 3 -car garage


## © Cypress Cove

- Available December - $\$ 591,624 \cdot 869$ Cypress Cove Way $\cdot$ Edinburgh $\cdot 3,939$ sq. ft. • 4/41: • Scudy-Bunus Rnom-3-car side-load garage
- Available January ~ $\$ 523,029 \cdot 86.5$ Cypress Cove Way $\cdot$ Warwick $\cdot 3,830$ sq. fc. $\cdot 4 / 4 \cdot{ }^{\circ}$ Suly ${ }^{\circ}$ Bonus Roorn - 3 -car side-load garage

[^0]



[^0]:    Fouses As Unique As The People Teko CallThern Ffome Model Centers: Lake Jovita (352) 588-0187. West Meadows (813) 910-0915. Villa Rosi (813) 926-8110. Trinity (Si. Gcorge) (727) 372-1270. Trinity (Tatragon \& The Crossings) (727) 372-7266. Cypress Cove (727) 242-6848. wwwnohlcresthomes.com

